

# **The Management of Archeological Resources**

## THE AIRLIE HOUSE REPORT

*edited by*  
Charles R. McGimsey III  
*and*  
Hester A. Davis

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# Preface

It would be hard to say exactly, when, how, or even by whom the idea that became the Airlie House seminars originated. I was involved, but I have long ago learned that ideas that become projects, that in turn become publications generally spring from a variety of sometimes almost casual amalgamations of ideas, incidents, opportunities, and catalytic agents.

In this instance I had the good fortune to serve as one of the catalytic agents. I had served on the Executive Committee of the Society for American Archaeology from May of 1971 to May of 1973; starting as early as 1970 I had been actively engaged in efforts to draft and see through to signing the so-called Moss-Bennett legislation (P.L. 93-291); I began serving on the Committee on the Recovery of Archeological Remains and as an Advisor to the National Park Service Interagency Archeological Services Division in 1971, and had conducted a nationwide evaluation of the National Park Service archeological program in 1971; I had done a nationwide review of state archeological programs which resulted in the publication of the book *Public Archeology* in 1972 and was myself involved in helping administer one of the larger state archeological programs in the country. It should therefore be of no surprise that I was aware when I was elected President-elect of the Society for American Archaeology in May of 1973, that I had received from a large number of people many ideas and great quantities of data, largely unpublished, about the current status of the archeological profession, its operation, and the nature and success of its relationships to a variety of audiences. I traveled frequently during that year as President-elect, attending as many meetings as possible and talking to as many people as possible. As I sat in airports or on planes, between reading the latest M\*A\*S\*H or similar uplifting work, I tried to sort through the multitude of impressions and information I had received.

At some point early in the fall of 1973, in an airport which has long since lost identity by blending in with literally hundreds of subsequent ones, I pulled my everpresent notebook from its back pocket repository and jotted down after only a few moments of conscious cogitation the following list:

- (1) The Profession (as a profession)
- (2) Cultural Resource Management  
    The Philosophy of Conservation
- (3) The Archeological Report: Guidelines
- (4) Dissemination of Information
- (5) Archeology and the Law
- (6) Archeology and the American Indian

The list was entitled "The Archeological Profession: An Analysis."

After more periods of thought spanning several subsequent trips these entries were further fleshed out so that they covered what seemed to me to be focal points of most if not all of the profession's various major areas of concern as they had been expressed to me in varying forms by dozens and perhaps hundreds of colleagues.

These entries are undated but by late fall of 1973 the idea of approaching these areas of concern through the mechanism of a series of seminars had emerged and taken form. The notion of holding three sets of two concurrent sessions heralded its arrival by the addition of sets of "1st," "2nd," and "3rd" after each of the six topics listed in the notebook.

By late fall also I had begun taking advantage of my relatively frequent trips to Washington and to meetings to try to develop support (i.e., funds) for holding such a series of seminars or, depending upon my audience, for one or more of them. This search extended into the winter and spring of 1974. To my certain recollection the ideas were explored tentatively or at some length with the following: NSF (a number of different branches), NEA, NEH, EPA, HEW (several areas), CEQ, the Corps of Engineers, the Smithsonian, the National Trust, and the Wenner-Gren Foundation.

All expressed interest and were in agreement that the areas were not only of great importance but warranted immediate exploration; some even agreed it was something they wished they could or even felt they should participate in. All were uniform in their determination that for one or another reason they could not do so because of a shortage of funds, constraining regulations, or simply because it "wasn't their department."

It began to appear that no assistance would be forthcoming. At a time when it was becoming increasingly clear that the profession needed an opportunity to sit back and review where it was, in order to help determine where it was going and thus suggest how to get there, no mechanism for achieving those ends seemed available except the traditional publication outlets and regional and national meetings. That these were not adequate for this particular task was apparent to many.

On the third of June, 1974, shortly after I had become President of the SAA, Arkansas business brought me to the National Park Service and the office of Rex Wilson, Chief of Interagency Archeological Services in the Office of Archeology and Historic Preservation. More as a last resort rather than because I thought the seminars were something the National Park Service was in a position to fund, I outlined them and their importance to Rex. He expressed interest and, to my considerable surprise, indicated that NPS support for this type of activity, particularly in such crucial areas as we were discussing, was indeed possible.

He asked me to prepare a proposal and submit it to him immediately. This was done, and on the thirtieth of June, 1974, I was notified that the Society for American Archaeology had been awarded a contract in the amount of \$39,750 to conduct a series of "Six Seminars on the Future Direction of Archeology."

We immediately began making arrangements for seminar facilities and personnel. The first seminar began on June 31, only 57 days after the idea had been broached to Rex and his associates and only one month subsequent to the awarding of the grant. After such extended inquiry the final rapid awarding of the contract appeared somewhat in the nature of a miracle, as did the fact that arrangements could be completed at such superb facilities as we had at Airlie House on such short notice. That nearly all of the people who were asked to attend were sufficiently concerned to abort their own plans and attend on such short notice served to underscore everyone's concern.

I believe that archeology owes a great debt of gratitude to Interagency Archeological Service's personnel for their willingness to be innovative in their funding, and for taking the initiative necessary to make the Airlie House seminars and, ultimately, this publication possible. I am grateful personally for their encouragement and support and would like to take this opportunity on behalf of the profession to thank them all.

*Charles R. McGimsey III*

Fayetteville, Arkansas  
December 1976

# Introduction

## **THE PROPOSAL: THE MANAGEMENT OF ARCHEOLOGICAL RESOURCES\* –SIX SEMINARS ON THE FUTURE DIRECTION OF ARCHEOLOGY**

### **Background**

Recent federal legislation, among other factors, has caused the Department of the Interior and the entire archeological profession to recognize an urgent need to reassess their responsibilities and actions relative to archeological investigations and to become vitally concerned with a number of basic questions concerning the future direction of archeological research.

How can federal and other agencies who have a responsibility for this Nation's archeological resources identify qualified individuals or institutions with whom they can cooperate or contract in meeting these new responsibilities?

How can these agencies review the product of an individual archeological investigation to determine if they have a report which will enable them to plan effectively as well as one which will contribute meaningfully to the basic store of archeological data?

How can the Nation's continuing need for information about its past best be coordinated with its needs with respect to present and future growth or development?

How can information resulting from archeological research best be disseminated to various interested audiences (federal, state, and other planners, archeologists, schools, the general public) in the most effective manner?

How do publicly funded efforts to protect and recover archeological data affect the rights of private citizens?

\* What follows is the text of the proposal as it was submitted to the National Park Service in June 1974.

How does the scientific investigation of America's prehistoric past affect, and how is it affected by, the American Indian, the physical and cultural descendants of that past?

All of these questions are vital to the Department of the Interior, to the archeological profession, to federal, state, and private administrators responsible for public programs which affect archeological resources and, ultimately, to every citizen, for all are affected by the past. The prejudices, the preconceptions, the experiences of our predecessors, all have been responsible for creating what we are today. The better we are able to understand this past the better will we be able to understand the present and prepare for the future.

The six seminars constituting this proposal are designed to enable the Department of the Interior and the archeological profession to explore the present data base in order to establish a carefully reasoned approach to the future.

### **Organization**

#### *Procedures*

A series of six week-long seminars are to be held in groups of two at Airlie House, a conference center in Virginia.

The personnel chosen, experienced archeologists and other participants as appropriate, will arrive in Washington, D.C., on a Sunday and will proceed to Airlie House Sunday evening.

Each group of two seminars, the 1st and 2nd, the 3rd and 4th, and the 5th and 6th, will be held simultaneously, but in separate conference rooms. Each will meet to discuss their particular topic during the day, but at supper and in the evening there will be the opportunity for the participants of both seminars to get together and exchange ideas. In each case the paired seminars are closely related and an interchange of ideas each evening by the participants will

permit greater input into each topic and coordination of results, while still maintaining the advantages of small group discussion during the day.

Monday morning will be devoted to an introduction and review of the basic problem during which time the subtopics as outlined here will be reviewed and perhaps modified. Monday afternoon, and each subsequent afternoon, will be devoted to detailed discussion of a specific subtopic. This discussion will be recorded on tape and transcribed in the evening so that a complete transcription will be available to each participant at breakfast the following morning.

After breakfast, each participant will have time to read, correct, and digest the previous day's discussion. At midmorning, each group of discussants will gather in their separate conference rooms to discuss the previous day's discussion. In the afternoon a new subtopic of the subject will be introduced and the routine repeated.

Saturday afternoon, after a morning review of the final session, the participants will be transported by bus or cab back to Washington for return to their point of origin either that evening or on Sunday.

Prior to each session one participant will be designated as principal author. This individual will take the transcripts and will draft a manuscript for publication. This draft will be completed within four weeks of the seminar and distributed for comment to all participants. They will have two weeks to comment and the principal author will have an additional two weeks to prepare the final draft for the editors. The editors should also complete their work within two weeks. Thus there should be a time lapse of approximately three months from initiation of a seminar to completion of copy ready for the printer.

If meeting space can be arranged, the first conference on Certification and on Guidelines for Reports will be scheduled for July, the second conference on Resource Management and on Archeological Communication in late August or early September, while the final conference on Archeology and the Law and on Archeology and the American Indian will be scheduled for October or November.

This schedule should permit circulation to the profession of the results of the first conference in time to allow comments to be returned to the Executive Committee so that they might take official action with respect to certification and guidelines for reports at their meeting in November 1974. The complete report on all 6 seminars, including any Executive Committee action, should be ready for distribution at the Annual Meeting of the Society for American Archaeology in May 1975.

### *Personnel*

The personnel for all six seminars will be selected by a committee consisting of the President, the President-elect, and the immediate past-President of the Society for American Archaeology in consultation

with the Departmental Consulting Archeologist of the Department of the Interior.

Insofar as possible, the individuals chosen will represent a broad spectrum of pertinent experience, professional orientation, and geographical location in that approximate order of priority.

Because of time pressures, personnel for the first set of seminars will be drawn largely from persons already known to or referred to the Committee by colleagues. However, every attempt will be made to publicize subsequent seminars widely with a view toward obtaining input and personnel from the widest possible spectrum within the profession and from related fields.

The Principal Investigator (the current President of the Society for American Archaeology) and the Chairman of the Society for American Archaeology's Committee on Public Understanding of Archaeology will participate in each set of seminars to provide continuity throughout. (Two persons are necessary for continuity since there will be two concurrent seminars on each occasion.) These two individuals will be responsible for the organization and coordination of each of the sessions and for final editing of the resultant manuscript for publication.

### *Publication*

It is planned that the final edited manuscript of all six seminars will be printed and released as a Special Publication of the Society for American Archaeology. Every effort will be made to have the publication available for distribution by May 1975.

### *Seminar Syllabi*

There follows an outline of each seminar and a suggested outline of subtopics to be considered each day of the session. These are intended primarily as an indication of the subjects to be considered. The individuals attending each seminar will be the final arbiters of the total range of topics to be covered and the emphasis to be placed on each.

#### *1. Certification of Individuals, Accreditation of Institutions and Programs*

As a result of recent federal legislation, particularly the National Environmental Policy Act and the Archeological Conservation Act, many federal, state, and private agencies are contracting for archeological data. These agencies need and should have a mechanism for determining that the individuals or institutions with whom they contract are professionally qualified. The traditional guide, identification with or as a reputable institution of higher learning or museum, is no longer totally adequate, for other individuals or institutions are attempting to help meet the agencies' needs.

*1st Day* Is certification and/or accreditation necessary and possible? What factors encourage consideration of certification or accreditation; which factors discourage it? What problems can be foreseen, and which can be avoided? What advantages might accrue to the individual, to institutions, or to the profession?

*2nd Day* Individual certification. If individuals are to be certified, should this be on the basis of training, or experience, or examination, or some combination? How should individual qualifications be determined and by whom? What are the implications, personal, professional, and legal, of instituting any such procedures? Should there be periodic recertification? How would certification be funded and administered?

*3rd Day* Institutional accreditation. The second major approach toward providing the public with a professional overview and some measure of control over archeological performance is through the institutions carrying out the research. But what capabilities should such an institution have available or be able to call upon in the areas of personnel (professional and staff), physical facilities, laboratory facilities, comparative collections, professional assistance in related sciences, storage facilities, library, etc.? What level of professional responsibilities by individuals should or can an institution expect to enforce?

*4th Day* Field school accreditation and amateur certification. Traditionally, these have been considered as separate ideas and they are separate, for field school accreditation is oriented toward an institution, whereas amateur certification is oriented toward an individual. Nonetheless, both are directly aimed at a single result, the production of an individual qualified to a varying degree as a field archeologist from an individual who was previously less qualified. How can the output of each program and each individual's current capacity be measured, evaluated, and attested to? How do or should we face or resolve the differences between training anthropologists, field archeologists, and technicians by whatever mechanism?

*5th Day* Review and summary.

## II. Archeological Reports

Archeological input into the planning process of federal, state, and private agencies is becoming increasingly important. Development and presentation of this data in any one report should be compared against standards carefully drawn up by the profession, recognizing that different data may be appropriate for different scientific and planning circumstances.

*1st Day* What should be the nature of these standards? Should they be related to organization, content, theoretical orientation, and/or these plus others? What problems and advantages are inherent in any attempt to establish standards? To what de-

gree can or should standards vary with the nature of a specific report?

*2nd Day* Research design and project development. Are guidelines possible? In what detail could any such guidelines be developed.

*3rd Day* Basic data. Are there basic minimal questions for which every or at least most reports which present original fieldwork should endeavor to supply data? If so, what are these? Is there basic information which should be striven for, observed, and made available in every report for which it is appropriate?

*4th Day* Basic data. Insofar as is deemed possible, specific guidelines, perhaps subdivided by specific topics, e.g., the purpose of the report, nature of the original data, or on some other basis, are to be developed. Subdividing the discussion group along some such lines might be appropriate.

*5th Day* Summary and review.

## III. Management of Archeological Resources

It is essential that everyone concerned with archeology begin to plan with the total resource base in mind. It is not enough that there be problem orientation, there also must be established a set of archeological problem-oriented priorities, as well as a set of priorities oriented toward the total public good.

*1st Day* Archeological priorities and directions. Development of a philosophy of archeological conservation and of what constitutes mitigation, rather than the more restricted concept of salvage.

*2nd Day* Development of regional overviews and interrelationships with agency planning (agency consultants to be present, if possible). Discussion of agency/professional relationships in terms of practical, economic, administrative, and planning necessities. What type of archeological data are needed at various planning stages? What should be the roles of the Society for American Archaeology, the Committee on the Recovery of Archeological Remains, and the American Society for Conservation Archaeology? What relevant functions might a Washington office of the Society perform?

*3rd Day* Assessment of site significance. Correlation of archeological capabilities, needs, and goals with the Historic Preservation Program and the National Register—problems and potentialities.

*4th Day* How can personnel be developed who are equipped to manage the archeological research base? What are appropriate approaches, training mechanisms, and acceptable levels of competence?

*5th Day* Summary and review.

## IV. Archeological Communication

Archeologists have an ever increasing need to communicate to federal, state, and private agencies, to their professional peers, and to the general public. Present publication and distribution mechanisms

in each of these areas are largely the result of casual growth and development. All of these need to be reviewed to permit maximum dissemination of information to the largest possible audience which needs or would potentially benefit (in whatever way) from that information.

*1st Day* Identification of the various audiences archeology is trying to reach and, in general terms, what type and level of information is appropriate to each. How well are we presently reaching these audiences? How is success determined; how can it be monitored (peer review, public review, public participation or nonparticipation, etc.)? What is the role of the Committee on Public Understanding of Archaeology? What functions might a Washington office of the Society for American Archaeology serve with respect to facilitating communication within the profession and between the profession and others?

*2nd Day* Discussion of the various professional publications media presently in use: *American Antiquity*, *Society for American Archaeology Memoirs*, *Archaeology*, *Current Anthropology*, *American Anthropologist*, regional and state periodicals, museum series, contract reports, etc. What type of data are appropriate to each in light of their known or presumed audience? How many copies of various types of reports should be produced and to whom should they be distributed? Should they be free or for sale? Should authors be charged as is customary in some fields?

*4th Day* Other audiences. How can the archeological profession and federal agencies best communicate with the nonprofessional audiences concerning archeology, e.g., via TV, radio, newspapers, talks, secondary school courses, extension courses, etc.? What avenues of communication can be established and how can their development be encouraged?

*5th Day* Summary and review.

#### V. Archeology and the Law

The increasing body of federal and state legislation and the consequent increased activity by archeologists and the increased contact between archeologists, agencies, and individuals all have combined to create a potentially troublesome legal situation unless all concerned are presented with some well-thought-out guidelines as to what is legally required, permitted, or desirable.

*1st Day* Primarily a review by participating lawyers of laws relevant to artifacts and archeology, ranging from the Antiquities Act and the Archeological Conservation Act at one end of the spectrum, to relevant laws concerning private property on the other. This should be supplemented by archeologists giving specific experiences or possible experiences which they can envision as a basis for discussion of the legal implications of specific situations.

*2nd Day* Discussion of laws of private property and what should be done by archeologists as stan-

dard procedure concerning permission to excavate, releases for damages (to the landowner and protecting the landowner), payment of property or crop damage, removal of property (i.e., artifacts), and ultimate ownership of artifacts recovered. Discussion of the problems raised by the National Environmental Policy Act, which requires consideration of archeological resources on private land if federal funds are involved, and the normal archeological approach which assumes retention by the investigator of archeological materials recovered from private property. That is, potentially, the landowner can satisfy NEPA only if he not only allows but pays the archeologist to survey, test, and then retain any artifacts recovered from his property!

*3rd Day* The legal responsibilities of federal and other agencies, with a discussion of how these can best be met in various state and local situations, particularly where adequate state or private agencies are presently not available to handle the necessary research under contract. How can the profession best meet the potential crisis?

*4th Day* The National Environmental Policy Act and the Archeological Conservation Act require consideration of and authorize responsible action with respect to the Nation's archeological resources. Nothing is spelled out as to how the artifacts recovered from consequent investigations are to be preserved for future generations. Present practice is that the state or other public agency who contracts with the federal government for the initial research is expected to provide this service in perpetuity. Will this continue to be a viable practice in the future? What other alternatives are open or at least open to investigation and possible development?

*5th Day* Summary and review.

#### VI. Archeology and the American Indian

There currently is a rather large gap between the viewpoints of many American Indians and many archeologists, yet potentially many of their ultimate goals probably are quite similar. These similarities should be explored in order that we may work together toward common goals, operating from a solid base of cooperation and assistance, rather than through confrontation and antagonism.

*1st Day* A discussion by representatives of the Indians of various Indian points of view, followed by a discussion of the archeological point(s) of view.

*2nd Day* With the above as background, discussion of how the needs of the Indian communities and groups can best be served by archeologists, i.e., what can archeology do for the Indian? This should be followed by a discussion of how Indians can assist archeologists in the protection, recovery, and interpretation of our Indian cultural heritage.

*3rd Day* Discussion of specific problem areas that have come out of the first two days of discussion in order to develop approaches to the future which will have the greatest opportunity for success.

*4th Day* In the perspective of the total public good, i.e., within local, regional, tribal, and national frameworks, how can Indians and archeologists work together to facilitate protection and development of archeological data in ways that will be pertinent and appropriate to the needs not only of Indians and archeologists but of the total public?

*5th Day* Summary and review.\*

## THE SEMINARS

It is doubtful that anyone who participated in the Airlie House seminars will ever forget them. Everyone seemed to agree at their conclusion that it was the most intellectually and professionally stimulating experience in which they had ever participated.

The Airlie House facilities themselves proved excellent. Airlie House is located some 45 miles southwest of Washington, D.C., near Warrenton, Virginia. It consists of an old estate which has been made into a center specifically for use by study groups such as ours. The main house has a variety of meeting rooms, the outbuildings provide very comfortable living quarters, and the food is superb. The countryside is quiet and stimulated contemplation, and there was little to distract any of the participants from the subject of the seminar, unless they were devoted duck or goose watchers. Occasionally other conference groups were present but because of the expansive facilities it proved quite easy to ignore them completely.

In addition, the Airlie House seminars benefited both during the seminars and subsequent to them from a great deal of personal and logistical support from Ed Lehman, Executive Director of the American Anthropological Association, and from Kirby Kendall of that same office. It is questionable if the program could have been put together and executed without them.

The first two groups to meet were those concerned with Certification, and with Report Writing. They convened on July 31, 1974. The second set of two seminars consisting of Cultural Resource Management, and Communication met on August 27. The final two, Law, and Native Americans did not meet until November 2.

Each group gathered at Airlie House one day, and spent the latter portion of that day becoming acquainted. During the next four days, from after breakfast until far into the night or even into the early hours of the next morning, each group either met as a unit to hold discussions or split up into individual study groups preparing position reports for subsequent group discussion. Meals provided the only break. In the evenings, when one seminar group was not working as a unit, or not working individually on particular assigned topics, they usu-

ally got together with the other seminar group and informally exchanged information about what each group was considering. On occasion the two groups met formally for presentation of ideas and total group discussion. The presence of two seminars had been planned with this possibility in mind. Rather than having only five or six people discussing a subject, it was desired that the end product of each seminar be the result of more or less direct input from all of those present at the time. The fifth day was spent wrapping things up. To provide continuity among the three sets of seminars, Hester Davis and Bob McGimsey attended all three sets, with Davis participating actively in the Report Writing, Cultural Resource Management, and Native Americans seminars, while McGimsey played an active role in the other three. In this manner, ideas expressed in preceding seminars could be carried forward and introduced as appropriate into subsequent sessions.

Of great importance to the effective operation of the seminars were the two staff persons who formed an integral part of each of the seminar groups. Their basic charge was to take notes on the essence of each session, to transcribe these and run them off each evening in order that the transcription would be available to the participants the following morning. The theory had been that one of each pair would take notes while the other typed them and ran them off. In fact, since all of these individuals had considerable background in archeology and an interest in the topics of the seminars, each wanted to be present for all the discussions. They often were able to actively contribute to the discussions as well as record them and, because of their knowledge and background, they were able to take a much more comprehensive set of notes than would have been possible by the best trained secretary. Seldom did these individuals finish their chores before midnight, but they were always (well, almost always) ready the following morning right after breakfast. Actually, most of us had been working well into the night.

When groups work as hard as these did, some comic relief is essential. In this case, the most frequent approach was that of limericks of varying quality and subject matter which would appear on our blackboards or be circulated anonymously to the group. No one was immune either from being the subject or the originator of these bits of doggerel before it was over. The participants in the first group of seminars established a new organization known to its members as SOFT. The charter members generously allowed subsequent seminar participants to enter their ranks, and Stan South created one of his famous barnyard charts for the Report Writing seminar. A mini-epic poem and a cultural resource management anthem, a portion of it set to music, also appeared.

By the end of the fourth full day, some of the seminars had essentially completed their business with only tag ends to be finished off by one or two

\* This concludes the basic proposal presented to the National Park Service.

members on the fifth day with final arrangements being made only at the very end.

In all six instances the seminars followed a nearly identical pattern. The first day was devoted largely to all participants expressing their views and exploring the views of others. At the end of the first day, such a diversity of outlooks was evident it seemed inconceivable that the participants would ever agree on anything, much less a coherent report on the subject of the seminar. The second and third days were spent exploring various ideas and approaches in an extraordinarily fluid manner with argumentative alliances changing constantly, depending on the subject under discussion. Nonetheless, by the end of the third day each group found itself in basic agreement on most issues. The fourth and, when necessary, the fifth day were devoted to working out details and preparing preliminary drafts. By the end of the seminar there was essential unanimity among all those who had participated. It was, in many ways, an amazing and extraordinarily rewarding process.

## THE REPORTS

Subsequent events indicate that there was one major flaw in the plan developed for the Airlie House seminars. At the conclusion of each seminar one participant agreed to serve as compiler, with the charge of taking all of the prepared drafts along with all of the daily notes, and working these sometimes discursive documents into a coherent whole. Funding was provided for this and instructions to compilers indicated they were to have the completed first draft of the report back to Davis and McGimsey within thirty days of the conclusion of the seminar. Davis and McGimsey were then, after receiving all six reports, to coordinate them all, do the final editing, and distribute the reports once again for final review by the seminar participants, prior to submission to the National Park Service and the publisher. It was anticipated that this would enable the final report to be distributed within twelve months of the time the grant was awarded, if not by the time of the May 1975 meeting of the Society.

As is evident from the date of the publication, this goal was not achieved. Only one compiler succeeded in getting the manuscript returned within the thirty day period.

The flaw, of course, was that all participants are extremely busy individuals and all have considerable responsibilities to their home organizations. When anyone in that position returns from a full week's absence, there is always a list of emergency items that need to be taken care of immediately. The chain of concentration is difficult to reestablish, and local needs and emergencies inevitably take precedence over completion of a manuscript. The end result was that some of the reports were not returned to the editors until twelve months after the seminar. The editing, too, has been delayed by local necessities and by developments which, in fact, grew directly

out of the report on the Committee on Certification. The final meeting of the Interim Committee on Professional Standards, in which both editors were involved, was held in Fayetteville in late January 1976. Both editors functioned as hosts and participants in this Committee's activities, right in the middle of the final push to complete editing on the Airlie House manuscripts. This further delayed them for a period of several weeks. National Park Service review and subsequent discussion tacked on another six months.

Each seminar report was written as a separate document. The compilers endeavored, and to an amazing degree succeeded, in reflecting the total views expressed by the seminars. Yet, as all such compilations were to be reviewed and commented upon by each member of the seminar prior to publication, no hesitation was felt by the compilers to provide original forms of expression or organization.

The editors have defined their role in an even more liberal way, particularly because of the long, unforeseen, time lag in publication. Much has happened in that period. All of us have gained new insights and greater experience in handling the problems which the seminars addressed. It was the opinion of the editors that the purpose of these seminar reports was to provide the profession and those working with it, with as up-to-date and complete a review of the areas discussed by each seminar as possible. We would be derelict in our duty if we simply incarcerated the thinking of two years ago, rather than making every effort to include this additional experience and these added insights. Therefore the editors have felt free to insert new portions and to rewrite entire sections as they felt it to be appropriate. In addition, the editors took the six separate seminar papers and endeavored to rework them in such a manner that they became consistent, complementary, but not too overlapping, chapters of a single report. This often involved reducing or enlarging sections, eliminating a few, adding several, as well as general reorganization. Some repetition was felt to be desirable in the interest of having relevant information immediately available at appropriate points in the discussion. Because of these changes none of the participants, other than the editors, can be held strictly accountable for what follows. They are, in fact, in the perhaps enviable position of being able to take credit for whatever they wish while being able to deny ever having seen that which they do not agree with.

Mark Raab and Dee Green were among the first to read the completed draft of the entire manuscript and their comments have been valuable. The preliminary drafts of each seminar paper were returned to the seminar participants for their review and discussion. These comments generally have been incorporated into the final report as published here, as have been the comments of the National Park Service reviewers. Time and cost factors generally

prohibited such review of subsequent drafts by anyone but the National Park Service. Review of the final draft by Interagency Archeological Services revealed some differences of interpretation and opinion of sufficient professional depth to demand special treatment.<sup>1</sup>

So far as possible, it is hoped and intended that these reports reflect the very carefully considered viewpoint of a wide range of individuals active within the profession of archeology on the topics concerned, and that these viewpoints represent not just those individuals, but that of a majority of the profession.

The editors would like to recognize, on behalf of the entire profession, the days, in some cases

<sup>1</sup> Subsequent footnotes indicate the views of Interagency Archeological Service (IAS), that Division of the Office of Archeology and Historic Preservation responsible for providing archeological consultation, recommendations, and other services to Federal agencies and others on behalf of the Secretary of the Interior under the authorities of the Antiquities Act of 1906, the Historic Sites Act of 1935, the Historic Preservation Act of 1966, Executive Order 11593, and the Archeological and Historic Preservation Act of 1974. The Division will consistently be referred to as "IAS" throughout the footnotes.

weeks, of effort which the various participants in these seminars contributed. The editors also would like to express their very real appreciation for the understanding shown by these individuals as their ideas and thoughts were reorganized and reassembled in the process of achieving this final result.

It would not have been possible to develop and carry out the seminars or to produce this manuscript had it not been for the assistance of the Arkansas Archeological Survey and its fine staff.

This publication is not going to resolve all the problems of the profession. Some will disagree and changes will continue to occur. This is as it should be. This publication attempts to pull together a great deal of current thinking about the archeological profession and its problems and thereby give everyone a solid point of departure for development and growth.

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Hester A. Davis*

Fayetteville, Arkansas  
January 1977

# 1 A Consideration of Law in Archeology

## EDITOR'S PREFACE

Although the Law seminar was one of the last two held, it was felt that the report on those discussions should be the first chapter, for it covers both the federal laws that form the base for much current archeological activity, and some of the basic legal issues facing the profession today.

The seminar participants also spent considerable time discussing an early version of National Park Service guidelines and spent some time on then-pending federal legislation. Those discussions have been deleted in varying degrees from the chapter which follows. The discussions were timely when they were held and we hope provided valuable input to the National Park Service in developing its guidelines. However, there seemed little point in reviewing old arguments or in attempting to present data on legislation which would be out of date by the time this volume was printed.

The *Anthropology Newsletter* now has a section which reviews all current federal legislation of concern to anthropologists. Archeologists should utilize that information to keep themselves informed of legislation affecting the profession. It is not enough to be informed, however. Information not acted upon is useless. The editors have probably had as much opportunity to become involved in the legislative process as anyone in the profession. It is our experience that the system can be responsive to the voiced concerns of groups with particular interests; but the system works only if those groups concerned also work—collectively and individually.

State and federal laws passed in the last ten years have transformed the entire archeological profession. Further changes are on the horizon as the current attacks on the 1906 Antiquity Act make evident. Indeed, archeologists must be aware of and continue to consider the law as an active portion of their total professional responsibility.

## INTRODUCTION

### Rationale

The rapid depletion of archeological resources throughout America has caused a crisis of unprecedented impact. Vast numbers of prehistoric and historic sites have been lost as a result of highway construction, dam building and reservoir flooding, urban sprawl, and other forms of development (cf. Pastron 1973; Davis 1971, 1972). Additional cultural remains have been destroyed by vandals, pot hunters, and by "archeologists" who have neglected to report upon their findings. In most cases, the problem has been intensified by the failure of archeologists to communicate effectively their findings and needs to both governmental agencies and the general public.

Archeologists have responded in various ways to this critical situation: a restructuring of governmental approaches to archeological management has been advocated (cf. King 1971); new emphasis has

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been focused upon the vital development of public archeology (cf. McGimsey 1972); and, most recently, the innovative paradigms of "conservation archeology" have been spawned.

Conservation archaeology is founded upon the assumptions that: (1) The preservation of archaeological sites as a resource through management decisions will be necessary if American archaeology is to continue to evolve as a problem-oriented discipline (Lipe and Lindsay 1974:vii); and (2) to ensure its survival, American archaeology must be totally restructured in such a way that the public participates more fully in archaeological responsibilities and benefits, that archaeologists abandon the traditional excavation ethic in favor of a preservation ethic, and that students and professional archaeologists actively seek political and legal measures to further the goals of heritage conservation [Moratto 1975:ii].

With the growth of public and conservation archeology, increasing attention has been directed toward legal remedies for archeological maladies (cf. Hallinan 1973; Hester *et al.* 1973). American archeology has reached the point where its very survival depends upon close interaction with the realm of law. Recent legislation and court decisions have substantially affected the powers, responsibilities, and potential liabilities which now face the archeologists of this nation. It seems inevitable that law must assume an integral role in the discipline's future if archeologists are to avoid legal pitfalls and work effectively with private and governmental agencies toward the basic goals of preserving and interpreting cultural information.

These facts provided the rationale for the seminar on "Archeology and the Law."

### Seminar Orientation

A wide range of topics was considered in the course of this seminar. The discussants first examined new federal actions (laws, regulations, and court decisions) concerning archeological resource protection. Pursuing this theme, attention was focused mainly upon: (1) the 1974 Archeological and Historic Preservation Act; (2) a draft of proposed "Historical and Cultural Properties Regulations" of the Department of the Interior; (3) the *United States of America v. Ben Diaz* case, which affects the 1906 Act for the Preservation of Antiquities; and (4) new and proposed laws which may pertain to archeology. Also discussed were: (5) the legal aspects of environmental impact studies; (6) archeology and private property laws; (7) legal relationships between Native Americans and archeologists; (8) contracts; and (9) the role of archeologists as advocates.

Comparatively little time was spent reviewing pre-1965 federal actions, though for the convenience of the reader the major federal laws are summarized below. Similarly, because of their diversity and number, state and international laws were perused only superficially.

## A SUMMARY OF FEDERAL LEGISLATION

The management of archeological resources in the United States rests not just on philosophic necessity and professional and public concern, but on legal support by a number of federal and state laws, published guidelines, and policy decisions.

Most of the state and federal laws (through 1970) germane to archeology were treated adequately in McGimsey's (1972) *Public Archeology*, although many have since experienced significant modification. The texts of these laws can be found either in McGimsey (1972) or in Lipe and Lindsay (1974), and current updated versions can be obtained from the Office of Archeology and Historic Preservation, National Park Service. The intent here is to briefly cite the key laws and to emphasize certain current legal challenges and opportunities which confront archeologists and others concerned with cultural resources.

At various times one or another of these legal bases has, for various reasons, received undue emphasis to the ultimate detriment of the resource base. The exact mix necessary to provide the best results doubtless will vary in given instances. However, the important point to emphasize is that these Acts, as a group, together provide an unusually comprehensive package, and that only if all of them are used in concert rather than as separate entities will it be possible for the archeological community, concerned citizens, and public and private agencies to develop and carry out a well designed rational program in protecting and investigating our cultural resources.

### The Antiquities Act of 1906

(P.L. 59-209; 34 Stat. 225; 16 U.S.C. 431-433)

This Act provides for the protection of historic and prehistoric remains, "or any antiquity," on federal lands; establishes criminal sanctions for unauthorized destruction or appropriation of federally owned antiquities; and authorizes through a permit system the scientific investigation of antiquities on federal lands (see also page 35).

### Uniform Rules and Regulations

These rules now charge the Secretaries of the Interior and of Agriculture to carry out the provisions of the Act (the Secretary of the Army having relinquished authority to the Secretary of the Interior). It provides guidelines requiring that institutions undertaking archeological research and curatorial capacity, obtain federal permits, and submit reports. It further provides that resultant collections must remain available to the public. (For discussions of recent court activity regarding P.L. 59-209, see pages 15-17).

### **The Historic Sites Act of 1935**

(P.L. 74-292; 49 Stat. 666; 16 U.S.C. 461-467)

This Act designates the Secretary of the Interior as responsible for establishing the National Survey of Historic Sites and Buildings, requires the preservation of properties "of national historical or archeological significance" and the designation of national historic landmarks; and authorizes interagency, intergovernmental, and interdisciplinary efforts for the preservation of such resources.

### **The Reservoir Salvage Act of 1960**

(P.L. 86-523; 74 Stat. 220; 16 U.S.C. 469-469c)

This 1960 Act provided for the recovery and preservation of "historical and archaeological data" that might be lost or destroyed as a result of the construction of federally funded or licensed dams, reservoirs, and attendant facilities and activities. (It was extensively amended in 1974 by P.L. 93-291. See pages 11-14).

### **The National Historic Preservation Act of 1966**

(P.L. 89-665; 80 Stat. 915; 16 U.S.C. 470)

In this Act a national policy of historic preservation is set forth, including the encouragement by matching grants of state and private efforts. The Act defines the term historic preservation as "the protection, rehabilitation, restoration, and reconstruction of districts, sites, buildings, structures, and objects significant in American history, architecture, archeology, or culture"; it directs the expansion of the National Register of Historic Places to include resources of regional, state, and local as well as national significance; establishes the President's Advisory Council on Historic Preservation; encourages states to conduct statewide surveys and prepare State Historic Preservation Plans; authorizes grants by the Secretary of the Interior to the states to support surveys, planning, and preservation activities; and prescribes certain procedures (Section 106) to be followed by federal agencies in the event that a proposed project might affect significant properties. The Act was significantly amended by Public Law 94-422 in 1976; these amendments clarified the authorities of the Advisory Council, increased authorized funding for state programs, modified the Federal state ratio for matching grants to favor the funding of survey and planning, and clarified to intent of Section 106. This section, as amended and as implemented by the "Procedures for the Protection and Enhancement of Historic and Cultural Properties" (36 CFR 800) requires that where sites on or eligible for the National Register will be affected by federally funded, assisted, or licensed projects, the responsible agency shall consult with the SHPO and, where necessary, the Office of Archeology and Historic Preservation to determine the significance of the property, then consult with the SHPO and the Advi-

sory Council to develop methods of mitigating the effect. Once a Memorandum of Agreement committing the agency to such methods has been signed work can proceed. Compliance procedures are provided for federal agencies under Section 106 of this Act and Executive Order 11593 by 36 CFR 800 (see pages 35-37, 60, and footnote 3, p. 13).

#### *Procedures for the Protection of Historic and Cultural Properties (36 CFR 60 and 36 CFR 800)*

These Rules and Regulations are set out under the National Historic Preservation Act and E.O. 11593. 36 CFR 60 defines the appropriate terms and sets forth in detail the procedures for nominating sites to the National Register. States must now provide for at least one public notice and provide a reasonable time for comment prior to placing a site on the National Register. 36 CFR 800 sets forth procedures for reviewing projects to determine whether they affect in any way properties on or eligible for the National Register. Additional review procedures are established for those instances where an adverse effect can be established. This regulation also sets forth the power of the Advisory Council to comment upon all such instances and the criteria for "effect," and "adverse affect." Both regulations list criteria for determining whether a property is eligible for the National Register. While an archeological site might qualify under any of the four criteria established, *all* archeological sites can be considered eligible for the National Register under the fourth criterion: "That have yielded, or may be likely to yield, information important in prehistory or history." In practice, the archeologist who asserts that a property qualifies for the National Register under criterion 4 is obligated to specify *how* the property may yield important information, and what this information is likely to be. Conversely, if an archeologist asserts that a site does not qualify for the National Register, the reasoning for this, too, should be explained. The Office of Archeology and Historic Preservation can provide more specific guidance on request.

### **The Department of Transportation Act of 1966**

(P.L. 89-670; 80 Stat. 574; 23 U.S.C. 1 *et seq.*; in conjunction with the Federal-Aid Highways Act of 1966)

(P.L. 89-574; 80 Stat. 574; 23 U.S.C. 1 *et seq.*)

These Acts direct the Department of Transportation to spend funds for the purposes of protecting, avoiding, or studying archeological sites to be affected by federally supported road construction.

### **The National Environmental Policy Act of 1969**

(P.L. 91-190; 83 Stat. 852; 42 U.S.C. 4321-4327)

This Act requires evaluation of the effects of major federal actions on environmental (including cul-

tural) resources. The Act also establishes the President's Council on Environmental Quality.

NEPA, with its expressed concern that every federally funded or licensed entity takes into consideration the total environment, not just the goals or charge of the entity itself, has had a major effect on archeology and archeological research.

For the first time, the archeologist is not being told that a project is almost to be initiated, certain funds are available, and do with them what can be done in the time available—the old salvage approach. Now the archeologist is being informed that a certain project is contemplated, and is being asked to evaluate the effect of various alternatives on the archeological resource base, and to determine what mitigative approaches are appropriate to each alternative along with their probable costs. The difference in the two approaches is highly significant.

Because of NEPA, the archeologist now can and should become involved at the earliest planning stage of every major land-altering project. Archeological input and, as necessary and appropriate, investigations can be provided at every step of the planning process. NEPA *if used together with* the more explicit requirements of the National Historic Preservation Act and Executive Order 11595, and in the context of viable state and agency historic preservation planning, can insure that maximum consideration is given to cultural values and to the resource base.

*Council on Environmental Quality  
Guidelines of August 1, 1973  
(38 FR 20550)*

These Guidelines define cultural resources as part of the environment, detail procedures for making and evaluating Environmental Analysis Reports (EAR) and Environmental Impact Statements (EIS), and list agencies with special review competence.

**Executive Order 11593 of May 13, 1971  
(Protection and Enhancement of the Cultural Environment)**  
(36 FR 8921, 16 U.S.C. 470)

This Order directs all federal agencies to make an inventory of historic properties under their ownership or control, nominate eligible properties to the National Register of Historic Places, and give priority in inventory to federally owned properties to be transferred and/or altered. It also directs federal agencies to develop policies that will contribute to the preservation of non-federally owned historic properties, and to exercise caution until inventories and nominations to the National Register are complete, to insure that eligible properties are not inadvertently damaged or destroyed. The Secretary of the Interior is directed to prepare standards and provide advice concerning identification and preservation.

## **The Housing and Community Development Act of 1974**

(42 U.S.C. 5301)

*HUD Community Development Block Grants  
(40 FR 24709)*

The Housing and Community Development Act of 1974 is particularly important to historical archeology. Urban renewal projects generally affect older sections of cities where significant historical properties often exist. As cities meet the National Environmental Policy Act requirements for the evaluation of impacts upon the (cultural) environment, archeologists may enjoy the opportunity to influence planning and conservation decisions in urban historical areas to a greater extent than has been possible. It is also worth noting that many prehistoric sites still exist, relatively intact, in urban contexts beneath the shallow footings and foundations of old structures. The Housing and Community Development Act can provide the mechanism for the location, evaluation, and conservation of some of these cultural resources.

Section 570.604 of the Rules and Regulations for Block Grants spells out that all recipients of such grants must meet and comply with all requirements of the National Historic Preservation Act of 1966 (P.L. 89-665) including the Rules and Regulations promulgated for the Act (36 CFR 800), and the Archeological and Historic Preservation Act of 1974 (P.L. 93-291), as well as E.O. 11593. It is important to recognize that according to the policies of the Department of Housing and Urban Development (HUD), the recipient of the grant (the community) is responsible for this compliance—not HUD. The Housing and Community Development Act, as thus interpreted by HUD, is unique among federal statutes in this transfer of responsibility from the federal to local governments.

*HUD 701 Comprehensive Planning Assistance  
(40 FR 36861)*

HUD requires that planning activities funded under Sec. 701 of the Housing Act of 1954, as described by the Community Development Act of 1954, be carried out in accordance with Section 106 of the National Historic Preservation Act of 1966, E.O. 11593, and Section 101(b) of the National Environmental Policy Act of 1969. The Rules and Regulations (Section 600.66) for Sec. 701 outline the steps for including historic preservation and enhancement in the planning process and for preparing an historic preservation assessment.

## **The Archeological and Historic Preservation Act of 1974**

(Amendment to the Reservoir Salvage Act of 1960, also known as the Moss-Bennett bill when before Congress)  
(P.L. 93-291; 88 Stat. 174; 16 U.S.C. 469)

## Provisions

The Archeological and Historic Preservation Act, which was signed into law on May 24, 1974, amends the Reservoir Salvage Act of 1960 by specifically providing a mechanism for the preservation of archeological and historical data:

... which might otherwise be irreparably lost or destroyed as a result of (1) flooding, the building of access roads, the erection of workmen's communities, the relocation of railroads and highways, and other alterations of the terrain caused by the construction of a dam by any agency or (2) any alteration of the terrain caused as a result of any Federal construction project or Federally licensed activity or program (Sec. 1).

Moreover, the Act outlines the actions to be taken by every federal agency which undertakes or authorizes construction in order that historical and archeological resources receive maximum consideration:

Sec. 3. (a) whenever any Federal agency finds, or is notified, in writing, by an appropriate historical or archeological authority, that its activities in connection with any Federal construction project or Federally licensed project, activity, or program may cause irreparable loss or destruction of significant scientific prehistorical, historical, or archeological data, such agency shall notify the Secretary [of the Interior], in writing, and shall provide the Secretary with appropriate information concerning the project, program, or activity. Such agency may request the Secretary to undertake the recovery, protection, and preservation of such data (including preliminary survey, and other investigation as needed, and analysis and publication of the reports resulting from the investigation), or it may, with funds appropriate for such project, program, or activity, undertake such activities.

Similar requirements are applied (for the first time) to all federally-assisted projects. Furthermore, under certain conditions, agencies are allowed compensation for losses resulting from construction delays caused by implementation of the Act:

Sec. 3 (b) Whenever any Federal agency provides financial assistance by loan, grant, or otherwise to any private person, association, or public entity, the Secretary [of the Interior], if he determines that significant scientific, prehistorical, historical, or archeological data might be irrevocably lost or destroyed, may with funds appropriated expressly for this purpose conduct, with the consent of all persons, associations or public entities having a legal interest in the property involved, a survey of the affected site and undertake the recovery, protection, and preservation of such data (including analysis and publication). The Secretary shall, unless otherwise mutually agreed to in writing, compensate any person, association, or public entity damaged as a result of delays in construction or as a result of the temporary loss of the use of private or any non-Federally owned lands.

In situations where significant cultural data are jeopardized and the initiating agency, for valid reasons, cannot institute adequate protective or investigative measures, it becomes the explicit responsibility of the Secretary to:

... conduct or cause to be conducted a survey and other investigation of the areas which are or may be affected and recover and preserve such data (including analysis and publi-

cation) which, in his opinion, are not being, but should be, recovered and preserved in the public interest [Sec. 4. (a)].<sup>2</sup>

Section 7 of the Act authorizes the appropriation of \$500,000 (in 1974) to \$3,000,000 (in 1976-78) per year for the purposes of Sec 4 (a) (*supra*). More importantly, however:

Sec. 7 (a) To carry out the purposes of this Act, any Federal agency responsible for a construction project may assist the Secretary [of the Interior] and/or it may transfer to him such funds as may be agreed upon, but not more than 1 per centum of the total amount authorized to be appropriated for such project, except that the 1 per centum limitation of this section shall not apply in the event that the project involves \$50,000 or less: *Provided* that the costs of such survey, recovery, analysis, and publication shall be considered nonreimbursable project costs.

Unfortunately, to date, none of the funds authorized for Sec. 3 (b) purposes have been appropriated.

## Discussion of Problems and Benefits

Among the patent advantages of the Archeological and Historical Preservation Act are these: (1) the Act authorizes *all* federal, federally-assisted, and federally-licensed agencies to expand program or project funds to evaluate, protect, and/or recover archeological and historical data jeopardized by their projects; (2) it establishes a legislative precedent by explicitly calling for the "analysis and publication," as well as the "recovery, protection, and preservation," of significant data; (3) it is directed toward the protection and/or recovery of data rather than of sites; (4) monies are authorized to compensate those who suffer losses as a result of the Act's execution; and (4) federally-entailed agencies are authorized to expend funds directly, or to transfer up to 1 per centum of project budgets, to the Secretary of the Interior for the preservation of significant archeological and historical data.

It was not the intent of the original authors of the legislation nor of at least one of its legislative sponsors that the 1% limitation apply to funds spent internally by one agency. No such arbitrary limitation can do justice to every archeological situation. Nonetheless, as this goes to press (early 1977) an increasing number of federal agencies are making the interpretation that the 1% limitation applies to all situations. They evidently have taken the position that the law is not clear on this point and have therefore consulted the legislative history (which, unfortunately, is itself susceptible to either interpretation) and they have chosen to accept the more conservative course. Only future amending legisla-

<sup>2</sup> Based on study of the Act's legislative history, the Department of the Interior Solicitor has concluded that the authority conveyed by Section 4 (a) is a temporary one, extending only through the transition period until all Federal agencies have developed appropriate mechanisms to insure that adequate protective or mitigative measures will be instituted.

tion or court decisions will serve to clarify this issue.<sup>3</sup>

(1) The 1% limitation applies to the costs of data recovery. It does not apply to identification studies and planning required by statutes other than the Archeological and Historic Preservation Act (such as NEPA and the Historic Preservation Act) nor does it apply to the cost of mitigation actions other than data recovery.

(2) Should the cost of adequately recovering significant data from a property exceed the 1% limitation, the responsible agency is not excused from its responsibilities under NEPA, the National Historic Preservation Act, Executive Order 11593 and 36 CFR 800. The total program of archeological impact mitigation should be the subject of a Memorandum of Agreement negotiated by the agency, the State Historic Preservation Officer, and the Advisory Council on Historic Preservation prior to the inception of construction. Any impacts that cannot be mitigated within the 1% limitation should thus be identified and efforts should be made to develop supplemental funding or explore alternative mitigation methods. Any remaining loss of significant data above and beyond the limits imposed by the 1% ceiling constitutes an unavoidable adverse impact language of the Council of Environmental Quality Guidelines for the Preparation of Environmental Impact Statements (40 CFR 1500), and should be reported as such.

The new law does contain some vague and potentially troublesome language. For example, Sec. 4. (b) indicates that mitigative measures are not required in the event of an "emergency" or in connection with "activities undertaken in anticipation of . . . a natural disaster." Even though the legislative history of the Act clearly records the preservationist intent of Congress, it might be argued in court that the construction of a flood-control dam or work on a levee constitutes work done " . . . in anticipation of . . . a natural disaster." In such a case, the project might be deemed categorically exempt for the provisions of the law, and no evaluative or mitigative actions would be authorized. To clarify this wording in a manner consistent with legislative intent it would be useful to publish a definition, such as the following, in the *Federal Register*:

As used in P.L. 93-291, Sec. 4. (b), "emergency" means a situation in which there exists a clear, present, and immediate danger to human life and/or valuable property.

Similarly, many potentially destructive activities (e.g., logging, land-leveling) might not be interpreted by some as being included within the phrase "Federal construction project" of Sec. 3. (a) (*supra*). To close this possible loophole, it is recommended that the following clarification be printed in the *Federal Register*:

As used in P.L. 93-291, Sec. 3. (a), "Federal construction project" means any Federal activity or project which modifies

<sup>3</sup> While the language of the Act itself does appear to apply the 1% limitation only to transfer funds, study of the Act's legislative history by the Department of the Interior Solicitor indicates that Congress intended to establish 1% as the ceiling on all expenditures under the Act except those of the Secretary authorized by Section 7 (a) to "assist" the Secretary, presumably with service, equipment and personnel whose aggregate value might exceed 1% of the project cost in some circumstances. The important points to recognize, in the view of IAS, are:

the land or its surface in any manner which may affect significant, prehistorical, historical, or archeological data.

Other crucial, but undefined, phrases in the Act relate to the identification of "appropriate" historical or archeological authorities and the determination, by the Secretary of the Interior, of what constitutes "significant" data. Remedial definitions, such as these, are suggested for *Federal Register* publication:

As used in P.L. 93-291, Sec. 3 (a), "Appropriate historical or archeological authority" means any agency or individual competent in the field(s) of history and/or archeology; the phrase includes, but is not limited to, State Historic Preservation Officers, professional historians, archeologists, historical architects, and architectural historians.

As used in P.L. 93-291, Sec. 3. (a,b) and Sec. 4. (a), "significant scientific, prehistorical, historical, or archeological data" means sites, specimens, relics, artifacts, remains, and records pertaining thereto which by virtue of their uniqueness, age, state of preservation, integrity, relevant ecological information, scientific interpretive potential, and with due consideration of the cost and other relevant considerations of excavation, restoration, or preservation, possess sufficient value as sources of information regarding the cultural past to warrant their protection or recovery and interpretation.

As in the case with any new law affecting a wide variety of agencies operating over the entire country, initial interpretations of the basic law and methods of integrating its operation into already established procedures have tended to vary not only between but even within federal agencies.

The interpretation of the 1% provision discussed above is one such problem. Another has involved the various contracting methods. The Corps of Engineers has adopted the architectural-engineering approach; other agencies are utilizing various forms of bidding. (For a more complete discussion see pages 48-49.) It does seem essential, whatever methods are finally adopted, that archeological studies be viewed as professional input, and not in the same light as the purchase of a commodity. While every agency has a responsibility to expend public funds wisely and well, it must be recognized by them that, with respect to archeological studies, the capability for developing the best possible scientific recommendations and data must always be paramount in the selection process.

Additional problem areas have arisen which are not yet fully resolved. Some of these entail the definition of indirect impact and the degree of agency responsibility in this area, what constitutes publication as called for in P.L. 93-219 and what audience should be served to satisfy the need stated in the law for publication, and how permit and license studies are to be funded (since normally the agencies who issue these permits and licenses do not have funds for such studies). Finally, guidelines need to be developed as to when the Secretary of the Interior should become involved under the provisions of Section 4. (a). All of these have been subject to somewhat different interpretations by different agencies but none are incapable of resolution if the

concerned agencies and archeologists will work together in good faith toward their solution.

In sum, due to occasional vague phraseology in crucial sections, such as those noted above, and some unresolved problems involving interpretation of the Act, the potentials of this Act can be viewed with a guarded optimism. The new law will not bring the millennium upon American archeology; it will not lead to the salvation of all jeopardized archeological sites; and it will not automatically alter the orientation of public agencies charged with compliance. However, if archeologists and the land-modifying agencies can establish a vigilant, systematic, intensive, and cooperative relationship, then the 1974 Act should markedly enhance the quality and extent of archeological and historical conservation programs across the nation.<sup>4</sup>

### Historic and Cultural Properties Regulations

The law seminar participants also discussed an early draft of guidelines being considered by the National Park Service. Because no such regulations have yet been adopted (as of Dec. 1976), we will consider here the overall purpose, structure, and significance of such a document.<sup>5</sup>

<sup>4</sup> In the experience of IAS to date, most of the ambiguities noted are of much less moment than are some which have not been addressed here. There is a significant question about the relationship of Section 3 (a), which allows agencies engaged in construction projects or federally licensed projects, activities, or programs to undertake data recovery activities or request that the Department of the Interior do so, and Section 3 (b), which refers to Federal assistance projects and simply authorizes the Department of the Interior to undertake data recovery activities where needed. The Department of the Interior believes that Section 3 (a) applies to all kinds of Federal construction projects including many Federal assistance projects, while Section 3 (b) allows the Department to assist in data recovery programs when funding such programs would constitute an unreasonable burden upon the recipients of Federal assistance. Some Federal assistance agencies, on the other hand, have argued that Section (b) alone applies to them, exempting them of all responsibility and placing this responsibility upon the Department of the Interior. A more general area of confusion relates to the place of the Act *vis a vis* the planning processes prescribed by NEPA, the National Historic Preservation Act, and related authorities. Since the Act fails to refer to these authorities, their mutual relationship has been the subject of varying interpretation by affected agencies. The Department of the Interior holds that the Archeological Historic Preservation Act provides one method of mitigating impacts on those properties that contain valuable and recoverable data, and that it can best be brought into play after the properties and their data have been fully identified, and mitigation options explored via the planning processes provided for by NEPA, the National Historic Preservation Act, and their related authorities.

<sup>5</sup> Due to statutory changes and receipt of many useful comments from Federal agencies, State Historic Preservation Officers, and the public, the Department of the Interior is now issuing the regulations discussed here in several parts. 36 CFR 63 deals with procedures for requesting determinations of eligibility for the National Register of Historic Places, as required by Executive Order 11593 and 36 CFR 800. 36 CFR 64 prescribes standards for identification studies (including archeological surveys) conducted pursuant to Section 2 (a) of Executive Order 11593 and Section 106 of the National Historic Preservation Act as amended.

National Park Service guidelines could easily become the single document most useful to conservation archeology in the United States. One potential problem area to which the guidelines should be directed is concerned with the role of the National Register of Historic Places (NRHP), and the equation of NRHP eligibility with archeological "significance." The significance of a site depends upon many factors, including variable contexts and research parameters. By listing all "significant" sites on the NRHP, and then using the Register as a planning device archeologists would be tied into a system which could fossilize in the long term that which is presumably significant at the time the initial site evaluation is made.

If the National Register of Historic Places is accepted as a basic planning document, it follows that all significant cultural properties affected by federally-involved projects would have to be placed on the Register before advance-stage plans are formulated. In turn, the lead agency and the Advisory Council would be required to enter into "Section 106 consultations" (cf. E.O. 11593) before sampling or mitigative excavations could be permitted at *any* site or district. Admittedly, this consultation procedure may protect resources in situations where land-altering agencies are not complying with the terms of the various pertinent Acts. However, a *requirement* to bring all cultural sites up to NRHP status as the standard mechanism for their management was felt by the Seminar to be unduly expensive and cumbersome. (Subsequent developments have largely though not entirely alleviated this area of concern. For further discussions of this same point, see pages 34-40).

Another potential area of difficulty considered by the seminar lay in the fact that, in court, any citizen might gain access to any or all NRHP data (including site location) by invoking the Freedom of Information Act. The use of the NRHP as an "honor roll" for relatively well known sites or as a "court of last resort" for sites and districts jeopardized by federal activities does not pose such a problem; but any requirement to include *all* (federally-related) sites on the NRHP, as an integral part of the location-evaluation-mitigation process, may threaten certain cultural properties by bringing their locations to the attention of the general public. However, Public Law 94-458 (enacted in 1976) largely allayed this concern by amending Section 101 (a) of the National Historic

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36 CFR 65 details the procedures to be followed by Federal agencies in notifying the Department of the potential loss of data under terms of the Archeological and Historic Preservation Act; in doing so, it sets forth the place of compliance with this Act in the general environmental and historic preservation planning process. 36 CFR 66 sets forth professional standards for data recovery programs undertaken pursuant to the Archeological and Historic Preservation Act. In spite of the basic change in organization from a single document to a set of documents, the issue that concerned the participants in the symposium remains the same.

Preservation Act to authorize the Secretary of the Interior to withhold locational information on National Register properties from disclosure to the public when disclosure would risk destruction or harm to them (see page 46).

The guidelines should support multistage research and investigation. The entire evaluative process cannot be accomplished in a single, initial phase of investigation. The inventorying and evaluating process should begin at the earliest planning stage and should continue with varying degrees of intensity until project authorization or mitigation is completed. (See also pages 66–71 for a more extended discussion of this point.

## THE ANTIQUITIES ACT ON TRIAL

### The United States of America v. Ben Diaz

#### Introduction

The Antiquities Act (P.L. 59–209) has formed the cornerstone of archeological law in the United States for seventy-six years. In a 1974 decision, this Act was declared “fatally vague” by the U.S. Ninth Circuit Court of Appeals in San Francisco. Here we will (1) summarize the actions which led to the decision, (2) evaluate the implications of this reversal for American archeology, and (3) suggest steps for the improvement of the law.

#### The 1906 Antiquities Act

This is the first as well as the most basic piece of federal legislation affecting archeology. It clearly established the principle that the government, acting for all the people, should not only protect archeological and historic objects and sites but should also actively work toward their preservation and public availability. The act and the accompanying rules and regulations have served as guidelines for the development of most state regulatory legislation [McGimsey 1972:111].

The Act provides fines and imprisonment for unauthorized investigations of historic properties on federally owned or controlled lands. It provides for the establishment, by presidential proclamation, of national monuments for structures or objects of historic, prehistoric, or scientific interest which are located on government property and sets up a mechanism for permits to be issued to scientific organizations to conduct investigations, provided the results are permanently preserved in a public museum.

#### The Case of The United States of America v. Ben Diaz

In 1973, Ben Diaz of Arizona was charged with appropriating “objects of antiquity” in violation of the 1906 Antiquities Act, which, in part, states that:

Any person who shall appropriate . . . any object of antiquity, situated on lands owned or controlled by the Government of the United States . . . shall, upon conviction, be fined in a sum

of not more than \$500 or shall be imprisoned for a period of not more than ninety days, or shall suffer both fine and imprisonment in the discretion of the court [16 U.S.C. 431].

The items taken included twenty-two recent Apache face masks, headdresses, ocotillo sticks, bull roarers, fetishes, and muddogs. They were stored in a holy man’s cave on the San Carlos Indian Reservation. Mr. Diaz was found guilty by the U.S. Magistrate and bound over to the District Court. In the hearing before the Magistrate, the case appeared to be one of first impression with respect to the legal definition of “antiquity.” The testimony of Dr. Keith Basso, Professor of Anthropology at the University of Arizona, appears to have significantly influenced the Magistrate’s evaluation of the word “antiquity.” Even though the subject items had been made between the years 1969 and 1970, Dr. Basso explained that, in his opinion, the artifacts were objects of “antiquity.”

They are not of the present. They are very much of the past and they are decided and viewed by Apaches as articles which are, if left alone, able to return to nature, to their former state, to disintegrate slowly according to the natural processes of time, and to that extent return to the past from whence they came. This too is a religious tenet of the people involved [TR page 61; cf. 368 *Federal Supplement*: 858].

On September 13, 1973, the conviction was affirmed by District Court Judge Fey. Subsequently, Diaz appealed his case, disputing the implicit finding of the court that the artifacts were objects of antiquity. On June 24, 1974, the U.S. Court of Appeals for the Ninth Circuit reversed the judgment of the lower court. The Court (in *Opinion* No. 1177 by Judge Sweigert) stated that

We have no doubt as to the wisdom of the legislative judgment . . . that public interest in and respect for the culture and heritage of native Americans requires protection of their sacred places, past and present, against commercial plundering. . . . Protection, however, can involve resort to terms that, absent legislative definition, can have different meanings to different people. One must be able to know, with reasonable certainty, when he has happened on an area forbidden to his pick and shovel and what objects he must leave as he found them. . . . Nowhere here do we find any definition of such terms as “ruin” or “monument” (whether historic or prehistoric) or “object of antiquity.” The statute does not limit itself to Indian reservations or Indian relics. *Hobbyists who explore the desert and its ghost towns for arrowheads and antique bottles could arguably find themselves within the Act’s proscriptions.* Counsel on neither site was able to cite an instance prior to this in which conviction under the statute was sought by the United States. . . . Here there was no notice whatsoever given by the statute that the word “antiquity” can have reference not only to the age of the object but also to the use for which the object was made and to which it was put, subjects not likely to be of common knowledge . . . in our judgment the statute, by use of undefined terms of uncommon usage, is *fatally vague* in violation of the due process clause of the Constitution [Judgment reversed (*Opinion* No. 74–1177, June 24, 1974 in the United States Court of Appeals for the Ninth Circuit). (Emphasis added.)].

#### Discussion

Even though the *Opinion* is not binding outside of the Ninth Circuit, this decision could sap the re-

maintaining strength of the 1906 Act's criminal statute wherever the case may be cited.

Other recent developments serve to point up the present dangerous legal situation. In two instances in Oregon, attempts by the BLM to prosecute well-documented Antiquities Act violations through the local office of the U.S. Attorney (BLM's only legal recourse) have been turned down by that office (Grayson 1975). Refusal to prosecute was first based on the ground that such offenses were minor and therefore prosecution would not be viewed favorably by the courts; subsequently, the *Diaz* decision, too, was utilized as a basis for not prosecuting in such cases.

In unrelated instances on the East Coast, a treasure seeker is attempting to gain full rights from the courts to a sunken vessel on the outer continental shelf. This case currently is pending in the U.S. Fifth Circuit Court of Appeals. Another recent case challenged the applicability of the 1906 Antiquities Act to a site exactly three miles off shore on state and federal property where there previously had been no question as to the Act's applicability. This case resulted in dismissal and hopefully will resist any appeal.

Recently the U.S. Forest Service filed criminal charges against individuals under Title 16 U.S.C. 433 (Antiquities Act of 1906) for violations occurring in Gila National Forest. The defendants were tried in Las Cruces, New Mexico, before the Magistrate on May 13, 1976. During trial defense a motion for dismissal was entered based on previous findings of the court in *United States v. Ben Diaz*, wherein 16 U.S.C. 433 was found to be "unconstitutionally vague." After issuing a "Findings of Fact" which included a "Conclusions of Law," the Magistrate found the defendants guilty of violating the Antiquities Act, declared that 16 U.S.C. 433 was not *unconstitutionally vague* and in doing so denied the defense's motion for dismissal. This case is presently (December, 1976) in a state of appeal with U.S. 10th Circuit Court of Appeals.<sup>6</sup>

In short, the 1906 Antiquities Act is under review, one might even say attack, as never before. The most hopeful sign in all of this is that at least people are endeavoring to apply it. However, if the 1906 Act is not to be effective in the courts, then other alternatives need to be considered—immediately.

What can be done to rectify this rapidly deteriorating situation? In the *Diaz* case there appear to have been three possible actions, only one of which is likely to be entirely satisfactory. With some risk, the United States might have appealed to the Supreme

Court. The High Court might have declined to hear the appeal, or, if it did accept the case, it might have upheld the *Opinion* of the Ninth Circuit Court and thereby bind the courts of the nation to an archeologically deleterious interpretation of the statute. Even were the Supreme Court to have accepted the appeal and thereafter reversed the judgment of the Ninth Circuit Court, archeology might well have been left with a quasi-enforceable, injuriously vague law. Therefore, appeal to the Supreme Court did not appear to be a satisfactory course of action. An appeal would be hazardous, perhaps disastrous; at best, it would not produce a viable improvement.

A second approach would be to adopt new regulations which define the crucial terms in the Antiquities Act. The Act confers rule-making and updating authority on the Departments of Interior, Agriculture, and Army:

The Secretaries of the departments aforesaid shall make and publish from time to time uniform rules and regulations for the purpose of carrying out the provisions of this section and section(s) 431 and 433 of this title [16 U.S.C.:432].

It is believed by some concerned parties that, under this authority, an administrative cure of the vagueness in the criminal penalty statute might be effected. The Office of the Solicitor, Department of the Interior, has recommended that the National Park Service draft remedial language for the approval of the departments cited.

The rules proposed by the National Park Service should, we feel, seek to accomplish two objectives. First, they should attempt to clarify the ambiguities noted by the court in *Diaz* by defining what is meant by the words "object of antiquity." The words "historic or prehistoric ruin or monument" should also be defined. Secondly, an attempt should be made to define the words "lands owned or controlled by the Government of the United States" [Watts 1974:3].

The Solicitor's suggestion carried with it the admonition that:

... an attempt to remedy the *Diaz* problem ... (by rules) is fraught with some uncertainty. We believe that sound legal arguments can be advanced in support of the rule making. However, it is possible that a court reviewing such regulations would refuse to be swayed by such arguments ... [Watts 1974:4].

After the above was written the United States Attorney General's Office commented to the effect that clarifying regulations might present a viable solution to the problems raised by the *Diaz* case:

We agree ... that the holding in *Diaz* does not vitiate 16 U.S.C. As you know, the facts in *Diaz* were very unfavorable to the government since the "antiquities" in question were made less than five years ago. However, this Department considers the *Diaz* decision as simply a declaration of unconstitutionality as applied to the facts in *Diaz*. We feel that 16 U.S.C. 443 remains viable as a vehicle to reach wrongful appropriations of truly antique objects. See, *United States v. National Dairy Products Corp., et al.*, 372 U.S. 29, 32 (1963), which indicated that statutes should not automatically be invalidated as vague simply because difficulty is found in determining whether certain marginal offenses fall within their language. Accordingly, we concur in your opinion that the holding in *Diaz* does not preclude the drafting of clarifying regulations with respect to 16 U.S.C. 433 [Letter from H. E. Peterson, Assistant Attorney General, to K. Frizzell, Solicitor of

<sup>6</sup> The action of the Magistrate is in keeping with the recommendations of the Departmental Consulting Archeologist as supported by the Department of the Interior Solicitor on November 21, 1974, and the findings of the Department of Justice on December 9, 1974. Thus the concerns raised by the seminar may now appear a little extreme, although the need to resolve the issues raised by *Diaz* and other cases does remain.

the U.S. Department of the Interior, dated December 9, 1974, Washington, D.C.).

Thus, promulgation of new regulations might resolve the "Diaz problem."

A third approach would be to develop new legislation. The *Diaz* case would provide an excellent vehicle to gain support for such legislation, and this may be viewed as a timely opportunity to expand, as well as clarify, the provisions originally set forth in the 1906 Act. For example, a revised antiquities act should include protection for places of spiritual importance (regardless of age) to Native Americans.

In another area, to conserve underwater cultural remains, a new act should explicitly apply to lands of the outer continental shelf.

This issue has been raised with respect to the recent discovery of the U.S.S. Monitor beyond the three mile limit off the North Carolina coast, and with respect to Spanish galleons off the Florida coast. We feel that, since the lands of the outer continental shelf are "controlled" by the United States, if only in a limited sense, the Antiquities Act should apply [Watts 1974:1-2].

Furthermore, in keeping with the 1974 Archeological and Historic Preservation Act, a revised heritage statute might afford protection to cultural resources situated on both federal and federally involved lands. And finally, in order to clarify criminal sanctions, the new law should explicitly proscribe the disturbance or appropriation of defined cultural remains by *any* agency or person operating without a permit. The act and accompanying regulations should make it clear that "hobbyists" and other collectors, as well as commercial plunderers, are included within the purview of the criminal statute.

Three possible means of dealing with the problems raised by the *Diaz* case have been examined. The first of these, appeal to the Supreme Court, seemed *a priori* to be ill advised and was not attempted. Consideration of the second approach is recommended by the Solicitor of the Department of the Interior and by the Attorney General's Office because it affords a direct and expedient means of remedy through regulatory clarification. This is probably the best short-term approach to the protection of cultural resources on federal property. Thinking toward the future, however, there seems considerable merit in the idea of drafting an altogether new law which might effect better protections for a wider range of heritage data than is presently feasible under the provisions of the 1906 Antiquities Act.

## LEGAL ASPECTS OF ENVIRONMENTAL IMPACT STUDIES

### Introduction

Because of requirements set forth in recent federal and state actions, archeologists are increasingly being retained to evaluate projects in terms of possible impacts upon cultural resources. A growing cadre of archeological consultants, including per-

sons affiliated with universities, museums, and independent firms, is developing in response to this need. Archeological consultancy work involves considerable opportunity for field research, planning for the management of cultural remains, and other obvious inducements. Simultaneously, however, impact-evaluation work entails some serious legal and financial hazards of a kind not previously faced by archeologists.

Archeologists who undertake impact assessments are considered professionals (in the same sense that physicians, soils engineers, and attorneys are professionals), and, as such, they assume certain legal responsibilities and liabilities. In addition, there are new risks to the profession in general as sensitive archeological data are conveyed to a host of planning, developing, and regulatory agencies—many of which maintain open public files. Thus, the rapidly growing field of consultancy (or contract) studies confronts archeology with a bewildering array of legal and professional challenges. Some suggestions are offered here for the avoidance or handling of these problems in the context of archeological impact evaluations.

### Anticipated Problems, Possible Solutions

Archeological impact studies are normally accomplished under the terms of a contract. Technically, this means that the sponsor (e.g., a developer) is purchasing the rights and title to specified data gathered by the contractor (i.e., the archeologist). The contractor is legally responsible for the adequacy and validity of the product or report. Consequently, the archeological contractor may be liable for the costs of construction delays ("down time") under certain circumstances. It is possible, for example, that significant archeological resources may be exposed during construction in an area previously "cleared" by the archeologist who did not make precautionary statements concerning data not originally discernible. If such a discovery results in costly unanticipated mitigation and delays, then, if culpability seems evident, the developer might sue the archeologists for failing to provide an adequate impact assessment.

There are a number of professional and legal steps which can be taken to insure that archeological impact assessments are of high quality and that they do not pose legal or financial liabilities for the contractor. To help avoid legal entanglements and to maximize the archeological value of impact reports, the following procedures are suggested:

(1) As contractors, archeologists should address only those topics within their immediate field of experience. As a case in point, the archeologist concerned with indirect impacts may envision growth-inducement in "Locality X" as an obvious byproduct of a planned highway or water system, but while such potential problems can be noted, predictive interpretations should be left to demographers or

other experts (whose findings can be cited by the archeologist). In a similar vein, archeological impact reports should include *verbatim* descriptions of the overall project to be provided by the sponsor. This will protect the archeologist from possible complications resulting from the use of inaccurate information regarding the nature and/or extent of the contemplated project. The practice of quoting the sponsor's data shifts the legal burden of adequacy from the contractor to the sponsor, and it limits the archeologist to statements within the field of his or her specialization.

(2) Impact reports should make the underlying legislation (if any), the scope of work, the research design(s), and all methods explicit, for it is on the basis of these data that the adequacy of the resultant report can best be evaluated. The investigator must indicate precisely which tracts of land were examined, how the field surveys were conducted whether vegetation or other conditions impeded the reconnaissance work, and whether it is likely that any undiscovered cultural remains may yet exist within the study area. The assumptions and rationale employed in assessing site significance also should be made explicit.

Archeologists should take special care to evaluate properties against the National Register criteria (36 CFR 60.6) when consulting with a Federal agency, and to explain the reasoning behind their evaluations. Much time is spent unnecessarily by Federal agencies, State Historic Preservation Officers, the Office of Archeology and Historic Preservation, and the Advisory Council on Historic Preservation in attempts to "translate" archeological reports into terms meaningful to the Federal planning process. Often delays occur in project planning because, for example, archeologists fail to provide sufficient information on archeological sites to permit evaluation of their research significance against National Register criteria.

(3) The archeological contractor must also bear in mind that data already on hand from earlier surveys may be unsatisfactory for environmental impact studies. Older inspections may be judged inadequate as measured against current legal standards, or they may fall short of professional requirements; sites may have been missed or they may have been poorly recorded or evaluated. Even if the former inspections were exceptionally meticulous, any number of cultural sites may have been altered, destroyed, or revealed subsequent to the earlier study. Since the archeological contractor is legally bound to provide an up-to-date evaluation of potential direct and indirect impacts upon cultural resources, extant documents usually cannot be substituted for conscientious field inspections. On the other hand, it would be both inefficient and unjustifiable for archeologists to survey repeatedly the same parcel as each new development is proposed. If the procedures listed above are followed carefully during the initial field survey, then subsequent con-

tractors would merely need to cite the former work, rely upon it to the fullest extent possible, and do only such additional field studies as may be necessary to assure the accuracy and currency of the original study and to assess the impacts of the immediate project.

(4) Archeologists should require (among the contract specifications) that either their full *verbatim* report or their summary or abstract appears as a part of the final environmental impact statement or report for the project. Unless required by law, no sponsor or planner should be authorized to synthesize, abstract, or interpret archeological findings for inclusion in the environmental impact statement. Where summations by others are required, the original report must be fully cited. This practice will safeguard the archeologist against any inadvertent or intentional misrepresentation of his or her findings and recommendations.

(5) It is imperative to recognize that many standard contracts place stringent limitations on the dissemination of archeological data. Often the standard contractual wording reserves for the exclusive control of the sponsor any and all data acquired. It is the responsibility of the contracting archeologist to insure that all technical data resulting from research undertaken may be freely exchanged with other professionals. This position must be explained in the language of the contract before it is signed. At the same time, the written agreement should be designed to protect site location data and other sensitive information from uncontrolled public access. One practical solution to this problem would be to submit two separate documents in satisfaction of the contract: (1) a general report of findings and recommendations suitable for inclusion in the published environmental impact statement, and (2) technical data, including maps and site descriptions, for the restricted use of planners on a need-to-know basis and for appropriate distribution to the community of archeological scholars. In this manner, proper archeological studies could be provided to the sponsor without jeopardizing cultural remains.

(6) The archeological contractor must remember that his or her mission is to comment upon a project's impact upon cultural resources, not on the pros and cons of the project itself. In the impact assessment, the archeologist is obligated to evaluate the significance of all potentially jeopardized cultural resources, and to recommend strategies to mitigate predictable adverse impacts, weighing the merits and disadvantages of each. It is in this process that the archeologist's professional expertise and familiarity with law, science, and economics blend to produce a listing of viable alternatives to site destruction. Depending upon the stage of planning, the cultural value of the endangered site(s) (which the archeologist must demonstrate), the intensity of the contemplated impact(s), and other considerations, any of the following mitigative actions (or others) might be appropriate: (see pages 66-71 for

a more detailed discussion of archeological investigations and planning and construction stages.)

#### *At the Regional or Preliminary Planning Stage*

(a) Include the site(s) within a historic or archeological zone wherein no development should be permitted (avoidance)

(b) Provide city, county, state and/or other tax relief to landowners who agree to protect sites on their property

(c) Secure public or private funding to purchase scientific easements for the protection of known cultural sites

(d) Include sites within protected open spaces or park lands

#### *At the Alternative Design Stage*

(a) Redesign or relocate planned developments to avoid sites

(b) In subdivisions, industrial parks, etc., establish deed restrictions prescribing the disturbance of identified historic and archeological remains

(c) Design structures and other "improvements" to eliminate or minimize impacts if they must be located on sites

(d) Consider the abandonment of the project if the impacts appear to be both significant and unavoidable

#### *At the Final Design or Execution Stage*

(a) "Bank" (protect) the site(s) under a blanket of sand, earth, riprap, spoils, concrete, etc. This action should follow a careful mapping and an adequate collecting and testing program and analysis of long range consequences of such action on the resource

(b) Protect the site by incorporating it within the matrix of a levee, golf course, playground, or other development after mapping, collecting and testing, again after analysis of long range consequences of such action on the resource

(c) Excavate the site(s). This should be a last resort measure, used only when all other conservation tactics are inappropriate

The above recommendations for "conservation" alternatives to excavation should be tempered by caution until knowledge is available on the effects of such alternatives. For example, if a site is buried under such a thick layer of spoil, riprap, etc. that excavation will be impossible for centuries to come, and if the site contains fragile data categories (e.g., postmolds, botanical materials) whose erosion is not arrested by burial these categories of data will be lost without record. Sites buried under or affected by the substantially changed soil chemical environment created by a golf course need to have these effects carefully weighed beforehand. The activity of burial itself may be destructive, if the wrong kinds of equipment or materials are used. A buried site may

also be forgotten and damaged by subsequent earth moving. It is important that archeologists design conservation options carefully to be sure that they will really conserve.

It is clear that archeologists should become involved with projects at the earliest possible stage of planning. When a project benefits from archeological input at an early phase of the design, the sponsor is able to accept the most efficient and economical means of preserving sites which otherwise might later have been threatened. This not only means that time consuming and expensive mitigative excavations can usually be avoided in favor of a better alternative, but also the sponsor becomes the direct beneficiary of favorable publicity.

### **Summary**

In this section some of the legal and professional challenges facing archeological contractors have been examined and possible ways to improve the overall quality of archeological impact evaluations have been suggested. Some of the legal hazards of archeological contracting have also been mentioned.

Naturally, it would be best if archeologists could circumvent legal difficulties arising from either job performance or contract specifications but this is not always possible. Because unforeseen problems may develop in the course of almost any project, it is highly advisable for archeologists to consult with their attorneys whenever they encounter unfamiliar contract language. It is further recommended that, when appropriate, bonding or insurance policies (of the type available to architects, engineers, etc.) be carried by all persons who conduct archeological impact studies on a contractual basis.

### **ARCHEOLOGISTS AND LANDOWNERS: SOME LEGAL CONSIDERATIONS**

#### **Introduction**

Numerous legal factors must be considered before archeological fieldwork is undertaken on private land. There may be, according to the state or locality, relevant laws governing trespass, easements, treasure trove, liability, health and safety, and contracts which bear directly upon the archeological work. Most landowners will ask some very reasonable, basic questions: Who will own the archeological collections? How much are the artifacts worth? Who is liable in the event of an accident or injury during the fieldwork? The best way to deal with these issues is to work with an attorney to draft a contract or agreement with the landowner. Such legal services are often available at no charge to the faculty and staff of universities and larger museums.

## Contracts

A written contract is normally the best form of understanding between the archeologist and landowner, even though some property owners may say that a verbal commitment is satisfactory. Where a contract is executed, these are some of the questions which should be addressed:

- (1) Who are the real parties to the contract?
- (2) Who (or what agencies) will be bound by contractual terms?
- (3) Who is the legal owner of the archeological site(s) or property in question?
- (4) Is there a tenant? If so, the tenant should sign the contract (in addition to the legal owner).
- (5) The exact legal description of the tract of land which is to be surveyed, excavated, used for camping or other purposes must be made explicit.
- (6) What is the nature of the planned archeological investigation (survey, surface collection, excavation, or other)?
- (7) What are the specific provisions for the removal and processing of specimens and data?
- (8) Who is to become the legal owner of the specimens and data, and what are the governing terms?
- (9) What value and sufficient consideration will be given to the landowner? (This might include a report, cash payment, suggestions concerning an appraisal of the donation for tax purposes, etc.).
- (10) What are the provisions for restoring the land to its original condition following the investigation?
- (11) Who is legally responsible for injuries or losses? Here it is customary to indemnify (save harmless) the landowner against any and all losses, including reasonable attorney's fees, which may result from the fieldwork. Evidence of insurance may also be cited in this context.
- (12) What are the dates of contract execution and termination?
- (13) What are the provisions for changes in the contract or for default?

As one example of an archeological contract, a standard agreement used by the Colorado Archaeological Society is presented on pages 21-22.

## Summary

The written contract is a device to insure the smooth operation of archeological field projects. The contract shows good faith by the entailed parties; it specifies precisely how archeological data will be gathered and processed; and it explains the division of responsibilities in advance of any fieldwork. Moreover, the provisions regarding liability and compensation may actually sway the landowner to grant permission for research to be undertaken on his property.

Since a university, museum, or foundation is the usual party to the contract on behalf of the archeologist, the individual researcher is protected by the document. Independent archeologists who enter

into contracts as real parties would be well advised to carry bonding insurance as protection against property damage or personal injury liabilities. It is further recommended that all archeologists, regardless of affiliation, seek legal counsel before entering contractual agreements.

Archeologists should also consider the negative repercussions which may develop in the absence of a contract. Lacking a formal agreement to the contrary, a landowner (generally any time within seven years) may legally demand the return of artifacts and other data after fieldwork (this is known to have occurred), or, in another instance, the landowner might unexpectedly seek financial compensation for objects taken by archeologists. It is even possible that the landowner might contend that the objects had been removed without his full knowledge, in short, that they had been stolen. In such a circumstance, even return of the items in question would not relieve the archeologist of all legal implications. The return of "stolen" material does not mitigate the crime.

Against these very real concerns must be weighed other factors. Many landowners who would gladly give verbal permission may hesitate to enter into a legal contract. The finality of it is somehow disturbing and could entail lengthy consultations with spouses, heirs, and lawyers and eventual refusal to enter into such an agreement. It also is more likely to raise the issue of compensation. In addition, particularly in rural areas, many still operate under the principle that "my word is my bond." Such individuals can react negatively to any attempt to force them to "put it in writing" with, again, the potential that the end product would be a refusal to permit the study requested.

Each archeologist must judge the local situation and act accordingly. The concern here has been to point out the legal desirability of a contract and the potential risks involved in not utilizing this approach.

In closing this section, it is worth keeping in mind that archeologists may also be bound by terms of governmental contracts. (This topic is given considerable attention in Chapter 2.) In the present context, however, it should be noted that the aforementioned liabilities and responsibilities apply to archeological contracts with governmental agencies, as well as those with private parties, and that the archeologist may at times be a signatory to both sorts of contracts simultaneously.

## NATIVE AMERICANS, LAW, AND ARCHEOLOGY

Because fundamental issues relating to Indians and archeologists are treated in Chapter 5 (also, see Johnson 1973; Pastron 1973), only a few additional comments are offered here.

The passage of a national heritage act (to replace the Antiquities Act of 1906) which would protect places of spiritual significance to Native Americans

LANDOWNER CONSENT AND CONVEYANCE  
to the  
COLORADO ARCHAEOLOGICAL SOCIETY  
(A Non-profit Organizaiton)

The \_\_\_\_\_ Chapter of the Colorado Archaeological Society ("Society"), a non-profit organization with an address of \_\_\_\_\_, represented by its undersigned member, hereby agrees with \_\_\_\_\_, ("Landowner") that the Society will conduct a systematic survey for archaeological materials and sites on the following described lands, located in the County of \_\_\_\_\_, State of Colorado, to wit:

comprising \_\_\_\_ acres, more or less; Landowner representing (him)(her) (it) self to be the owner in fee of the surface of said land.

During the period from \_\_\_\_\_ to \_\_\_\_\_ Society agrees to use two to \_\_\_\_ members to systematically inspect and survey said land, record any archaeological sites found thereon, and collect any archaeological artifacts or other cultural or environmental materials of archaeological significance from the surface of said land. Society will close all gates, keep its vehicles in areas or on roads designated by Landowner and avoid disturbing Landowner's cattle and crops.

As a part of its survey of said lands, Society agrees to perform the following services:

- (1) to register any archaeological site found with the Office of the State Archaeologist in the State Historical Society of Colorado ("State Archaeologist"), Room 5-a, Ketchum Hall, University of Colorado, Boulder, Colorado 80302, (Telephone: 449-0630)
- (2) To file with the State Archaeologist a complete report of the entire survey of said land of any site found thereon
- (3) To furnish Landowner, upon request, a complete copy of any such report
- (4) To do no digging or testing on said land without further permission in writing from Landowner

Landowner agrees that Society has fully explained the purpose of its survey for archaeological sites and materials and, in consideration for the aforesaid services, of Society, hereby grants, bargains, conveys and demises any archaeological artifacts and other cultural or environmental materials found by Society on said lands, save and except those made of gold, silver, or precious stone, or those attached to the ground as architectural structures; provided (a) that Society deposits said artifacts and other materials in the permanent collection of the State Archaeologist and (b) that Society shall provide landowner, upon request, with a reasonable opportunity to examine said artifacts and other materials before the same are removed from said land.

If Landowner has rented a part or all of the above described lands, then the Tenant shall also sign this Agreement to signify his understanding and consent.

This agreement shall be binding upon the heirs, assigns and successors of those signing, but the right to enter upon the lands of the Landowner shall expire on the latter of the two dates written above.

In witness whereof, the undersigned have set their hands this \_\_\_\_\_ day of \_\_\_\_\_, 1975.

THE COLORADO ARCHAEOLOGICAL SOCIETY

by \_\_\_\_\_  
Member, \_\_\_\_\_ Chapter

LANDOWNER:

\_\_\_\_\_  
(Landowner)

\_\_\_\_\_  
(Spouse)

\_\_\_\_\_  
(Tenant)

has been mentioned (page 17). This policy could also be extended to the state level if archeologists would cooperate with Native Americans in developing laws to safeguard Native American cemeteries and other secret or sacred areas. This has been done in California, where a 1971 amendment to the Public Resources Code (Sec. 5097.93) expressly prohibits the disturbance of Indian cemeteries and burial grounds less than 200 years old.

Similarly, Native Americans and archeologists might join forces to seek legal and professional sanctions against persons and institutions which exhibit burials or skeletal material in a demeaning, insensitive, or commercial manner. The Society for American Archaeology, the American Association of Museums and other professional organizations have already approved resolutions against the unwarranted or tasteless display of burials. Archeologists are encouraged to assist in the implementation of such resolutions and to seek parallel actions in their respective states and communities.

Museums have offended Native American sensitivities in a number of ways other than the callous display of human remains, and it is often within the power of archeologists to determine or influence remedial policies. Indians have noted with increasing frequency that certain museums have not only appropriated vast collections of Native American artifacts, but that these same museums are often grossly inadequate custodians of the specimens. Because of meager budgets, poor facilities, and insufficient curatorial staffs, certain museums permit collections to deteriorate. Archeologists could work in a number of ways toward the improvement of this situation. When research contracts are drafted, the archeologists should insist that provisions be included for the proper long-term curation of anticipated collections. Beyond this fundamental responsibility, archeologists may assist Native Americans in their applications for grant monies to support the establishment of cultural centers and museums and, subsequently, to assist in the loan or transfer of collections from large and overcrowded museums to the Indian cultural facilities.

In another area of concern, archeologists working, under whatever auspices, on tribal lands or lands in which a tribe has a valid active interest should be acquainted with and adhere to tribal (as well as federal and state) laws and should respect legitimate tribal concerns with respect to these lands.

Lastly, it is felt that archeologists should express their ethical convictions in the form of resolutions and guidelines for professional conduct. While such codes may not carry the criminal sanctions of law, they may be tied in to reasonable peer review mechanisms. The preparation of ethical resolutions serves both to codify the attitudes of the archeological profession and to inform individual practitioners as to the propriety of specific actions. The Code of

Scientific Ethics of the Society for California Archaeology exemplifies what we have in mind:

Section 4. Whereas archaeologists and Native Americans alike are deeply committed to the preservation of archaeological remains, and whereas Native American sentiments often proscribe the disturbance of recent cemetery sites:

a) Members of the Society for California Archaeology shall make every reasonable effort to contact pertinent representatives of the Native American community during the planning phase preceding archaeological programs of excavation or extensive reconnaissance, and it will be the essential purpose of such communications to develop a design for fieldwork in full coordination with the interests and sensitivities of the Native Americans.

b) No member of the Society shall excavate, or otherwise disturb, any location of a previous Native American settlement, ceremonial locality, cemetery, or other mortuary context which was used until recently or which is still being used, and for which the Native peoples have a sense of spiritual affinity, without the full concordance of the pertinent Native American community.

c) Whenever requested by Native Americans, all human skeletal remains exhumed from mortuary contexts of recent date (or where specific historical or ethnohistorical data are lacking, contexts known to have been used after 1800 A.D.) by members of the Society shall be reinterred following the laboratory analysis. Reburial will be done in accordance with the requests of pertinent Indian groups and in compliance with relevant state and local statutes.

#### **A NOTE ON LEGAL ASPECTS OF ARCHEOLOGICAL CERTIFICATION**

At this time a number of state and national archeological societies are establishing procedures and criteria for certifying "professional" or "qualified" archeologists. The many arguments for and against certification are, or soon will be, well known to most American archeologists. Here the intent is to argue neither pro nor con, but rather to offer a few words about potential legal entailments of certification programs.

If certification is established and defined in such a manner that failure to be certified would make it impossible for an individual to obtain gainful employment in the area affected, members of review boards, as well as their organizations generally, are liable for suit if an archeologist is improperly refused certification. To reduce this possibility: (1) Certification procedures should be worked out carefully with the benefit of legal counsel; (2) written requirements should be designed to assure that certification procedures are neither capricious nor arbitrary; and (3) the parent organization must establish a fair appeals system for those who feel aggrieved by the certification board.

An alternate approach to the problem would be simply to establish and publish guidelines in order to recognize levels of professional competence (leaving the application of those guidelines to the various agencies, employers, or others interested).

Another possible means for providing a measure of guidance to the concerned public without creating a certification procedure *per se* (that is a proce-

dure which implies more or less directly that anyone not certified is not competent) would be via the mechanism of establishing an organization which all individuals who accepted certain standards and met certain minimal levels of training and experience would be free to join. While membership in such an organization of professionals would constitute recognition by one's peers that such levels had been attained and such standards maintained, there would be no implication that those who chose not to be members were necessarily less competent. Those individuals who chose to have agencies apply the organization's standards or others when evaluating their experience and actions would be perfectly free to do so. On the other hand, dismissal from such an organization for alleged failure to adhere to the standards established could be interpreted as being subject to court review and a full and fair appeals mechanism would be essential. The recently organized Society of Professional Archeologists, in general format, has taken this last approach.

### THE ARCHEOLOGIST AS LEGISLATIVE ADVOCATE

In the preceding sections it has been emphasized how archeologists may help implement, or comply with, extant laws. In this final section the role of the archeologist as a legislative advocate is considered. Lifetimes are spent learning the subtleties of legislative mechanics, and no sure-fire recipe for the concoction of sound, enforceable archeological laws can be offered. Nevertheless, there are certain canons which may be used to guide any group of archeologists toward the goal of establishing or improving local, state, or federal laws from the preservation of cultural remains. These guidelines may be stated briefly, as follows:

(1) Wherever possible, strive for "positive" laws — laws which affirm the protection of cultural remains rather than the laws which impose criminal sanctions as their essence (McGimsey 1972:46ff). It is well known that even the threat of extreme punishment does not necessarily deter proscribed actions (cf. Hallinan 1973), whereas laws which offer incentives such as tax relief enjoy considerable success.

(2) If penal sections must be included, the law may designate that a portion of the monies collected as fines be transferred to specified agencies to accomplish heritage preservation goals. In certain instances, such as the problem of looting or vandalism, a portion of the fine might be earmarked for the citizen who brings the offender to the attention of the law. Precedent for such use of fines is to be found in recent conservation legislation, though there are drawbacks.

(3) Laws should be reasonable, well-written, and enforceable. When drafting legislation, archeologists should actively coordinate their efforts with avocational and professional archeological societies, ethnic groups, conservation organizations, the Commission on Uniform Laws, the National Legislative Council, and/or other agencies, according to the nature of the specific proposal at hand.

(4) In the course of committee hearings, professional testimony is very important. The archeological testimony may very well determine whether or not a committee supports the desired bill. But equally important, the testimony forms part of the official legislative history which may be referred to later by a judge in order to determine legislative intent or clarify vague points in the law. Thus, professional statements incorporated within the legislative history may serve both to assist in the passage of a law and to interpret the same law in court at a later time.

(5) Public support must be generated as a basis for the passage and enforcement of heritage legislation. The influence of museums, universities, civic groups, avocational and professional societies of archeologists and historians, and similar organizations should be enlisted and coordinated as a key element in any legislative strategy. The support of community groups is especially important in this regard.

(6) Many other topics must be given due consideration in drafting an effective law: constitutionality, enforceability, desirability, etc. These matters are omitted from the present discussion because they have been treated adequately in McGimsey's *Public Archeology* (1972:46-62). McGimsey's summary comments provide a fitting conclusion to this chapter.

Antiquities legislation cannot be the sole approach to preserving a state's archeological heritage. Given the fact that education rather than legislation is the real answer, is antiquities legislation of any value at all? I believe well-drawn legislation is of value. It publicly establishes the state's concern and interest in having archeological resources preserved and protected. Without such a public statement, education would proceed more slowly and be much harder to effect. It also strengthens the hand (and moral fiber) of the concerned landowner or land user. These facts alone warrant its enactment. . . . Positive provisions, such as tax relief and legal aids to the landowner . . . are also valuable adjuncts to a well rounded state program. . . . The negative provisions of antiquities legislation are likely to be of least value, for only occasionally will they, or should they, actually be brought into play. . . . An antiquities act which emphasizes the negative approach to the virtual exclusion of more positive action, or which drains off the major force of legislative interest from support of a well rounded . . . archeological program, can be a real threat rather than an aid to archeology. A carefully thought out antiquities act which supplements a total . . . program has a place, however, and can make a valuable contribution [McGimsey 1972:62].

# 2 Cultural Resource Management

## EDITOR'S PREFACE

The Cultural Resource Management seminar was charged with the responsibility for organizing a cross section of the profession's thoughts, both theoretical and practical, on a series of new concepts relating to the management of this nation's archeological heritage—the resource base, its conservation, mitigation, assessment of significance, and contract negotiation, to name a few. We soon realized we had an opportunity to legitimize and christen, through an official naming ceremony, what had actually been born over the past few years—the whole idea of cultural resource management.

McGimsey, in his original proposal to the participants, had recommended a five day session. The first seminars then made further suggestions of problem areas and topics which should be covered. It soon became evident that there were major philosophical and theoretical areas needing discussion, but, equally important, there were detailed guidelines needing development, more, perhaps, than could possibly be completed in the time allotted. Much of the first two days of the seminar was spent in "honing-down" these ideas, our various attitudes toward them, and in agreeing on a general format for the statements that *must* be covered. During this initial dialogue, we realized the breadth of experience, exposure, and expertise of the individual members of the group, and when the actual drafting began, each of us felt able to speak for the group with respect to a particular topic. Each member of the seminar was assigned a topic or topics, depending upon that person's area of expertise, and before the end of the seminar, almost all sections of the following report had been drafted, read, and criticized by the whole group.

An initial draft was sent to seminar participants in May 1975 and elicited considerable additional correspondence. At this point, Grady and Lipe extensively reworked it, added a lot of material, and sent it back

to the compiler who circulated it again in September. Differences in needs and approaches in different parts of the country prompted revisions, particularly in the discussion of compliance problems. The experiences of another year also provided an opportunity to make further useful additions by the editors and others.

A final draft was reviewed by several seminar participants and a number of other interested parties, including at least one person affiliated with each of five federal agencies who are involved in cultural resource management. Some final modifications were made as a result of this review. The opportunity to review and provide input does not, of course, involve endorsement by any individual or agency of the content of this report. However, the attempt was made, throughout development of these discussions to be as concerned with the agency point of view as with that of the profession, and to direct the discussion to the needs of both.

### *Seminar Participants:*

Adrian Anderson  
Hester Davis  
Mark Grady  
William Lipe  
Bruce McMillan  
Lloyd Pierson  
Margaret Weide

### *Compilers:*

Bruce McMillan  
Mark Grady  
William Lipe

### *Staff:*

Norma Hoffrichter  
Sandra Robinson

As indicated throughout the Cultural Resource Management chapter, it was the strong feeling of all the seminar participants that all archeological activity, however funded, must be conducted and evaluated in the light of sound scientific principles and with a concern for appropriate conservation of the total resource base. In that sense, there is no difference between traditional archeological research and so-called "contract" research. In every case the charge to the archeologist must be to do the best possible job of archeological research.

There can be differences, however, between an archeological study oriented toward cultural resource management and other archeological studies. In a cultural resource management study the archeologist does not have the freedom to determine or select the geographic locus of the study, that is determined by the needs of the sponsoring agency. (On the other hand the archeologist should have the freedom to expand his research beyond the strict areal limits of a project border if this is necessary, for often it is only in this way that it is possible to place the sites and data contained therein in some reasonable scientific context.) Given the location, however, archeologists should consider themselves faced with the same opportunities, the same scientific demands and restrictions that they would have faced had they themselves selected the area. The spirit and purpose of any conservation or preservation legislation requires (as we believe is the case with current federal legislation) that maximum scientific data be conserved and protected, or recovered, and interpreted for the maximum benefit of all. This can only be accomplished, if, in every instance, the best possible archeology is accomplished in every study on any level whether funded "traditionally" or "under contract."

In a cultural resource management study the archeologist generally is confronted with making certain judgments, evaluations, and recommendations which, in other types of archeological studies do not have to be made, or at least not so obviously (this site is more significant than that one, for example). This undoubtedly places an additional burden on the archeologist but it also provides the archeologist with an unprecedented opportunity. In the past most decisions affecting the archeological resource base normally have been made by nonarcheologists with no archeological input. The difference now is that, for the first time, archeologists have the opportunity (burden!) of providing meaningful input in the decision-making process. It is an opportunity which archeology must not lose or betray.

A third difference is that a certain, generally quite small, proportion of an archeological management study must be devoted to relating the findings to factors unrelated to archeology or other aspects of science, e.g., analysis of the number of sites to be adversely affected by a particular earth moving project, establishment of archeological priorities relative to a sponsor's planning goals. In a strictly scientific

sense these are side issues. But it cannot be contended that they are irrelevant or a "waste" of the archeologist's time. Archeologists' work must relate and be related to the rest of the world, preferably (at least initially) by the archeologist.

A fourth difference is that structural limitations are generally built into cultural resource management studies. That is, it may be that the research design, because of the sponsor's current planning stage, is restricted to a general assessment rather than an intensive survey which the archeologist might like to see accomplished. Such limitations occasionally can be personally frustrating, however well the practical need for them may be understood. The other side of the coin is that the logical scientific progression of research recommended in the following guidelines provides archeology with an unparalleled opportunity for a carefully programmed, increasingly intensive series of interrelated scientific studies in areas to be effected by land modifying projects.

To contend that contract archeology is somehow something less than traditional "scientific" archeology is simply not to understand the situation. None of the differences documented above are major (with the possible exception of the archeologist's inability to choose the locus of his/her research) and most actually are salubrious—as are the other differences discussed in the preface to the following chapter on report writing.

It perhaps will be noticed that salvage archeology is rarely mentioned. Archeology has come a long way since the early (or even later) days of the River Basin Salvage program. Salvage archeology now carries the connotation (however unjustified) of digging as many sites and recovering as much data as possible for the simple reason that they were being threatened with imminent destruction. Few would question that if primary data are about to be destroyed, serious thought should be given to recovering as much of it as possible. The difference now is at least two-fold. Archeologists are becoming involved with the total planning process so they have an active voice in helping determine what must be destroyed. This is distinct from their more traditional role of passively waiting until they were given some plans, more or less at the last minute, and told to go out and save whatever they could. The second difference is the increased awareness that work in a project area—of whatever size—must be placed in a broad topical and regional context if there is to be any possibility of recovering maximum useful data. This awareness necessitates regional overviews and well thought through research designs. (It must be noted too that this stricture is equally applicable to all field archeology regardless of how funded.)

The opportunities of cultural resource management offer archeology a great challenge. If the profession meets this challenge, the future will have occasion to be eternally grateful; if it does not, the profession will rapidly and inevitably lose credibility and the capacity to perform in a scientifically ade-

quate manner. The challenge to this seminar was a major one. Hopefully the following report will assist the profession in meeting the challenge facing it.

The report reflects the strong belief that it is time for the profession to provide a position paper which presents guidelines for assessing, seeking, and executing adequate mitigation measures for *any* potential impact upon the nation's archeological resource base.

One final point should be made. Cultural resource management is properly concerned with *all* sorts of cultural resources—including not only archeological sites but historic buildings and districts, social institutions, folkways, arts, crafts, architecture, belief systems, the integrity of social groups, the ambiance of neighborhoods, and so on. While all these aspects of cultural resources are certainly subject to effect by the activities of government, and all constitute aspects of the National Environmental Policy Act, the historic preservation laws pertain directly to only some of them, and archeologists are typically concerned with or knowledgeable about an even smaller subset. The reader should understand that this chapter, because of the particular expertise of the seminar participants, is directed primarily toward the archeological component of cultural resource management.

## INTRODUCTION

The idea that nonrenewable archeological resources were being rapidly exhausted surfaced soon after the conservation ethic hit the American scene. As concern mounted about the portending obliteration of much of our natural and physical environment, those interested in the past also recognized the impending destruction of our historic and prehistoric resources through a thoughtless and often incompletely planned rush toward a more populous and technologically developed future world. As historians and prehistorians became fully cognizant of the direction we were heading, they realized that without new management procedures, the future of the past was bleak. We only hope this realization has not come too late.

Today there is increasing recognition that cultural resources are part of our national heritage and that they should be given due consideration. Through protective federal legislation, there is now a means by which the nation can be assured that the best efforts possible will be made to provide future generations with a meaningful link to the past. Whenever there is any action that involves land modification, the burden for planning and programming is placed upon the federal and federally funded and licensed agencies and upon the archeological community. If this challenge is not met, we will witness the near total loss of this resource base within the next few decades.

The opportunity that American archeology has been offered should be apparent. But recognition of the fact that the archeological resource base is non-renewable and of the opportunity to provide for its conservation is not enough. Archeologists, with their professional responsibility to interpret the past, must now combine with it the responsibility to develop and adopt a long-term management philosophy for this nation's archeological resources.

## The Problem

Archeology traditionally has had as its primary research objective the development of new knowledge about the past so that we may better understand the present and the future. This information has been transmitted to other researchers through technical publications and at professional meetings, and has been disseminated to various audiences in American society by means of academic teaching, popular books, articles, films, museum displays, and interpretive programs in archeological parks and monuments. These efforts to acquire, interpret, and disseminate knowledge have been dependent upon the use of archeological materials. For most of its history, the archeological profession has concentrated its attention on resource use, as if the archeological resource base upon which these efforts depended was inexhaustible and could be exploited forever.

*Resource base* means the totality of information sources that can be used to understand past human activities. This base includes not only cultural remains such as artifacts, structures, features, activity areas, and so forth, but any parts of the natural and cultural environments that were either used or modified by people in the past or which can aid in understanding the basic relationship between people and the environment in the past. Another element of the resource exists at the level of spatial relationships—between materials at a site, among sites, and between sites and aspects of the natural environment. The resource base, then, is not just the sum of specimens and sites, but includes networks of interrelationships that potentially can contribute another magnitude of information. In other words, the whole is greater than the sum of its parts.

In recent years, attrition of this resource base has accelerated, precipitating what is generally accepted as a "crisis" in American archeology (Davis 1972). Although the practice of archeology itself results in the consumption of the resources, the principal causes of destruction have been activities that develop and modify the landscape.

Since World War II, land alteration has increased almost geometrically. Land leveling, urban development, inexperienced or ignorant diggers, commercial dealers in Indian relics—these and many other agents of destruction are obliterating traces of the past. Anything that disturbs the ground where people once lived destroys forever whatever information is left about them and their way of life [Davis 1972:272].

## New Directions

The initial response of the archeological profession to increasing threats against the resource base was part of the prevailing approach to the resource—exploitation. If a development project threatened an important site, efforts were made to excavate it—to salvage the information before the site was destroyed. The choice of sites to be eliminated was in the hands of the landowner, developer, or contractor, and the archeologist's options were limited to how many, which ones, and what parts of the doomed sites would be salvaged, provided funds could be found to excavate any of them.

Now archeologists are being made aware that the entire resource base is threatened; thus they are beginning to explore ways to slow the rate at which it is being diminished and to develop measures to guide which portions of the remaining resource base are to be saved, which salvaged, and which sacrificed. Lipe (1974:214) describes this broader perspective:

... a focus on resource conservation leads us to a position of responsibility for the whole resource base. We must actively begin to take steps to insure that this resource base lasts as long as possible. Only if we are successful in slowing down the rate of site loss can the field of archeology continue to evolve over many generations and thereby realize its potential contributions to science, the humanities, and to society. In this context, excavation becomes only a part of a larger resource management responsibility.

This increasing concern by American archeologists for the total resource base paralleled and is perhaps related to a growing concern about resource conservation and environmental quality within American society at large. Legislative bodies have responded by passing numerous laws regulating environmental alteration. A number of these include historical and archeological sites, either directly or indirectly, as aspects of the environment that require consideration. Of these laws, the one with the most far-reaching effect on archeology has been the National Environmental Policy Act of 1969. This law espouses an environmental conservation policy, provides for advance assessment of the environmental impacts of development projects, and requires that programs be designed for mitigating adverse impacts. In the Guidelines promulgated by the Council for Environmental Quality, with respect to NEPA (38 CFR 20550, August 1, 1973, see also Chapter 1), cultural resources were explicitly defined as being included:

NEPA was preceded by the National Historic Preservation Act of 1966 which, with the Advisory Council Procedures for Compliance (36 CFR 60 and 36 CFR 800) and Executive Order 11593 of 1971, greatly expanded the National Register program and National Park Service review responsibilities with respect to the conservation of archeological resources. The Archeological and Historical Preservation Act of 1974 authorized the expenditure of federal program monies to mitigate the adverse impacts of federally

funded or licensed project or projects on federal lands (see also pages 11-14).

NEPA ensured that cultural resources can be reviewed during all phases of the planning process, the 1966 Act established a program for federal and state involvement and review with respect to cultural resources, and the 1974 Act authorized expenditure of program funds for the conservation and preservation of cultural resources and related scientific data.

Against this background of societal concern for the environment, archeologists have increasingly come to recognize not only that the archeological resource base is nonrenewable for any particular time period, but that there is a need to conserve and to manage this finite set of resources to insure its best use over a maximum length of time; hence, the label "cultural resource management." The shift to this approach involves much more than a new label for business as usual—it literally requires a "restructuring of the profession" (McGimsey 1974a).

In order to gain some influence on management decisions affecting archeological resources, archeologists must work together with the federal, state, and private entities who own, administer, or take actions affecting the lands upon or within which cultural resources are located. Within this new set of relationships, archeologists enter into a dialogue with these other entities, promoting conservation and wise management of cultural resources through compliance with existing laws, and, through the initiation and improvement of resource management teams of federal and state agencies, creating a new set of statuses and role in the profession. Academic and museum researchers are increasingly being called on by landholding or landusing entities to provide cultural resource information or management services, usually on a contractual basis. This is radically changing the funding and conditions of American archeological research.

The success of this complex effort, which involves archeologists with numerous other individuals, groups, and institutions, depends upon the possibility for a continuing healthy evolution of the field of archeology. In other words, if the archeological resource base is not successfully conserved and managed for responsible and frugal use, future archeologists will be denied opportunities to explore new research problems with new techniques, and the public will be denied opportunities to obtain new understanding and appreciation of the past.

Although some archeologists will become primary managers, these changes in no way diminish and, in fact, increase the profession's responsibility to produce good and innovative research. A conservation management philosophy requires that the greatest possible return be obtained from a piece of research, because each research effort ordinarily requires expending a part of the finite research base. Furthermore, one assumption of both the legal and philosophical bases of cultural resource

management is that archeological research will continue to produce significant new information about the past.

The contact format, within which most such investigations will be done in the foreseeable future, does require more kinds of data from archeologists than does the more traditional grant format in that the contract sponsor has a need for specific information required by law and/or by a management program. Also, proposals are not usually initiated because of research priorities *per se*, but as part of the planning for a particular development project. Under these constraints, archeologists might produce results by rote methods, or address the contract sponsor's requirements in only the narrowest sense. It is essential that the profession avoid these pitfalls and insure that studies, in addition to satisfying specific management needs, meet high standards as *research*. We must not forget that contract sponsor's requirements exist, ultimately, so that the maximum amount of scientific and humanistic information, and by extension, public understanding and appreciation, can be extracted from the resource base over the maximum length of time.

One potentially important approach to the integration of the profession's research needs and the sponsor's management and legal compliance needs, is the development of research priorities and overall research design on a regional basis, as urged by McGimsey (1974a). In this way, scattered pieces of research, contracted for a variety of reasons, could focus on problems of general professional interest.

Cultural resource management, then, is an essential and inseparable aspect of archeology, along with pure research and public programs. It is considered to be an aspect rather than a subdivision of archeology, because it is only analytically separable from other pursuits of knowledge by means of research. Research conclusions generally have management implications for the resource base, because they generally involve decisions about which materials will be physically saved, which discarded, what potential observations will in fact be recorded as data, and what will be left unrecorded or unrecognized. Decisions to conserve or not to conserve archeological resources likewise have implications for research, for they determine what kinds of data will be available for future researchers.

## INTERPRETATION OF THE LAWS

Further sections of this report and Chapter 1 discuss the applications of the body of federal law and regulations to the profession. Most policies and procedures developed by federal agencies relative to their interpretation of these laws are published in the *Federal Register*. The *Federal Register* (FR) is published five days a week and contains all notices and statements of policy, regulations, and guidelines required of federal agencies. Statements of policy and procedure, and reviews and revisions of

policy, are required to be published in the *Register* in draft form to provide a 30 day comment period, and then are published in final form, becoming after that a part of the U.S. Code of Federal Regulations (CFR). Archeologists working in cultural resource management should familiarize themselves with this publication.

Interpretations of federal laws and regulations sometimes differ from one agency to another. Some of the problems which this brings to cultural resource management are discussed below.

McGimsey (1972) has commented on all of those laws and regulations extant in 1970. The texts of laws and regulations that appeared through 1973 are reprinted in Lipe and Lindsay (1974) and they are discussed in various articles and comments in that volume. Many specific elements of the laws and regulations are still subject to various interpretations. Here we will discuss three terms—mitigation, significance, and compliance—key terms used in several of the most important of these laws and regulations. Experience has shown these concepts to be open to widely divergent definitions both by archeologists and federal agencies.

### Mitigation

Mitigation is a concept that requires archeologists to view management of the resource base in a new light. It is no longer felt to be appropriate to consider salvage as the *only* solution to the potential destruction of archeological sites. Under the concept of mitigation it is possible, and indeed incumbent upon archeologists, to present a sponsor with alternatives with respect to preservation and/or recovery for consideration during the overall decision-making process.

Mitigation, as intended by NEPA, is a basic management tool, and although it is still undergoing refinement, it clearly consists of one or more of the following procedures:

- (1) *avoidance* of the destruction or disturbance of cultural resources
- (2) active measures for resource *preservation* or minimization of effect
- (3) *investigation* or the conservation of information through adequate study of the resources before they are destroyed.

### Avoidance

Avoidance includes all endeavors to bypass the adverse effects of a proposed project on cultural resources by redesigning or relocating the project. Avoidance may, of course, not be effective in the long run unless coupled with some type of *preservation* measure. Avoidance, while a mitigation strategy, is a strategy which can and should take place at the design rather than the execution stage in which case it is not subject to 36 CFR 800, Section 106

requirements (see page 60) for mitigation of adverse impacts. Application of avoidance as a mitigation technique later in the planning process may involve 106 procedures.

### *Preservation*

Preservation is defined as active measures designed to avoid or reduce impacts through *physical maintenance* or *protection*. Physical maintenance prevents cultural manifestations from further deterioration or destruction; examples include stabilization and reconstruction. Protection implies active long-term efforts to prevent further disturbance of archeological resources by or as a result of the project. Such measures can include covering sites with fill, asphalt, or other material, fencing, barrier construction, patrolling and monitoring, establishment of archeological preserves, and public education. Of all these protective measures, public education is doubtless the most important, because it is, potentially, the most effective in the long run (see discussion on pages 84-85).

### *Investigation*

Investigation of resources through research and study refers to problem-oriented data recovery, analysis, publication, and dissemination to professional and public audiences. "Salvage archeology" or the recovery of archeological objects and data under emergency conditions with the opportunity for minimal problem-oriented research before or during excavation is one form, the least desirable, of the investigation of the resource. However, NEPA now enables archeologists and agency planners to work together from the inception of a project and other legislation enables archeological data to be conserved or developed in a scientifically programmed manner throughout a project's history. Therefore there is little present or future excuse for salvage situations to develop unless (1) the resource was discovered during land modification and could not reasonably be predicted, (2) the project is in the catch-up stage of planning too far advanced for archeological data to be appropriately incorporated, or (3) the archeologists and/or planners are not meeting their scientific or legal obligations. The first problem will always be present (and should be provided for); the second should rapidly cease to be a factor; and the third problem area should be alleviated through the review process.

In conformance with the conservation philosophy previously discussed, either resource avoidance or preservation is usually the favored mitigation procedure. Since, however, the concept of conservation includes and justifies wise use, study may in some cases be chosen even if avoidance or preservation are possible (Wildeson 1974). An example might be a site that fits the needs of one, or preferably several,

research problems of general importance to the evolution of the science of archeology. Such a choice might also be made where study of a particular site is critical to obtaining information needed as part of a larger mitigation program. Furthermore, there may be instances in which direct impacts can be avoided, but indirect or potential impacts (e.g., vandalism, increased off-road-vehicle traffic over the site) seem probable; if relatively long-term preservation cannot be insured, study may be considered a necessary alternative.

To reiterate, mitigation does not equate with investigation and certainly not with salvage. Mitigation implies the consideration of a complex set of alternatives designed to reduce or remove the adverse impact of a particular project. As such, alternatives must be developed that are specific to the project needs.

An integral condition for mitigation planning is an evaluation of project impact on the total resource base. The relationships between *direct*, *indirect*, and *potential* impact are an important concern here.

### *Direct Impact*

Direct impact is the immediately demonstrable effect of a land modification project on the resource base. Mitigation of direct impact is the responsibility *in toto* of the agency causing the impact. Examples include project-specific land disturbance, such as construction of dams, access roads, crew facilities, or borrow pits, and the immediate consequences of such construction (reservoir inundation, etc.). The professional archeologist must identify and define all recognizable aspects of direct impact as early in the planning stage as possible, and provide the information and recommendations needed by the sponsor in developing a good plan for investigation as other forms of mitigation become impossible.

### *Indirect Impact*

Indirect impact relates to adverse effects that are secondary but are clearly brought about by a land modification project and which would not result without it, at least within a predictable time span. Specific examples consist of increased erosion of sites because the project has altered drainage patterns, impacts related to project maintenance, greatly facilitated access to otherwise difficult-to-reach sites, etc. Indirect impact effects need to be considered by the sponsor insofar as the archeologist can justify and support conclusions regarding sponsor responsibility for such damage to the resource base. This question again is specific to the project under consideration. Although the bounds of responsibility are less obviously defined, ample precedent exists for the sponsor to mitigate the effects of demonstrable or clearly predictable indirect impacts.

## Potential Impact

Potential impact is concerned with ancillary developments which can be predicted to occur as a result of a project, but which depend upon the operation of other variables (often socio-economic) as well. Examples include increased urban development, intensification of farming, or increased recreational use. Often these impacts are projected by the sponsors themselves as potential long-term benefits of the project, and can therefore be cited by the archeologist. The degree of potential impact responsibility may be difficult to develop but, again, its definition and its role in a total mitigation program is specific to the conditions surrounding the particular project.

## Significance

Significance is a key term used in most of the laws, regulations, and directives applicable to cultural resource management (i.e., the Historic Sites Act of 1935, the Reservoir Salvage Act of 1960, the Department of Transportation Act of 1966, the National Historic Preservation Act of 1966, the National Environment Policy Act of 1969, the Guidelines of the Council on Environmental Quality, and the Advisory Council on Historic Preservation Procedures for Compliance, E.O. 11593, and the Archeological and Historic Preservation Act). Because of this, most agencies require in their contract specifications that resource significance be evaluated when possible. This term consequently appears in archeological reports and recommendations, where it varies greatly in definition and application.

The fact that archeological sites and the information they contain are our only clues to much of human life in the past makes every site potentially significant. It is generally recognized, however, that defining significance implies some frame of reference, problem orientation, geographic, temporal or other context, against which an archeological phenomenon is to be evaluated. A site is therefore more or less significant relative to some criterion or criteria.

If "all" of the sites within a drainage have been surveyed and the region itself has been well studied, relative scientific significance can be established with considerable confidence. If the site in question is the only one of its type known for the drainage (and most of the rest of the drainage and region is unknown) the archeologist has no choice but to determine that the site is significant. Only when the topical, geographical, and temporal context is under control can relative significance be estimated.

Significance obviously is not a directly measurable property of an archeological resource as is site size, depth of fill, or number of artifacts. A large deep site with numerous artifacts may not be evaluated as more significant than a small shallow one, if the former is a member of a well-studied class with a

number of regional examples, and the latter is unique or is thought to contain data relevant to one or more important research problems.

Thus a single universal or absolute frame of reference cannot be established against which all archeological resources are to be measured to determine significance. There are many potential kinds of significance, the evaluation being relative to the question(s) being asked at the time and the state of knowledge concerning the resource and the question. This situation is made more complex by the fact that the degree of significance can change as the discipline of archeology evolves (a small hunting station, even one with abundant flint chips and other debitage, would be assigned a higher level of significance today than ten years ago), and, for that matter, as the public interest changes (in 1950, Cape Canaveral held no national significance to the American people). It is incumbent upon archeologists making statements about significance to specify the frame of reference used in making those evaluations.

A number of general types of criteria have already been promulgated and used in evaluating archeological resources within a discipline and management framework. Although other criteria may be used, the following are most generally emphasized: research potential, integrity, and public appreciation. Monetary evaluation has also been utilized but is not considered to be appropriate as a means of establishing significance in the sense the term is being used here. The degree to which all of these may be employed is dependent upon a great variety of factors and circumstances. Only investigative potential, integrity, and public value are valid measures of scientific significance, and any assessment of archeological significance *must* be made on these bases alone. Nonetheless, the archeologist making a determination as to whether a site is of sufficient relative significance to warrant preservation or investigation (and if it is to be investigated to what degree) cannot implement that decision in a vacuum. Financial factors and factors of temporal urgency will always enter the picture and inevitably will have a bearing on the archeologist's recommendations and on how the determination of significance is implemented, but should not be a part of the basic assessment of significance.

It is important to emphasize the distinction between "making a determination" and "implementing that decision." In some situations not involving federal agency actions, an archeologist may have to determine significance and implement his or her determination in a single action, and "financial factors and factors of temporal urgency" will be involved. For example, if one finds a site eroding off a cliff while one is digging a nearby site with one's field class, is the eroding site worth the difficulties involved in redeploying the class? The federal system for historic preservation, however, *should* (and the federal review process helps to insure that it

does) provide for systematic evaluation of each site purely on the basis of its research potential, integrity, and public value—via its nomination to or determination of eligibility for the National Register—and thereby consideration is given to those fiscal and project-related factors that may affect the site's proper treatment. Such factors are considered during consultation by the responsible agency with the State Historic Preservation Officer and the Advisory Council on Historic Preservation (36 CFR 800.4). Such factors are considered during consultation by the responsible agency with the State Historic Preservation Officer and the Advisory Council of Historic Preservation (36 CFR 800.4).

### *Investigative Potential*

Generally applicable or universal criteria for evaluating significance of the potential of an archeological or historic resource for producing information are impossible to establish because such fields are, or at least should be, dynamically evolving disciplines using a variety of approaches and having changing needs. The archeological investigator interested in cultural chronology would probably consider a stratified site more significant to those problems than a site occupied extensively but briefly, while the student interested in functional relationships within a single community would probably reverse the priority with respect to these other problems. An archeologist interested in culture-environment relationships might find neither site very significant within his or her research frame of reference. The relevant National Register criterion provides little help here: "Sites that have yielded, or may be likely to yield, information important in prehistory or history" may be considered significant. This is a statement of the basic assumption of the law, that every site is potentially significant, but it does not provide any guidance for determining *relative* significance. This criterion does provide a base for considering the association of all sites and broad patterning or processes revealed by them as an element of significance. The relativity of the concept of research significance is thus a major problem in its definition and application.

The State Historic Preservation Plan, prepared pursuant to NHPA is an appropriate context in which to develop (and periodically re-evaluate and update) frameworks for judging the relative significance of archeological properties. The National Register criteria, being by definition national in scope, must be broad and abstract, to allow for the variability that characterizes the Nation's historic environment. The State Historic Preservation Plan should provide an interface between the abstractions set forth in the National Register criteria and the reality represented by historic properties in the field.

One feasible approach to this problem is to evaluate archeological resources against frames of refer-

ence that incorporate current archeological theory, method, and technique. If the standards of evaluation are clearly specified, both sponsors and research peers can determine the validity of the evaluations made. It is for this reason, among others, that a clearly thought out thorough research design which sets forth such standards should be considered as an essential initial element of each project. This approach should enable decisions to be reached on the *relative* current significance of particular archeological resources.

As indicated, however, the discipline of archeology is a continually developing field. Any particular site may therefore have some significance for future problems. But because of society's wishes and needs for development, it is clear that not all sites can be saved, and no responsible voice in the archeological profession has taken this position.

This is the dilemma—all sites have *potential significance* relative to present or future research questions but not all sites can be preserved. A compromise solution is to attempt, using a regional perspective (and the State Historic Preservation Plan is one such valuable perspective), to preserve or investigate a *representative sample* of the potentially affected resource base. Representative means a sample characterizing as accurately as possible the full range of variability of the cultural resources. This array should reflect the true parameters of these resources in time and space. Such a sample of sites, if preserved, will replicate the main features of the original population of sites so that in the future new problems can be approached, using new techniques, with reason to believe that the results can be validly extended to the original population. This will also be true to some degree when the representative sample consists of data collected rather than sites that have been preserved. The sample will be constrained by the current limits of our ability to recognize and collect some kinds of data, but will still permit future research done on this sample to produce findings representing the original universe. Such a *representative* sampling approach should of course be integrated with choices made on the basis of broadly based *current research* values.

It should be evident that there is no region in the United States where the land is so undisturbed that all of the original sites remain intact. Thus site location and distribution data concerning different categories of archeological manifestations as they existed at the time of use are often difficult if not impossible to determine. In these cases, available information relating to archeology and other environmental variables, combined with careful and prudent application of such information to the region, must suffice for determining original types and proportions of sites. This baseline knowledge, if supplemented by a resourceful combination of stratified probability sampling and appropriate or necessary excavation (even when conditioned by practical, financial, and temporal contingencies),

can result in selection of what can be deemed a representative sample.

In deriving a representative sample of archeological sites for a region or for an impacted area, a simple statistical approach alone will in most cases be inadequate, not only because corrections must be made for loss, poor preservation, or inaccessibility of sites but because simple probability sampling is not a good technique for selecting rare elements from a universe. For example, a simple random sample of the cultural resources in a Southwestern region might include only open pueblo sites, and might miss the few cliff dwellings that occur in the area. Similarly, in some regions of the Midwest, major ceremonial mound sites could be missed entirely because they are few in number while earlier Archaic period sites might be well represented.

In areas where virtually nothing is known, simple random sampling may be a necessary initial approach to collection of representative data. However, where the archeologist has access to relevant prior knowledge and/or experience, either gained personally or communicated by other investigators, stratified sampling designs provide a more efficient and considerably more effective way to obtain statistically representative data. There is no inherent conflict between qualitative judgments based on prior experience and statistical techniques so long as data collection is accomplished in such a manner as to obtain statistically representative data from all relevant informational domains. In every instance it is essential that the rationale(s) for the delineation of strata or approaches be supported by an explicit, well-conceived research design. This discussion should not be taken to imply that random or other forms of less-than-complete survey are appropriate as the sole basis for archeological planning with respect to federal projects. Ultimately complete survey is necessary to identify all properties that qualify for inclusion in the National Register, though appropriate types of predictive survey are useful in state or regional planning, very early project planning, and planning for the development of measures to mitigate diffuse, regional project impacts.

Since accelerating land development has or obviously is going to destroy a substantial portion of the remaining resources in the United States whether there is an opportunity to investigate them or not, we should consider closely the one area where large scale preservation is still feasible—our public lands. Federal agencies such as the National Park Service, the Bureau of Land Management, the U.S. Forest Service, and the U.S. Fish and Wildlife Service are the nation's caretakers of various kinds of resources, but their management policies have involved managed use of these resources. Investigations of cultural resources on public land could and perhaps should be directed primarily toward those necessary for overall management needs (including interpretation), and only secondarily toward research ends. Preserves of publicly owned cultural

resources could be set aside from any unnecessary disturbance, just as are wilderness areas now. This should be done in the context of some regional research design and research not simply forbidden arbitrarily.

### *Integrity*

This is a concept that can contribute to significance in combination with either public appreciation potential or research potential. It might have been discussed under both the research and public appreciation categories, but has been considered separately. For the purpose of nominating sites to the National Register, integrity is characterized by the National Register of Historic Places as follows:

The quality of significance in American history, architecture, archeology, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting materials, workmanship, feeling, and association . . . .

Some element of integrity is considered a necessary although not alone a sufficient quality to establish significance. The Register criteria would seem to be directed largely at the role of integrity in contributing to the significance of a site in terms of its public appreciation potential. This is reinforced by other phrases in the Guidelines that recommend the consideration of buildings, etc., that "represent the work of a master, or that possess high artistic values."

In relation to research significance, integrity can be interpreted to refer to the condition of the site or district, and to its potential for contributing to the overall fund of archeological knowledge. The more adequate the assessment of resource condition and the potential for producing data, the more dependable can be the determination of research significance. For example, the amount of disturbance a site has suffered will condition to a considerable degree its research potential, as will the presence or absence of various kinds of site features and specimens. An assessment of integrity alone, however, is insufficient to establish significance. It is easy to imagine a situation in which a severely damaged site (i.e., one where internal locational integrity has been disturbed) might be judged more significant than a better preserved site.

### *Public Appreciation*

The area of public appreciation grades into research, because an archeological resource usually does not become an object of public appreciation until information about it is developed through research. Also, different segments of the population may have different tastes and interests, and these may change through time. Nevertheless, it is generally possible to say that some archeological and historical sites and districts have more potential than others for contributing to public appreciation of the

past. Consideration can be given to potential for developing exhibits, for providing information on especially dramatic or instructive changes in history and prehistory. Not to be neglected is the potential of a site for training conservators, preparators, or others whose professional careers will advance public understanding and appreciation of cultural remains, though this factor alone is not a valid reason for the excavation of a site, however scientifically accomplished. There is also a commemorative aspect to public appreciation which is recognized in the National Register guidelines. Here, "districts, sites, buildings, structures, and objects" may be considered significant if they

. . . are associated with events that have made a significant contribution to the broad patterns of our history; or are associated with the lives of persons significant in our past; or that embody the distinctive characteristics of a type, period, or method of construction . . . .

Finally, the importance of undisturbed sites in their natural settings must be considered. Archeological resources, as part of the total environment, have a potential for contributing to the "wilderness experience" without being developed or otherwise interpreted. Archeological phenomena have esthetic qualities that can be appreciated in a natural setting in ways similar to other aspects of the environment. Wilderness or environmental experiences also can sometimes be enhanced by the "discovery" of a tangible reminder of man's former presence, and by recognizing evidence of earlier adaptations to the environment that differ from those of today. (For a fuller discussion of archeology and wilderness see Lipe 1975.)

### *Monetary Evaluation*

This concept has primarily been applied to archeological portions of Environmental Impact Statements, as part of the development of cost-benefit ratios. A figure is derived by computing the cost of investigating the site or sites in question—the estimated dollar cost of as near total data study as is feasible and desirable under current standards of research. Obviously, this is a very limited and inadequate measure of significance. One can easily imagine a site that would be extremely costly to investigate, yet which might be essentially duplicated in a nearby area unaffected by the project. Or, conversely, study of an important problem might be relatively inexpensive.

Although cost is not a valid indicator of the full significance (i.e., the scientific and public value) of a cultural resource, it does fulfill some important needs in mitigation evaluation. Despite the essentially inequitable relationship between monetary cost of data study and less tangible but more important considerations, it is one quantifiable measure of the "value" of the resources—a value universally recognized by those involved in cultural resource management.

When any management activity or research project is considered, it may need to be translated at some point directly or indirectly into monetary terms. The archeologist must estimate the cost of appropriate data study of cultural resources as one factor which must be taken into consideration when making recommendations concerning the treatment of "significant" sites, just as the sponsor demonstrates in monetary terms the economic importance of this land modification project. When this approach is required, the "value" of the resources can be viewed as equal to the cost of appropriately investigating and studying them. This consideration may influence recommendations made (if so it should be overt) by the archeologist or by management concerning a site, but it is not a determinant of the significance of that site.

The implementation of a program based on a determination of significance must always be in the context of the total public good. This means that scientific, interpretive, temporal, and fiscal factors will be brought to bear on the final decisions. (The site may be scientifically significant and/or valuable for public interpretation but perhaps not to such a degree that it warrants the delay of an important and urgently needed project, or the level of expenditure necessary to recover the desired amount of data, or to protect the site for public interpretation.) In making determinations of significance archeologists must be idealists. In making recommendations for programs of investigation based on such determinations they must be pragmatists. Nonetheless it is their responsibility to insure that, in the total decision making picture, weight is given to the archeological and historic significance of the resources being affected.

Establishing the "value" of a site by computing the commercial dollar value of the artifacts found there is a method that has been used, generally by non-professionals, for establishing monetary value. This figure has no relationship to any important measure of significance. The most unsophisticated artifacts may have little commercial value, but could have great scientific importance. Determining the commercially appraised values of artifacts is not considered an acceptable approach to the basic determination either of significance or of the monetary value of archeological resources.

### **Compliance**

Compliance requires that agencies or project sponsors held responsible by various laws pertaining to environmental and cultural resources actually abide by the provisions of these laws. Compliance with archeological provisions can involve many things, from an inventory of the known resource base to comprehensive mitigative action, depending upon the planning stage at which the archeological involvement begins. From the sponsor's viewpoint, the reason for contracting with experts is that the

law requires specialized information and evaluations that the sponsor normally cannot develop alone. From the archeological point of view, the spirit of the law requires data protection or recovery which will best benefit the public, and this necessitates the best, most innovative research. Unless a high level of professional research is performed there cannot be information adequate for compliance.

Since the requirements and ramifications of the laws and guidelines are numerous, both the sponsor and the archeologist must take pains to be fully informed as to what constitutes legal compliance. A less than full understanding by the archeologist involved, may result in loss of professional credibility, misuse of sponsor-funded time, and destruction of the resource base. Inadequate understanding by the sponsor may result in poorly drawn contract specifications, insufficient funding, improper restraints on the archeologist, and ultimate rejection of management conclusions by review agencies, resulting in noncompliance judgments. The data requested by the sponsor and that produced by the scientist must therefore address all requirements of compliance and must soundly document the evidence for this compliance. Both the sponsor and contracted scientist must keep in mind that the final test of the adequacy of a study may be in a court of law.

Compliance requires the objective assessment of resources by unbiased competent experts, and the sponsor is thereby obligated to maintain the integrity of these assessments. A recent court case (*Sierra Club v. Froehle*, S. D. Texas 1973) has established that a researcher's findings must be presented accurately and cannot be manipulated to support sponsor goals. A sponsor can obtain some assurance of professional competence, reasonableness, and integrity through the use of peer review (see page 76). The archeologist cannot, on the other hand, expect that the sponsor will necessarily be able to accept and carry out all his or her management or mitigation *recommendations*. Mitigation is generally a compromise between ideal project goals and complete or ideal protection of a variety of environmental resources, with the notion of greatest public good being the decisive principle. Projects are rarely completely abandoned because of environmental considerations. Nonetheless, if the archeologist is able to make a case for the extreme value of the archeological and historical resources to be adversely affected such that, in the context of the total public good, the public value of these resources exceeds the public value which could result from the project, it is expected that the agency would seriously consider abandonment. Conflicts which arise over the importance of findings or the acceptance of recommendations should be negotiated first between the researcher and sponsor before resorting to federal agency mediation or further peer review. The archeologist's assessment must be restricted to the project's effects on archeological resources; no attempt should be made to judge the

worth of the project itself or the effect of the project on nonarcheological resources.

#### *Compliance Procedures* (see also Chapter 1)

There are a number of resource management situations in which federal laws and/or guidelines require archeological research for compliance. The most important of these instances are described in the following section.

*The Antiquities Act of 1906 and the Uniform Rules and Regulations* This legislation requires that institutions undertaking archeological research on federal lands obtain federal permits from either the Department of the Interior, Army, or Agriculture. (Subsequently, the Secretary of the Army transferred this authority to the Secretary of the Interior.) Granting the permit requires that the recipient institution demonstrate adequate research and curatorial capacity, and submit professional quality reports of the completed research to the respective agency within the time frame specified by the permit. It is unclear at this time whether permits are required of institutions implementing culture resource management surveys that do not disturb the cultural manifestations.

*The National Environmental Policy Act* The Act and the CEQ Guidelines require federal agencies to consider and evaluate the impact on the environment of all (EIS's are required on major actions, but NEPA applies to all) federal actions. The compliance process, as it affects archeology, is diagrammed in Figure 1; this discussion will emphasize the research procedures required of archeologists.

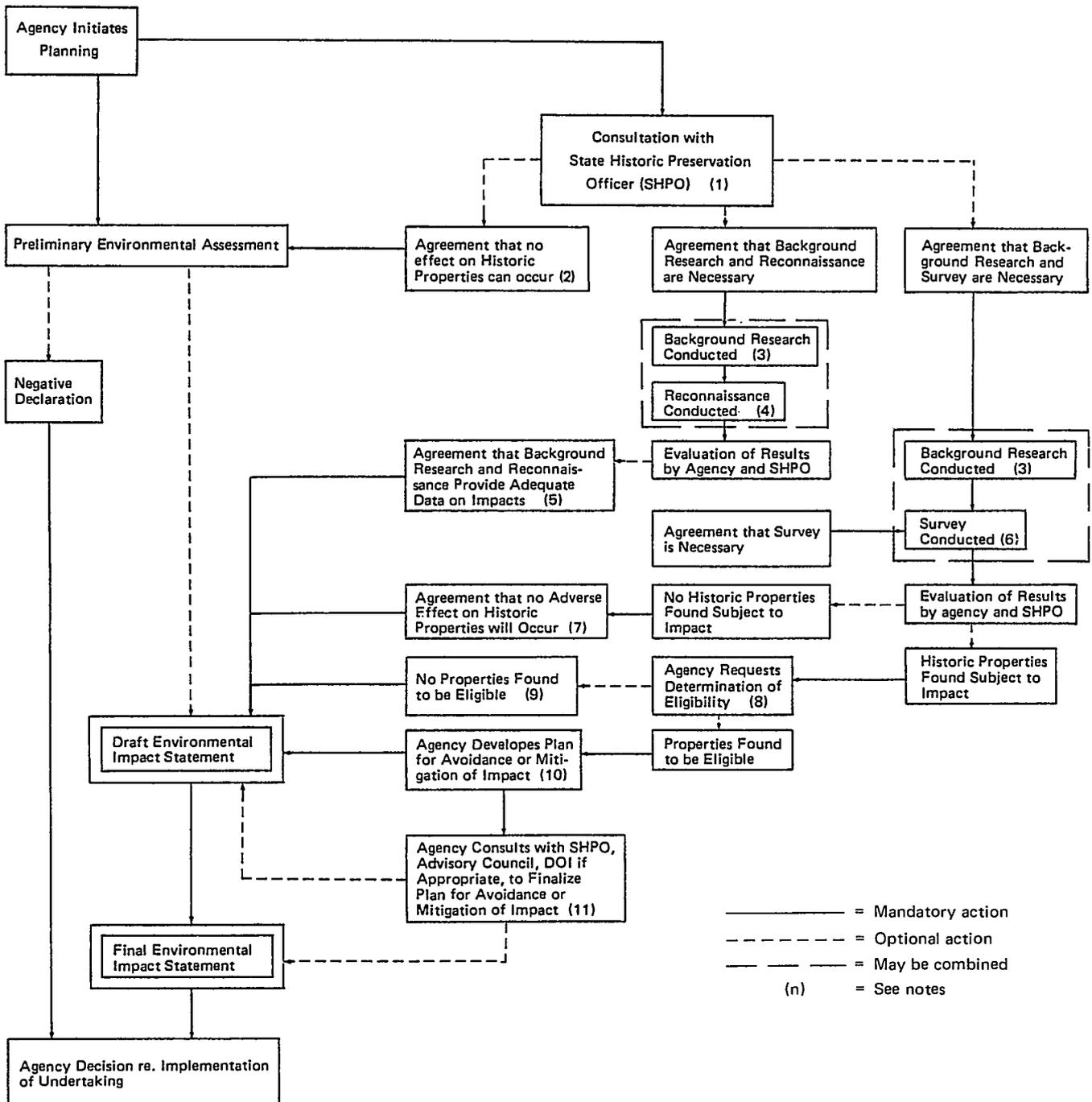
The archeologist may and generally should first become involved with the environmental impact research process at the evaluative stage where the sponsoring agency determines if its planned activities constitute a major federal action. Archeological research results are reported in Archeological Impact Reports (see page 41). Although primarily an evaluative process, the investigations included within this stage of the EIS process may range from archeological assessments to intensive field studies.

If the project is determined to be a major federal action, Archeological Impact Reports must be developed for both the draft Environmental Impact Statement and the final Environmental Impact Statement. Archeological research for an EIS include assessments, reconnaissance and/or intensive surveys, whichever is adequate for the level of EIS being prepared (pages 69-71). However, if archeological involvement does not begin previous to the final design stage, or if no subsequent public review is envisioned, research activities must be at the level of an intensive field study. Even if some background information resulted from previous planning stages, an intensive field study will be necessary in most cases to comply fully with EIS requirements with

FIGURE 1. INTEGRATION OF HISTORIC PRESERVATION PLANNING INTO THE ENVIRONMENTAL PLANNING PROCESS.

GENERAL ENVIRONMENTAL PLANNING PROCESS

HISTORIC PRESERVATION PLANNING PROCESS



Notes to Figure 1:

- (1) In accordance with 36 CFR 64 and 36 CFR 800.4
- (2) Documentation of the basis for this agreement should be maintained by the agency [36 CFR 800.4(b)].
- (3) In accordance with 36 CFR 64
- (4) In accordance with 36 CFR 64
- (5) Such agreement might occur when the reconnaissance and background research indicated that historic properties could not possibly occur in the areas subject to direct or indirect effect, when the impacts of the project were exclusively of a broad, indirect nature, or when the EIS was being prepared as a very preliminary document on a Federal permit or license program or some other activity for which opportunity would

exist at later stages of planning to conduct surveys and exercise agency discretion.

- (6) In accordance with 36 CFR 64
- (7) Documentation of the basis for this agreement should be included in the DEIS and provided to the Advisory Council on Historic Preservation [36 CFR 800.4(b)].
- (8) In accordance with 36 CFR 63
- (9) Documentation of compliance with 36 CFR 63, 64, and 800 should be included in the DEIS.
- (10) In accordance with 36 CFR 800.4(f), and 36 CFR 66 where applicable.
- (11) In accordance with 36 CFR 800.5 and 36 CFR 66 where applicable.

respect to the National Historic Preservation Act, Section 106 process (see Figure 1).

The purpose of a draft EIS is to present information that will elicit comments, criticisms, and corrections leading to the perfection of a final EIS. Research that goes into the draft would be as comprehensive as possible. Only in this manner can reviewers of the draft document have the full information they need to develop additive or corrective comments. 40 CFR 1500.7 (a) states:

The draft statement must fulfill and satisfy to the fullest extent possible at the time the draft is prepared the requirement of Section 102(2)(c)

With respect to data gathering it would be inappropriate to equate "draft" and "incomplete." Full identification, evaluation, and determination of the eligibility of the archeological sites for the National Register is important at the draft EIS stage so that time is available before completion of the final EIS for consultation between the federal agency, the State Historic Preservation Officer, and the Advisory Council on Historic Preservation and to develop avoidance or mitigation plans. It is in this forum that the primary weighing of public interest factors takes place.

*The National Historic Preservation Act* The CEQ Guidelines for NEPA and the Advisory Council compliance regulations require that the sponsor consult the National Register, contact the State Historic Preservation Officer (SHPO), and, if necessary, conduct field surveys to locate potentially impacted sites on or eligible for the National Register of Historic Places. In essence, cultural resources, which are most often inventoried and evaluated in accordance with E.O. 11593 and NEPA requirements, must also be evaluated under the National Register criteria for eligibility as mandated by the National Historic Preservation Act. In accordance with Section 106 of the act, if sites are on or are determined to be eligible for inclusion in the National Register, the SHPO must be consulted in determining the effects of the project on such sites. If there is to be an effect on the sites, the Advisory Council should be informed and if the effect is to be adverse the Council, as the forum for advising as to the appropriate action to be taken, must be allowed an opportunity to comment on the project. The Council staff attempts to negotiate a Memorandum of Agreement with the responsible agency, in consultation with the State Historic Preservation Officer, stipulating what avoidance or mitigation actions will be employed in connection with the project. If no agreement can be reached, implementation of the project must await full Council comment. The Advisory Council Procedures are given in 36 CFR 800 and should be complied with before the final EIS is developed. The resulting agreement or Council comment should be included as part of the final EIS.

*Executive Order 11593* Archeological compliance with this Executive Order requires that professional

quality surveys and appropriate evaluation of sites located on lands owned or controlled by Federal agencies be undertaken. Again, appropriate documentation is necessary. All cultural remains located in complying with the Executive Order must be evaluated in terms of the National Register criteria of eligibility. Priority must be given to federally owned properties to be transferred and/or altered. Documentation standards for the description of properties identified during surveys for compliance with Executive Order 11593 have been issued as 36 CFR 63, Appendix A; criteria and procedures for identification surveys themselves are in final preparation by the Department of the Interior as 36 CFR 64 (December 1976).

*The Department of Transportation Act* The pertinent sections of this Act authorize the funding of site mitigation when impacted by Federally assisted highway construction. Although the Federal Highway Administration has a set of specific procedural guidelines directing highway archeology, these directives do not yet appear to be in compliance with NEPA, the National Historic Preservation Act, Executive Order 11593, and the Archeological and Historic Preservation Act. Mitigation done under the auspices of the Department of Transportation Act must be preceded by evaluation via the environmental impact process, and Section 106 procedures also must be implemented prior to data recovery activities or other land modification actions. Compliance is complicated by section 4(f) of the DOT Act, which requires that all prudent and feasible alternatives be explored before making a decision to use land from any historic site designated as such by local, state, or federal authorities. Since any National Register property, or even any property determined ineligible by the Secretary of the Interior but held to be significant by a local or state government meets section 4(f) requirements, transportation agencies are required to conduct very elaborate studies of all prudent and feasible alternatives to taking any archeological site, even in cases where project impacts can be fully and properly mitigated.

*The Archeological and Historic Preservation Act* Public Law 93-291 authorizes federal agencies impacting archeological and historic resources to expend funds for the proper recovery of data from these resources. Such funds are made available after project impacts have been identified and assessed in the project planning process, and support research related to intensive field studies and mitigation actions, but the Act can be applied to any phase of the archeological process.<sup>7</sup> The Act also authorizes the development and publication of archeological reports.

<sup>7</sup> While the phraseology of the Act does not prohibit it, it is the view of the IAS that to apply the provisions of the Archeological and Historic Preservation Act to all phases "of the archeological

## *Problems Specific to Archeology*

The nature of below-ground prehistoric archeological sites, with respect to determination of significance, is inherently different from above-ground structures and even below-ground historic sites. Above- and below-ground historic elements normally can be researched via relevant documents and often significance of a specific site can be professionally established by this means alone. For those elements above ground, additional research and documentation (e.g., measured drawings and photographs) can supplement the documentary research and, after professional evaluation, can further establish significance—all without laying a permanently destructive hand on the site or the structure itself. No archeologist, however qualified, can do this with respect to a below-ground prehistoric archeological site. An archeologist can inspect surface indications and use these as a basis for estimating what cultural elements or components might be present. It is then necessary to place the site in a temporal, cultural, and geographic context in order to evaluate it as something other than a unique occurrence. Often this context has not yet been established, which necessitates either the development of data to establish this context or treatment of the site as unique (one which can yield important data available nowhere else).

Because knowledge of the context is essential to adequate evaluation, archeologists frequently recommend surveying a reasonable area surrounding a project, for often this results in the most efficient use of the archeologist's and the agency's resources, as well as having the most beneficial effect on the resource itself. Each situation must be evaluated on its own merits.

Even given good surface indications and a known context, the archeologist seldom can do more, on this data alone, than make a general estimate of a site's significance. A more reliable statement is made possible only through judicious subsurface testing. Is the site disturbed? Does it extend further than surface indications suggest? Is it stratified? Does everything cultural rest in the plow zone? How adequately does the surface sample reflect the subsurface sample? Even with these and other questions answered, the archeologist dealing with a site lacking documentation (which would include all prehistoric and many historic sites) can only make a professional best guess as to a site's level of signifi-

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process" would be confusing, and duplicative. The Act is not a substitute for the planning requirements placed on agencies by NEPA, the National Historic Preservation Act, and Executive Order 11593; it does provide one mechanism (data recovery) for mitigating impacts on one class of historic and cultural properties (those containing significant data), after all significant properties and impacts have been fully identified and evaluated and efforts have been made to explore the full range of applicable mitigation methods.

cance. A judgment of significance needs to be based on adequate information in the opinion of the archeologist, otherwise the judgment is premature and should not be made. If the initial test does not substantiate significance and the archeologist nonetheless has reason to believe the site may yet prove to be significant, there should be further testing.

The procedures that are developing (or that have been developed, e.g., by the Corps of Engineers) specifically direct themselves to the necessity for carrying out sufficient testing as a part of Reconnaissance Surveys and Intensive Field Studies, first to determine significance and secondly to develop an adequate mitigation plan. Recognition of the need for this level of testing, indeed the requirement of it, has done much to alleviate the problem of trying to determine archeological significance prior to adequate investigation (see pages 69–71 for further discussion and development of this point.)

In short, determining the "significance" of an archeological site is not philosophically different than for any type of cultural resource. It is nearly always a more difficult process, frequently time consuming and often more costly. This fact needs to be recognized by all parties involved more clearly than it was by many, archeologists and agencies alike, at the time of the seminars. Some progress has been made.

Since excavation destroys that portion of the resource excavated, the archeologist attempting to evaluate archeological resources is inevitably presented with a professional problem not faced by his counterpart, the historian or, often, the archeologist working with historic sites. However, the historic archeologist often works just as much in the dark as the prehistoric archeologist; just because a site's occupants knew how to write does not mean that they did, or that any accurate or relevant records have survived.

This difficulty in determining significance, combined with the sheer number of archeological sites, complicates but certainly does not make impossible the matter of adequate compliance with relevant federal and state legislation and guidelines.

### *Developments Subsequent to the Seminars (through 1976)*

All laws and regulations undergo a period, sometimes a lengthy period, of interpretation. Specific interpretations and resultant implementations by individuals and agencies is likely to differ in degree (and even in kind). Differences will develop inevitably until, finally, general consensus is achieved. Therefore problems of varying degrees of seriousness are likely to arise during that initial period of any important legislation.

At the time the seminars were held the Archeological and Historical Preservation Act of 1974 had just been signed and the implementation of both NEPA

and NHPA were undergoing considerable review, and modification.

In that context the seminar discussed several problem areas. Some of these have since been resolved by further administrative action or clarification or have proven to be non-problems (see pages 12–14 for a discussion of some of the problems envisioned with respect to the Archeological and Historical Preservation Act as contrasted to those which actually developed greater practical importance), others remain unresolved. Much progress has been made and a number of clarifications with respect to National Register procedures have been developed.

A recently instituted "consensus determination" (36 CFR 63) streamlines the procedures for determination of eligibility. Under this approach a site or district can be considered eligible when an agency and the State Historic Preservation Officer agree on the determination of significance and submit documentation to the National Register. Unless the Chief of the Office of Archeology and Historic Preservation objects within 14 days of receipt of the consensus determination data, the site is considered eligible and the Chief so indicates in the Federal Register.

A full Section 106 review also is normally a lengthy process, and could bring compliance problems. This process, however, has similarly been streamlined by making the on-site-inspection and the public information meeting optional at the discretion of the Advisory Council staff.

The consensus process can reduce the review time if the agency and the SHPO are in agreement. However, it also reduces the time in which concerned archeologists have an opportunity to become aware of the project and to comment on it to the SHPO or to OAHF.

In addition to the consensus procedures which speed up the administrative procedure, while maintaining review by the 106 process, there also has developed the "No adverse affect" process.

The "no adverse affect" process presently has similar advantages and disadvantages. Once an archeological resource is determined to be eligible for the National Register, if all concerned parties agree that the best treatment of the resource is through investigative data recovery (and an adequate program of mitigation is provided for), then a determination of "no adverse affect" is made and further implementation of the 106 process is waived. This streamlines the mitigation process (a procedural problem which concerned the seminar). But until adequate review mechanisms of these "no adverse" determinations are instituted, there remain potential problems.

The system of procedures and operations that revolve around and depend upon the existence of a National Register should be clearly distinguished from the National Register itself as a list of significant properties. The potential for "completing" the Na-

tional Register (a practical impossibility, in the absence of a way to halt time) has little relevance to the operation of the system itself. The system depends on the assumption that there is a threshold of significance beneath which properties will not be regarded as having sufficient historical value to justify federal concern, and above which consideration in planning is appropriate and necessary. Whether those properties that meet the threshold values encapsulated in the National Register criteria (36 CFR 60.6) must be recorded on a single list is not especially important: what is important is that they be identified, be distinguished from the rest of the universe, and be kept track of somehow. The National Register as a list is a first, relatively crude attempt at keeping track of significant properties; it would be very surprising and most disappointing if it did not evolve and grow in conceptual sophistication. Meanwhile, it is the system of review, evaluation and planning associated with the National Register that should be clearly understood and used by archeologists.

Executive Order 11593, NHPA, and NEPA, collectively, require that federal agencies and State Historic Preservation Officers engage in both long and short term planning with respect to historic preservation. States are required to undertake statewide surveys and develop state plans for historic preservation; Federal agencies are required to inventory their lands to locate and nominate properties to the National Register. In the short run, when projects or changes in land status are planned by a federal agency, efforts must be made to identify any property that might be eligible for inclusion in the National Register, and if such properties may be affected by the project or change, the Advisory Council and State Historic Preservation Officer must be consulted to develop methods of mitigating any adverse effects. The long range planning activities of both state and federal entities involve *nomination* to the National Register; the short range activities involve *determinations of eligibility*. The distinction is important. In a determination of eligibility, review by the agency, the SHPO, the National Register, and, potentially, outside concerned parties results in the determination that a given property is or is not eligible for inclusion in the National Register—i.e., that it is or is not of sufficient significance to be worth attention by the federal government in its planning. The data about the property that are reviewed, in a normal archeological situation, are those found in the archeologist's survey report. The report, accordingly, must be sufficiently detailed, and sufficiently well thought-out, to allow objective reviewers to understand what the reported site is like and why the archeologist thinks it is or is not important enough to justify expenditure of public money. Properties that are determined eligible are not actually placed on the National Register, except in instances where, after consultation under the Advisory Council's Procedures, it proves possible to

preserve them. Plans for treatment of the properties, however, are reviewed by the Advisory Council and the SHPO under the Council's Procedures, affording opportunities for exploring preservation options and improving research designs.

The National Register thus can serve as a planning tool in two different ways, associated with long term and short term planning respectively. In long term planning, the National Register can serve as a record-keeping device—the ultimate master record of the Nation's significant historic properties. Its evolution into its ultimate form requires statewide and regional surveys, predictive studies, and comprehensive planning. In short-term planning, the Register defines a threshold that must be reached by a property before it can be considered by a Federal agency in project formulation. For archeology, this means that a basic question must be asked and answered: does the property contain important information? Use of the National Register system insures that this question will be asked and answered systematically. Moreover, it insures that the answers given by an individual archeologist to an individual agency will be reviewed by others—by the SHPO with reference to the priorities established in the State Historic Preservation Plan, and by the National Register itself from a national perspective, as well as by outside parties who ask to be involved in review.

Although these developments are encouraging, some issues remain unresolved. One such issue is the degree to which the federal government is responsible for development and review of guidelines and standards and the degree to which these have been adhered to as distinguished from the government's right to pass judgment upon the archeological investigations themselves.

The fact that a number of issues remain dynamic should be considered as a basically healthy sign.

## **SPONSOR-PROFESSIONAL RELATIONSHIPS**

For archeologists the National Park Service has long been one of the focal points for contact with the federal government. The Park Service has employed staff archeologists who worked in liaison with archeologists from various state agencies, organizations, and institutions. They have also acted as intermediaries when dealing with many governmental sponsors. Today, however, archeologists at every level are also being called on to work directly with a variety of other sponsors, both public and private, who need expertise relating to archeology. As sponsors tackle the problems of compliance under the new environmental legislation, as well as attempt to understand the basics of cultural resource management, it is also incumbent upon archeologists to learn something of the agencies, organizations, businesses, and individuals with whom they are dealing.

To sponsors, archeological information is acquired through a purely business relationship in

which they contract for professional services. They usually are required either by law or by established policies to follow certain procedures in such a business arrangement. Thus obligations and responsibilities flow in both directions, and a lack of understanding of sponsor roles and needs by the archeologist will clearly create problems just as rapidly as will a failure to appreciate archeological realities and needs on the part of the sponsors.

## **Sponsor Needs and Responsibilities**

Under legislation discussed in Chapter 1 and elsewhere in this report, agencies and organizations using federal funds, licenses, or permits to modify the land have an obligation to acquire sufficient information to make responsible management decisions in the context of the public good and the total environment. Such decisions are possible only if based in part on good archeology. In order to comply with NEPA, agencies must fund archeological surveys adequate to identify the impact of their projects on the cultural resources, not just identify or record known sites or sites already on the National Register. In order to establish the significance of the resources as required by the National Historic Preservation Act and the Executive Order, sites may have to be tested. When the evaluative studies and procedures have been completed, the Archeological and Historical Preservation Act authorizes the funding of data recovery programs if such prove necessary to alleviate any adverse impacts.

It seems appropriate to mention, also, that the lowest cost for work will not necessarily yield the best information. Inadequate funding will not provide the best use of the resources, nor will it necessarily make the best use of the sponsor's money—particularly if the resulting report is substandard and is subsequently challenged, requiring the sponsor to fund more work.

Whatever the compliance or management situation, sponsors requiring archeological services must notify archeologists as early in their planning as possible, so that broad-based studies can be made. This has proven to be not only the most effective approach for identifying and mitigating impact, but also the most efficient expenditure of research and management time and money. Sponsors, in consultation with archeologists, should be prepared to fund the most appropriate level of archeological work consistent with the needs of the particular planning level of their project.

If a sponsor does not have archeological expertise in-house, considerable time might be saved and misunderstanding avoided by consulting with archeologists who understand management needs prior to drawing up the scope of work for a project. Archeologists familiar with the laws and sponsor planning stages could, for example, suggest the appropriate level of archeological investigation needed. It would, in addition, aid in communication

if a sponsor either hired an in-house archeologist to act as a liaison, or, if the work load does not indicate this, then designated a particular staff member as the contact person with archeologists, requiring that this person become familiar with general information about archeology and archeological resources. Some federal agencies have mechanisms for archeologists to give agency personnel short training courses in order to give this process of acquaintanceship some concentrated direction. Sponsors should understand, however, that a week or two of attending lectures in archeology does not an archeologist make; it is designed to increase the ability of the sponsor's nonarcheological staff to assess the proposals and budgets submitted. Some specialized field short courses may allow agency personnel to make initial identification of resources in limited cases. But interpretations of resource significance and consequent recommendations for mitigation of impacts upon them, must be made by those with appropriate professional training and experience.

### *Planning Reports*

**Archeological Impact Reports** An AIR is developed by the professional to document the research done to comply with the various stages of NEPA planning or to comply with the National Historic Preservation Act and E.O. 11593. Under NEPA, such reports must include detailed evaluative research results which are justified in terms of project-specific needs within the framework of NEPA guidelines. This framework is defined in Section 102 of the Act, and expanded in Sections 1500.5 through 1500.8 of the CEQ guidelines. These reports are then abstracted by the agency (or, preferably, when it is possible, a draft abstract should be prepared by the archeologist) becoming the archeological impact aspects of the Environmental Analysis Report (EAR) or Environmental Impact Statement (EIS). In this document determination must be made by the archeologist as to the presence of and affect on any sites on potentially eligible for the National Register. The archeologist or agency (depending upon contract stipulations) then should seek the opinion of the State Historic Preservation Officer and if appropriate the agency should request a determination of eligibility from the Office of Archeology and Historic Preservation.

**Environmental Analysis Reports** An EAR is developed by the sponsoring agency in order to determine if significant impacts on the environment will occur (resulting in a major federal action). If the action will have no deleterious influence on the resource base (as indicated by AIRs and other nonarcheological environmental studies), a determination of no adverse impact (a negative declaration) results, and the project is deemed not a major federal action. The EAR then becomes a document employed by the sponsor as evidence that environmental fac-

tors were considered in the planning process. But if the analysis report identifies adverse project impacts on the resource base—cultural or otherwise—an Environmental Impact Statement must be developed. If adverse effects on historic or archeological properties are identified and determined to be eligible for the National Register, the Advisory Council on Historic Preservation must now be afforded the opportunity to comment on the project [36 CFR 800.4(e)].

**Environmental Impact Statements** An EIS is often written without being preceded by an EAR when it is obvious that significant adverse impacts will ensue and, therefore, that a major federal action is involved. A detailed EAR can often be developed into an EIS with the addition of proposed mitigation measures. When the EIS is first prepared at the alternative design stage, alternatives to the project should be evaluated. The attendant AIR must be capable of recommending priorities in considering alternatives *vis-a-vis* the most responsible considerations of the archeological resource base. If subsequent EISs are provided for, a reconnaissance may be adequate at this level; if not, an intensive field study will be necessary.

Once the final project form and/or location has been selected, the EIS written at this stage must document fully the effect of the land modification on the environmental resources. The AIR developed for this stage must include detailed evaluations of the direct and indirect impacts of the project on archeological remains, may also consider potential impacts, and must recommend a responsible program to mitigate all impacts, including an estimate of mitigation costs.

### **Professional Needs and Responsibilities**

Cultural resource management has opened up whole new dimensions of inquiry and responsibility for archeologists. For the first time archeologists have begun unifying their efforts to develop systematic regional plans which will be directed toward not only present and future scientific needs, but in doing so will also meet legal requirements under existing legislation.

### *Archeological Studies*

American society has provided for legislative and administrative consideration, and sometimes for protection of substantial fractions of the archeological resource base, as detailed in preceding sections of this chapter. Everyone is aware of the popularity of archeological parks, monuments, museum exhibits, magazine and newspaper articles, and television shows. Why is this so? Is there something intrinsic within archeological sites and artifacts that "speaks" directly to the public, telling them of the past? To some extent public appreciation is based on

such intrinsic qualities, but much more importantly, it derives from an "interpretation" of the encounter with archeology, either by means of information obtained elsewhere, or a knowledge received during the encounter.

Archeological studies provide the information that gives meaning to the public's encounters with the traces of the past. The continued production of new, informative data is essential if society's commitment to cultural resource conservation and management (as well as pure research) is to be rewarded. Any use of archeological resources should therefore relate to the solution of viable research questions. If solving important problems to improve our understanding of the past for the benefit of present and future generations is not the discipline's principal goal, then any exploitation of the cultural record is allowable, and we can forget our hue and cry to save the past for the future.

Of course, cultural resource management by land holding and land modifying agencies often requires them to obtain data from areas that archeologists, independently, might not have considered areas of principal research concern. Nonetheless, if primary data in such areas is in danger of destruction the archeologist has a responsibility to concern him or herself with relating that data to current research in order that the management and the discipline's goal of preserving or recovering maximum scientific information from the area being impacted will be met.

The discipline's responsibility, then, is threefold. It must promote studies that expand research frontiers. It must also insure that responsible recommendations are made to management, couched in language comprehensible and useful to sponsors. Finally, it must endeavor to relate both of these to long-range regional planning, relating this to research priorities and broad regional or subregional assessments of archeological values. Such broadly based planning is the best method for insuring the most cumulatively beneficial attrition of the resource base.

In promoting professional involvement in cultural resource management, it is incumbent upon the discipline to support this approach in the same manner that it supports "pure research" endeavors. If the discipline is to attract and retain a progressive and responsible professional base in cultural resource management, it must equate this approach with the promotion/reward system presently employed in the academic world. It is only when experience in management-oriented research and involvement in conservation archeology are afforded the same status as academic teaching and "pure" research that cultural resource management will achieve the prestige it needs to continue to attract the innovative, competent people required for it to achieve its promise of serving both the discipline of archeology and society at large.

Pure research, motivated principally by the need to solve archeological problems, and partially or

wholly divorced from impact assessment and mitigation or agency management needs, will continue to be an important part of the overall evolution of archeology. This is true despite current economic restrictions which have reduced funding for such studies, while support for management-oriented studies has been increasing. There needs to be productive interchange, not only of ideas but also of personnel, between those working in pure research and in management research frameworks. The goals of both are the same—to expand knowledge of the past—even though the management archeologist may have additional considerations due to the context within which he or she works. As positions continue to open for professional archeologists outside the traditional academic sphere, status differences should disappear and there should be a healthy horizontal movement from academic to nonacademic professional work and vice versa.

The pure researchers will also need to recognize some constraints because of their dependence on the same limited and nonrenewable resource base. Unless important new knowledge results from pure research, the destruction of the resource base that the research entails cannot be justified. Such investigators are as constrained to make frugal and economic use of resources as are management-oriented investigators, and should consider whether or not their studies could not suitably be undertaken using available data or as part of a mitigation program or other management-oriented study of sites threatened by nonarcheological factors.

### *Discipline Boundaries*

As we assess the obligations, responsibilities, and needs of the profession relating to the management of cultural resources, we must continually keep in mind the interdisciplinary nature of archeological research, as well as that of environmental studies in general. If, in defining our responsibility, we limit ourselves to only those areas having evidence of specific human activity, we stand in danger of overlooking or losing important data.

The ability of the archeologist to interpret cultural data often depends on data derived from natural resource areas which may contain no cultural evidence *per se*. Bogs and springs, for example, are common sources of data from which the palynologist, botanist, or paleontologist derives materials which can be essential to paleoecological and climatological reconstruction. These noncultural materials can provide a framework necessary to understand the changes, both in environment and in cultural processes, which have occurred in a given locality or region.

In spite of the fact that interdisciplinary research projects are becoming increasingly common, there are still relatively few investigators in palynology, paleontology, or other disciplines interactive with archeology who have become engaged in identify-

ing and managing noncultural resources of archeological importance and planning for their conservation. Wherever possible in the design of archeological evaluation projects, specialists in pertinent interactive fields should be sought out and included as members of the study team. When noncultural resources of archeological importance are present in the study area but specialists are not available to inventory or evaluate them, the archeologist should still attempt to describe the archeologically relevant aspects and plan for their proper management. The interdisciplinary nature of archeological research must be reflected in the management plans developed for a region or locality. The conservation and management of noncultural phenomena significant for interpreting cultural remains is properly an area of concern for the profession.

Recognizing the potential importance of noncultural resources to archeology does not mean that archeologists should step beyond their disciplinary boundaries and attempt to assess other environmental resources in and of themselves. It is no more justifiable for an archeologist to assume the role of botanist, geologist, or hydrologist than for persons not trained in archeology to evaluate archeological resources. If the archeologist discovers a feature of the study area's environment that is of potential interest to another discipline and/or of potential concern to the sponsor agency or the public he should make the sponsor and appropriate experts aware of it.

Interdisciplinary relations with history and sociocultural anthropology are somewhat more complex, since archeologists often have a formal background in one or both of these fields, and since all three fields share some research interests, approaches and techniques. The archeologist is justified in making evaluatory statements about the archeological value of a historic site (i.e., its significance to the anthropology of the past) or of a living sociocultural group (e.g., the significance of its behavior or its organization of material culture for interpretive purposes), but he should also remain sensitive to the possible need for specialist assistance, both to help assess the archeological value of the resource, and to determine the cultural values that transcend the boundaries of archeology. As with the noncultural disciplines, specialists in history, historical architecture, architectural history, and sociocultural anthropology should be aggressively sought as members of research team, and when resources or data pertinent to such specialists are recognized by archeologists in the context of a contract project, the sponsor should be notified and appropriate individuals or groups should become involved.

### *Personnel Training*

An explicit concern for responsible stewardship of archeological resources has become a necessary component in all archeological training. If we are to

ask that governmental agencies and private individuals treat archeological remains with respect, then the profession must do the same. When teaching archeology, the nonrenewable nature of the resource base and the necessity for its long-term management should be themes that are communicated at all levels.

Colleges and universities are and probably will continue to be our primary instruments for the training of archeologists. Preparation of students for work in cultural resource management should, of course, be oriented around a solid academic grounding in anthropology and archeological fact, method, and theory. In addition, there will need to be opportunities for students to obtain additional training related to the demands of cultural resource management jobs. A number of schools have introduced courses in cultural resource management, and several have developed graduate degree tracks for students specializing in this area. In other institutions, assistantships or employment on management projects, internships, or course work in related departments provide training and experience useful in cultural resource management.

Although there are a variety of ways in which this additional training may be obtained, it may be well here to outline some areas of training that may be most useful. For students planning to work in cultural resource management research, familiarity with administration, conservation law, and technical writing will be most helpful. At the graduate levels, there should be emphasis on developing research designs that are both innovative and feasible. Supervised participation in actual cultural resource research is also essential, the more the better. For those planning to enter the public interpretive area of cultural resource management, work in outdoor recreation, education, communications, museology, and other such specialties will be helpful, in addition to the academic core. A basic familiarity with archeological research, through participation in field and lab work, also is essential. For students planning to work as resource managers in federal or state agencies, a thorough grounding in administration and conservation law and a familiarity with archeological research gained through participation will be needed, in addition to the academic core. It will probably also be well for students oriented in this direction to obtain some awareness of resource management in areas other than cultural resources.

Colleges and universities can also expect to accommodate students from these other resource management areas who want and need to gain familiarity with cultural resources. Specialists in outdoor recreation, forestry, wildlife, range management, and the like, often are called upon to recognize and administer cultural resources and/or to interact with cultural resource specialists. Such cross-enrichment of resource management programs is of value to all the fields involved.

Museums, too, can play an expanded role in train-

ing archeologists. The increased use of archeological collections for student study will permit an appreciation of the possibilities of museum holdings as resources for research. Internships and work programs in museums provide a format for learning the systematics of storage and retrieval, conservator's techniques, and the development of familiarity with material culture that can be achieved nowhere else.

A series of additional formats can be used by the profession in the current transition to new priorities. Chapter 4 suggests that workshops or seminars be conducted by specialists within the profession as an effective means to disseminate knowledge to the profession and to establish and maintain high professional standards. The National Park Service and the Bureau of Land Management are pioneering internship programs whereby management skills required by their programs can be acquired by students of archeology. The NPS is also establishing positions which permit a return to academia after a number of years of service, hopefully a portent of continuing active interchange between the academic and managerial sections of the profession.

The development of a number of in-service archeological training programs by federal agencies such as the Bureau of Land Management, the Army Corps of Engineers, and the U.S. Forest Service is proving to be a successful method of developing respect for archeological resources in agency field personnel. Such personnel receive training from both the agency and outside archeologists. The emphasis of these programs may be directed toward archeological values, methods of protection and/or resource recognition, and recording. In sum, they constitute the opportunity for archeologists to enlist the aid and understanding of a large number of necessarily concerned individuals who are out on the land or in the forests and who have an intimate contact with the cultural resource base. It must be stressed again, of course, that evaluation of the resources recorded must be the responsibility of a professional archeologist.

Professional participation in training programs leading to certification of para-professionals, many of them drawn from avocational ranks has been pioneered in Arkansas, Texas, and other states. Such programs permit individuals to develop the skills to perform many archeological tasks in cooperation with the profession in cultural resource management programs.

Archeology has yet to recruit many minority members to its ranks. Renewed efforts to encourage Native Americans to join the profession (see Chapter 5) in all capacities have a special urgency because archeologists so often deal with materials relating directly to their cultural heritage. The field has not been as closed to women as have some other professions, but women remain underrepresented, as do Native Americans, Blacks, Mexican-Americans and other ethnic minorities. Increased employment under contract will provide many new openings in

archeology and an opportunity to fulfill the spirit as well as the letter of affirmative action guidelines.

### *Communication*

*With Sponsors* It should be obligatory, possibly even specifically written into contracts, that archeological information relating to land-use decision-making and other management needs be communicated to the sponsor in nontechnical language. This should in no way compromise the archeological information being reported, but it is obvious that the archeological management aspects of a report to a highway department or a district engineer will be of no use to them if couched in unfamiliar specialized, or technical terms. For example, to an archeologist, the term "model" usually refers to an abstract construction employed to propose or explain some aspect of past human behavior. To a highway engineer, however, this term may evoke thoughts of an Indian village in miniature (see also page 73).

*With Other Professionals* Most archeological research presently and in the future will be generated through cultural resource management studies. Many cultural resource management programs now have substantial backlogs of unpublished material because the sponsor and the archeologists did not adequately recognize the need to include such costs in contracts. The cost of at least minimum level scientific (and perhaps even public) dissemination of the results should be incorporated as an essential item in every contract. It makes absolutely no sense to spend thousands of dollars on data recovery and analysis and then not have the results available to anyone. The Archeological and Historic Preservation Act specifically authorizes publication as an appropriate cost. Nonetheless, the profession needs to develop innovative ways of solving this problem. Some institutions have low-cost report and monograph series that can be used as vehicles to make available to the profession the reports written for sponsors. In addition, there should be the publication of summary or problem-oriented papers in regional or national journals. Longer reports containing supportive data might be made available on microfilm, microfiche, videodiscs, or in some other photocopy form. The SAA's "Archives of Archaeology" was an attempt at this, and was not well received by the profession. Perhaps, however, this was a concept ahead of its time, and such a venture might now be more successful. The Office of Archeology and Historic Preservation has recently begun microfiche reproduction and storage of all reports submitted under the authority of the Archeological and Historic Preservation Act; these will be made available at a modest cost.

An abstracting service would be an additional economical device for initial widespread communication. If summaries of research reports produced under contract can be widely disseminated by an

abstracting service, professionals interested in particular studies would become aware of their existence and could make arrangements for obtaining those of interest. (See page 83 for a further discussion of abstracts.)

Certainly we must solve the problem of timely and adequate dissemination of research results. The only justification for investigation is the increase of knowledge; if this knowledge is never disseminated, the investigation might as well have never been done, and the ultimate rationale for doing it has been undermined.

*With the Public* Most cultural resource management studies are carried out with public monies and the professional and the sponsor therefore have an obligation, on both generalized and specific levels, to provide the public with information on what has resulted from the use of these public funds. Data collection is often quite visible and exciting to the general public; interpretation of its purpose and results for the public—again, in language a lay person can understand—should be a part of the thought and lifeway of every citizen, and thus be institutionalized on a national level.

One approach to increasing the public's awareness might be to include as part of selected contracts, a short report of the research written specifically for the layman. Not only would such a report improve public understanding of archeology as it relates to a particular project, but it would enhance the public image of the sponsoring agency and of the entity carrying out the research.

Public comprehension of archeology can have one of its most important impacts in public hearings. Community feelings concerning land modification projects and related activities often have strong influence on agency decision-making. To the extent that the public appreciates and is knowledgeable about archeology, it should be supportive of the discipline's concerns for conservation and adequate research. (For a fuller discussion, see Chapter 4.)

### *Professional Testimony*

Because Environmental Impact Statements and other studies for which archeological expertise is contracted can become objects of litigation, participating archeologists may face the prospect of being called upon to give professional testimony in court. This is, in fact, often a requirement of the contract. The archeologist will usually be asked to testify as to the archeological facts of the situation as discovered by his or her research, and his or her independent professional assessment of these findings. In many of these instances, the archeologist may also be asked to explain in general terms the relevance of conserving archeological resources and the overall significance of archeological remains within the study area. It is incumbent upon the archeologist-as-witness to be able to discuss clearly the signifi-

cance of archeology to the public, how the resource base can be preserved, and the meanings of specialized archeologically relevant terms that appear in the laws and regulations. These factors must be thought out well in advance of actual testimony, since the fate of cultural resources may depend upon how readily and comprehensibly the professional's position is explained on the witness stand.

As a witness, the archeologist is not testifying for or against the sponsor's project, and in fact he or she must not do so. Whether the project is good or bad for society at large, or beneficial or harmful to the nonarcheological environment, is outside the archeologist's area of professional competence and responsibility as an expert witness. The archeologist is testifying only as a professional on matters within his or her area of expertise. As a citizen, through other channels, the professional has the right to express a personal opinion, but a clear distinction between these should be kept in mind at all times.

Insofar as the sponsor has contracted with an institution for research, the institution should reserve the right to choose who will represent it if professional testimony is required. The person taking the stand will normally be the Principal Investigator who completed the investigations and wrote the report for the contract that is under litigation. On other occasions the program director or other appropriate archeological personnel may be called upon to represent the institution.

### **Conflict of Interest**

Given the structure of sponsor-professional service relationships the problem of conflict of interest is a realistic concern. Institutions may be open to charges of making recommendations that "feather the nest" when over a long period of time they provide all management research for a particular sponsor, or if they are engaged in long-term multi-phase contracts where later phases of research are dependent on recommendations made in the earlier ones. Professionalism on the part of the contracting institution and objective peer review are, of course, primary antidotes for the fact or suspicion of self-serving recommendations.

The sponsor may also hire archeologically knowledgeable persons to supervise contracts, or may draw on other professional consultants or reviewers for program evaluation. One of the jobs of such sponsor-employed archeologists certainly is to review the work of contracting professionals and making a professional evaluation of their work and recommendations. Such personnel also, of course, should insure that the research produced is in compliance with all legal and contractual requirements, and will meet the sponsor's specific needs. The existence of a number of reliable and capable contracting institutions in an area also insures that the sponsor has a choice in contracting for research, and can thus select the researchers most capable of meeting

his needs. This condition, however, is not available, and may never be available in all areas of the country.

Increased and more effective cost accounting and the variables affecting cost, plus greater awareness of these results by agencies and archeologists will also help avoid some problems in this area. In general, it is worthwhile for contracting institutions to spell out openly the basic assumptions and rationale for the research programs they undertake, and to relate these explicitly to their cost schedules.

Conflict of interest can also be a problem for the sponsor. Sponsoring agencies, in gearing up for increased involvement in cultural resource management, may be tempted to develop the in-house capacity for implementing projects. This creates the possibility of conflict of interest, for the professional archeologist hired to staff these programs might be put under pressure to compromise the goals of cultural resource conservation and management in order to further opposing goals of the sponsor. The profession's position with regard to this possibility is to discourage sponsor creation of *major* in-house archeological research programs. In addition to possible conflict of interest, in-house archeology requires a commitment to laboratory space, equipment, full-time permanent curation of materials and records, and increased personnel. Most sponsors needing archeological information are not in a position to make this permanent, full-time long-range commitment. Insofar as the profession reserves the right to determine the viable goals and priorities of the discipline, these concerns should not be tempered by agency-specific constraints.

Unregulated sponsor access to potentially sensitive archeological information is yet another potential conflict between the sponsor and professional. Although sponsoring agencies must have data concerning the locations and significance of archeological manifestations that are to be impacted by their land modification projects or are to be managed by them for the public good, access to this information should be limited to those directly related to the management program. Much archeological information, in the wrong hands, can be used to destroy an already diminished resource base which is of national importance. The Freedom of Information Act and the Privacy Act, as currently interpreted, support the position that sponsors and professionals are obliged to make interpretive data available to the public, but that managerial information (specifically, site locations) is relevant only to those making managerial decisions. (See also comment on page 14 with respect to PL 94-458.)

Sponsor claims on primary field notes for purposes of revising or redoing a contract report are inappropriate and jeopardize the sponsor's own requirements of an independent, objective, and professional assessment of the threatened archeological remains. Further, the professional archeologist and/or contracting institution should retain full

freedom to utilize any basic data developed in order that it may be applied to subsequent scientific research.

A final problem relates specifically to EIS development. Although professional peer review of archeological input to the EIS is recommended, sponsor control and manipulation of the archeological findings and recommendations other than requests for content clarification should not be condoned. Although the sponsor cannot expect to control what recommendations are made, he may choose not to accept them once they are forthcoming, on the weight of other concerns. If this is the case, the sponsor is free to take such a stand, although it should be prepared to justify the decision in detail for the EIS review. Whatever the disposition of the archeologist's recommendations, the sponsor remains obligated by law to describe in the EIS the full impact of the project on archeological resources. Not to do so would be to invite challenge to the adequacy of the EIS.

## PLANNING

### Project Planning Stages and Archeological Investigations

All federal agencies have a planning process for land modification programs or any projects which may have direct or indirect impact on the natural or cultural environment. The type and duration of planning is dependent upon the agency and the nature of the project. For a major Corps of Engineers project, for example, planning may take twenty years from time of project inception to initiation of construction. The degree of commitment to location, design, facilities, and land use increases through the process; it is during the first stages that a plan can be most easily modified. In essence, that is the purpose of the planning process. NEPA and other environmental laws have been passed to assure the public that more than just the needs of the sponsor's programs are considered in the planning process—that other important variables are taken into consideration. By law, archeological resources are among those variables to be considered. (See page 68 for an illustration of the correlation between agency phasing stages and archeological input.)

Although many land modification projects in this country are well along in the planning process, agencies are required to seek public comment and consider "total public good" on these projects as well as ones just being initiated. Archeologists, therefore, are currently undertaking studies and assessments of archeological resources in project areas where planning is far advanced and there is essentially no alternative to the existing project design. Such a situation often makes excavation the only mitigation recommendation open to the archeologist. Although catching up in the planning proc-

ess is a current problem, for the first time there is the opportunity as well as the obligation by both archeologists and planners to see that archeological management information is integrated into land-use planning during its earliest stages. When all proposed projects reach that point, it will be easier for everyone to (a) fully comply with the relevant laws and regulations, (b) properly accomplish sponsor-specific needs, and (c) effectively plan and efficiently carry out necessary investigations that meet the highest professional standards.

Planning in general is continuous. Most sponsors alter plans in different ways throughout the life of a program or project. Implementation does not necessarily signal the end of planning, since such activities as operations and maintenance, management, and reconstruction normally follow. In general, one may consider planning as having a broad based preliminary and somewhat exploratory stage (often nonproject-specific), a number of intermediate phases where the details become more refined and the alternatives fewer, a final plan for implementation where alternatives normally are no longer considered and, when appropriate, post-implementation follow-up stages, which would include continued management of identified resources as part of operations and maintenance (O & M) phases of a project.

Information and recommendations concerning cultural resources can be integrated into the planning system at any stage, but, as previously noted, it becomes progressively more difficult to alter or change a plan for the benefit of the cultural resources as it nears implementation. Therefore, the earlier that consideration of cultural resources can be integrated into the planning program, the better the chance for an economical and mutually agreeable course of action.

### *Types of Investigation*

The archeological research activities required for different levels of sponsor planning vary considerably. The following discussion briefly describes the minimal level of research required for different planning stages (for additional discussion, see Chapter 3).

*Overview* This type of study involves the review of all known records available which concern the project area. Included are surveys of relevant literature and manuscripts, reviews of site survey records, and examinations of other existing field data and personal contact with informants. This report should summarize the present state of knowledge, evaluate the documentary base, and, insofar as available evidence permits, should utilize that information to discuss and predict the probable nature and distribution of the resources. Such a study is appropriate to an agency's initial regional or sub-regional planning and provides the sponsor with information ap-

propriate to a general management or initial planning stage. These data are not usually adequate for documenting impact for an EIS.

*Archeological Assessment* Basically a document for planning future field research, the archeological assessment is an extension of the overview which is designed to document information relating to logistic constraints such as access to the project area, availability of support facilities, terrain coverage considerations, as well as archeological potential as determined, when necessary, by an initial field sample. This information should allow for more precise estimates of subsequent project research needs and costs. The results of such assessments are most appropriate to the preliminary planning stages and commonly appear as proposals for subsequent field survey or mitigation research. Again the detail contained normally is not adequate for an EIS.

*Archeological Reconnaissance* This study requires an on-the-ground investigation of the surface cultural manifestations found in a portion of the project area. Such surveys are generally based on sampling designs, and are primarily used as a predictive device for estimating archeological potential. These supply information relating to numbers and types of sites and other data in representative locations related to the project area. Study results are most appropriate to the preliminary planning stage, or, if not accomplished earlier, to the alternative design stage of sponsor planning.

The archeological requirements of NEPA may be rationally satisfied in some cases by an archeological reconnaissance or even overview level studies. When a federal action is of an extremely general or programmatic nature—for example, the establishment of an oil leasing program on the entire outer continental shelf—an overview may be an appropriate component of the requisite EIS, coupled with an explanation of a management program to insure full identification of resources before actual use of the area begins. When a federal action involves permitting a nonfederal entity to use an extremely large area—for example, when a general program for strip-mining in a multistage area is under consideration—a reconnaissance resulting in predictive data may provide enough information to permit intelligent decisions to be made about land uses, and to permit the construction of functional stipulations to be attached to permits (36 CFR 64 will provide details). They should include predictive statements, concerning the archeological and cultural resources to be affected and discuss the probable mitigation approaches appropriate to each alternative.

*Intensive Field Study* Essentially a comprehensive field survey of the project area, this type of study is initiated when total ground coverage is necessary, normally because specific alternative designs are being considered, or, if not accomplished earlier,

when final designs have been set. Intensive surveys document in detail a project's impact on the cultural resource base, and collect the data to evaluate this base in light of the archeological context and accepted mitigation alternatives. Reports generated from such studies relate to the sponsor's alternative or final project design stage. When the results of these studies are developed as AIR's, mitigation recommendations and budgets must be included.

*Mitigation* The research required for mitigation studies varies with project-specific resource problems. Avoidance, preservation, protection, and investigation are all forms of mitigation. The last may include mapping, surface collecting, and testing, plus partial or complete excavation. Avoidance, preservation and protection as mitigation approaches can most effectively be implemented during the design or early planning stages, while mitigative investigations most often correlate with the project execution stage of sponsor planning.

*Follow-up Study* It often may be appropriate to implement post-mitigation studies to monitor the effects of indirect impacts, including impacts related to project maintenance. Follow-up studies are important tools for assessing the long-term effectiveness of different mitigation measures, and can be documented in a variety of ways. They may be developed as anything from a letter summary to an ancillary mitigation report, depending on study and project circumstances.

*Discussion* It should be emphasized that these research-planning stage relationships are somewhat idealized, and are not immutable. On certain projects, due to size and other development-specific constraints, it may be more efficient to combine several research stages. But, for the benefit of both the agency and the archeologist, detailed archeological input should be initiated at the earliest possible planning stages.

Although compression or combination of the research stages set forth above may sometimes be appropriate or necessary, skipping major research activities generally is not. For instance, if a sponsor first requests archeological input at the Preliminary planning stage, actual fieldwork must be preceded by the kind of Overview of relevant documentary sources that would normally be associated with the Regional or General Design stage. Mitigative investigation should not be undertaken in most cases unless it has been preceded by surveys adequate to document and assess the impact of the project on the total resource base.

The research activity stages discussed here provide cultural research managers with a generally applicable progression from regional overview to project execution. Although it is recognized that some variation will be necessary, consistent use of terms, procedures, and approaches to the general

planning process will expedite management program development, will allow for increased archeological data comparability, and will decrease communication problems between archeologists and sponsors.

## CONTRACTING

The initial sponsor-professional contacts which lead to the development of contracts vary widely. In many cases, agencies or firms requiring cultural resource management research will ask personnel of the National Park Service or other federal agency to recommend institutions with research competence. In other instances, sponsors will engage the services of research organizations that have proved reliable in the past. In yet others, initial interaction between a sponsor and contractor may result from sponsor advertisement in outlets such as the *Commerce Business Daily*, a federal publication in which agencies list research and development projects they wish to have done.

A generalized sequence of events is somewhat as follows: there is notification about the project in the *Commerce Business Daily* (CBD) and/or an invitation (by phone, or even by mail) to enable interested parties to indicate interest; interested potential offerers return a statement of qualifications; those who indicate interest and who are judged qualified are provided a detailed scope of work with a request for a proposal (RFP); on the basis of this scope of work the potential contractor prepares a research proposal or a research design; on the basis of the research proposal and/or research design the final contract is awarded. It must be emphasized that this is only a general sequence. In practice there are many variations depending upon the agency, the nature of the project, or other factors. For example, the initial notification may include a scope of work in which case the potential contractor must reply initially with a statement of qualifications plus a research proposal. Current NPS practice is to require a research design at this point (see discussion on page 50).

It should be emphasized that if the scope of work is in any way inappropriate to the project needs, the contracting institution (ordinarily represented by the principal investigator) should request clarification or modification. Such contract negotiations can be facilitated if the sponsoring agency has a staff archeologist who can aid in drawing up a scope of work and in reviewing the research proposals. On the other hand, it is incumbent upon the contracting institution to be sure that the contract specifications are realistic and will meet the discipline's and the sponsor's archeological needs, for only in this manner is compliance assured.

A contract, as the legal document formally defining the mutual responsibilities of the profession (institution) and the sponsor, must contain all information required by both parties to complete satisfacto-

rily a cultural resource management research project. The following discussions summarize some federal contract procedures as they relate to various cultural resource management activities. Such procedures must be in accord with Federal Procurement Regulations.

### *General Negotiations*

If a management research project is sizable, involving several thousands of dollars, the archeologist should be prepared to spend considerable time, and some nonreimbursable money, in contract negotiations. There are procedural requirements which must be complied with, and learning the system will avoid misunderstanding, frustration, and miscalculations.

In reaching agreement as to what work is to be done, when, and for how much money, it is important to remember that the finally agreed upon scope of work becomes a part (sometimes an Appendix) of the legal contract, and that this total document should be examined carefully by the contractor before signing. The scope of work also should be included as a part of the final report in order for that document to be fairly and appropriately reviewed and assessed.

Different agencies and organizations will negotiate contracts differently because of differing constraints or interpretations of regulations. In order to provide some idea of what is done in a "typical" government contract negotiation, a review follows of current (1975) contracting procedures for two such agencies.

Current U.S. Army Corps of Engineers guidelines specify that archeological studies fall under professional services and come therefore under their Architectural-Engineering (A & E) procedures. Here, the project is advertised in the CBD or similarly approved public notification procedure and information sought from individuals, institutions, and agencies interested in performing the required service. (Such entities normally file this information on Form 254, which provides the Corps with basic information on the contracting institution's personnel, experience, and capabilities, as well as data about past and present contracts.) The research entities supplement this data with a research proposal directed to the specific project and, if requested, additional pertinent data. The Corps, following published guidelines, then selects the most qualified entity to perform the service and enters into negotiations. If agreement cannot be reached concerning performance of the service, negotiations are broken off, the second most appropriate entity is contacted, and negotiations begin again.

At the present time, the National Park Service's procedures are to advertise in the CBD, receive responses from potential contractees. Those who meet the Service's minimum standards are provided a scope of work and may then submit a budget and

research design. The Service selects one entity to which it will award the contract, selection being based upon an evaluative formula which takes into account the proposal, the research design, the qualifications of key personnel, and the cost.

It is to be remembered that both these and other agencies consider their scope of work as subject to negotiation and modification. The major difference between these two procedures is that under the current National Park Service practice, several entities must commit a considerable amount of time (and money) to the complex problem of research design before finalization of the contract award. Only the proposal is negotiated by the Corps, however, with the research design included in the proposed work, thus becoming a part of the proposed budget. It is obvious that the Park Service's approach provides them with considerably more detailed information on the potential contractors' research goals and objectives, and therefore more information upon which to make their final selection. On the other hand, this approach is ultimately going to increase the contracting institutions' overhead charges, and thus raise archeological costs. It will also rule out participation by entities that do not have the capability of making a financial investment on this scale; that is, expend several person days or weeks in preparing a design on the chance that they will receive the contract.

Some agencies select a potential contractor and prepare an agreement with the contractor to develop a proposal and research design, which, if negotiated to the satisfaction of both parties, becomes the basis for the final contract to do the proposed study. This approach, like that of the Corps, has the advantage of compensating the entity for the time devoted to proposal and research design development, while still enabling the agency to maintain quality control throughout. Agencies and contractors who are operating under an annual or other Memorandum of Agreement (not to be confused with the Section 106 Memorandum of Agreement) negotiate the scope of work and cost of each amendment (project) entered into under that agreement as the need arises.

### *The Proposal and Scope of Work*

The proposal is essentially a description and explanation of suggested professional procedures for complying with the sponsor's needs, as set out in the scope of work. Normally this scope of work is negotiable and a responsible archeologist preparing a proposal should direct attention to the appropriateness of the sponsor's scope of work to the planning stage and/or administrative needs. The proposal should be generated by an institution or entity with a capacity for responsibly implementing the work determined to be necessary (see pages 53-58) and it must clearly identify the archeological investigations which will take place, their archeolog-

ical necessity, and their relationships to legal compliance and fulfillment of project-specific needs. It must also provide relative time frames, project logistic considerations, and a detailed budget of total proposed costs. This information should be concise, complete, and comprehensible to the sponsor. Proposals should not be confused with research designs (see pages 71-73).

### *Research Designs*

Research designs are documents which spell out a study's theoretical and substantive goals, and the methods by which these are to be implemented (see pages 72-73 for a more complete discussion). This document should, of at all possible, be developed after the project proposal is accepted but prior to implementation of the investigations, since it must guide the data collection and subsequent study. Development of the research design is part of the general research and management approach to the project and should, therefore, be funded by the sponsor.<sup>9</sup>

<sup>9</sup> IAS requires, and recommends to other federal agencies, that the research design be an integral part of the proposal package, since it is a rather crucial indicator as to what the offerer expects to do. Elaboration and modification at later stages in the work are to be expected, of course. The IAS feels that restricting negotiation to a single research design focuses attention only on those approaches, factors, or techniques of which the agency and the single contractor are aware and that this could have a "settling" tendency; that is, a tendency to normalize research performance at a minimal level. This approach would then be a little more than a formalization of that used in salvage archeology contracting during the 1950s and 1960s. [While not disputing that the approach recommended by IAS will provide the agency with maximum data for selecting the best contractee nor that this is desirable, the editors nonetheless are of the opinion that except for very small projects it is totally unrealistic unless the IAS is willing to underwrite the costs of preparing such detailed research designs. The fiscal aspects of archeological research must be conducted according to sound business practices in addition to sound scientific approaches. It is our belief that in most instances a good choice of contractee by an experienced agency can be made on the basis of a statement of qualifications and a research proposal (see page 218 for discussion). Development of a full research design before final awarding of a contract might well be desirable. Two opinions could then be available to the agency with the choice depending upon temporal and fiscal factors, plus perhaps the agency's experience in selecting archeological contractors. The first would be to select on the basis of statements of qualification and research proposals several potential contractees and to contract with them for the development of full research designs. The full contract would then be awarded by selecting one of these. (Or if none were acceptable the process could be repeated.) This approach is more costly but temporarily more efficient. A second alternative would be to select a contractee (on the basis of qualifications and a research proposal) and enter into a two-stage contract. The research design developed in the first stage would have to be accepted before the second stage became operative. If the research design was unacceptable and negotiations failed to make it so, the contract would be terminated and a similar one entered into with what had initially appeared to be the second best firm and the process repeated. This approach has the potential of being less costly but also the potential of being more time consuming.]

Any design should describe the problem to be considered and the hypotheses to be tested, should include a comprehensive plan for scheduling and implementing of the investigations, and should explain and justify each step in terms of recognized aims of the study. As no investigator has a comprehensive awareness of the research potential of the resource base before the study begins, an adequate research design must retain the flexibility necessary to maximize this potential as it is discovered throughout the study of the archeological record. Yet the design must at the same time realistically define the research parameters, in order to allow assessment of the degree to which it meets relevant management requirements.

### *Types of Contracts*

There are several different kinds of contracts possible depending on the time involved, amount of the contract, and the billing and payment provisions called for.

*Fixed Fee or Lump Sum Contract* In these contracts budget estimates proposed by a contractor are examined and negotiated if necessary, and the sponsor agrees to pay the contractor the total amount of the agreed sum upon completion of the study and submission of an acceptable report. Payments can be made on a percentage completed basis, normally with 10-25% retained until submission of the final report. On small contracts payment is often made as a lump sum after the report is accepted. If a contractor underestimates the cost of the project, the sponsor is not obligated to provide more funds. If the contractor overestimates, the total amount is still paid by the sponsor. Accurate budgeting is therefore essential.

*Cost Reimbursable Contract* Here, estimated budgets are also agreed to by both parties, but with the understanding that payment will be made for actual costs. Some agencies are not authorized to negotiate cost reimbursable contracts, because it may obligate them to unknown cost overruns. However, the contractor and sponsor can agree in the contract that the budget estimate is to be considered a maximum cost. Overruns may then be negotiated as a separate agreement should they become necessary because of factors unknown to or beyond the control of either party. In certain kinds of archeological work where the nature and amount of resources present is not known at the time of budget development a cost reimbursable contract is advantageous for it allows the archeologist to budget for *potential* costs but bill only for those actually incurred.

*Memorandum of Agreement* These contracts are normally very general in nature rather than project or budget-specific. They are in essence agreements to cooperate in some way, often for a period of time,

e.g., one year. They allow the sponsor to call on the contractor for short-term or small projects on a case-by-case basis without having to go through lengthy contract negotiations each time. These contracts should not be confused with the *Memorandum of Agreement* negotiated by an agency responsible for damage to a National Register or Register-eligible property with the Advisory Council on Historic Preservation and the State Historic Preservation Officer, setting forth avoidance or mitigation plans.

*Cooperative Agreement* These documents are similar to the memoranda of agreement of the previous section, although they may be project and budget specific. A cooperative agreement generally but not always implies a contribution of some sort to the project by both parties. In the past this has normally been through services provided or monetary, with both the sponsor and contractor contributing to the project. Such an agreement normally is not appropriate for cultural resource management studies unless there is a legally established specific responsibility to the resources concerned by more than one agency (e.g., a jointly funded project) or is directly beneficial to both parties (e.g., a field school held on public land which serves both the training needs of the contractor and the management needs of the federal land holding agency).

*Purchase Order* Some agencies, and private businesses needing archeological expertise for a small project can write a purchase order which is basically a legally binding request to provide a service or a product. There is generally a maximum allowable limit on federal purchase orders for personnel or professional services. In such cases, a total amount of money is agreed upon, and the purchase order is written. This essentially "purchases" a report, and when the report is accepted, payment is made in full. In operation it resembles a lump-sum contract but often initial negotiations are much simpler.

#### *Legal Requirements and Obligations*

When sponsors and contractors sign a contract agreement, each is assuming certain legal obligations. In general terms, the sponsor agrees to provide funds, and the contractor agrees to provide services (professional expertise to produce needed information, in this case). Most sponsors are aware of the ramifications of these obligations; many archeologists are not.

In larger archeological organizations a senior archeologist may assume final responsibility for the scientific quality of a report, while another archeologist in the organization, as the active principal investigator, may direct the field research and write the draft of the report. In most instances the archeologists who negotiated the contract proposals are *legally* representing an institution, agency, or organization, and another designated representative of

that institution may have to sign the contract as well as the principal investigator. Elsewhere (pages 53-59) is developed the nature of responsibility which institutions assume for facilities, space, curation, etc., relative to cultural resource management studies. Contracting institutions should also be made aware of the fact that the requirements of the contract are met. If the principal investigator leaves an institution without completing a contract, or becomes incapacitated, or for whatever reasons does not meet the contract requirements in the agreed time, the institution can be held legally liable for the completion of the contract or return of the funds.

The principal investigator also has certain obligations, both legal and professional. In addition to those that are obvious, such as providing the information requested, there are the responsibilities of avoiding overcommitments of funds, resources, or personnel and—a hard lesson for some archeologists—of submitting the report on the date agreed upon. Archeologists must come to recognize the potentially extreme adverse impact that a late submission can have on an agency. Finally they must recognize that failure to fulfill these professional and legal obligations may mean that no more contracts will be awarded to the institution or to the archeologist, as well as the possibility that legal action can be taken for default of contract.

#### *Funding*

Sponsors must be informed of the estimated total costs required for adequate research. These estimates should be supplied as early in the planning/funding cycle as possible, thus providing for the most economical and efficient program. Mitigation funding should be negotiated to reflect the most responsible treatment of the resource base (and should not automatically be equated with data recovery) and when funded directly by an agency should not necessarily be bound by an arbitrary one percent of the total project cost, as the Archeological and Historic Preservation Act is currently being interpreted by many federal agencies. (When investigations are carried out by transfer of agency funds to the National Park Service, the Act is, of course, quite clear that the amount which can be transferred is limited to one percent.)

As part of the management package, the sponsor has the obligation to provide funds for development of the research design, data recovery, analysis, report preparation, and report dissemination. Contractors must make certain that completed final reports result from their work and that these are produced in adequate numbers for them to be disseminated to or made available to all appropriate audiences in an agreed upon manner.

Although cost is certainly one factor to be considered in contract development and negotiations, it should not be the overriding factor in contract award. The need is for the most responsible scien-

tific study, and factors other than cost generally are overriding in determining how and by whom this can best be achieved. For example, for the proper protection and management of the resource base it normally is better to hire an archeologist familiar with Great Basin research to work in Utah at \$10.00 an hour, than to hire an archeologist familiar only with the Southeast U.S. for the same research in Utah at \$5.00 an hour. Insofar as practical constraints make it feasible, the quality and appropriateness of the end product must be the ultimate concern. There are a number of glaring examples in the recent past where on an archeological research project lowest cost meant inferior and/or inadequate archeological work, and resultant noncompliance by the agency involved.

*Budget Estimates* Although funding for many line items will vary regionally, detailed budgets allow sponsor assessment of expenditure responsibility (for line item examples, see Chapter 3, pages 71–72). Personnel wages equitable to those of comparable employees in academic archeology and equivalent professions should be provided. Fringe benefits may be listed as line items, or included under indirect cost; if the latter is done, this should be indicated. Whenever possible, unit cost estimating should be standardized. For example, many analytical expenses, such as pollen analysis, radiocarbon dating, etc., should vary only minimally in the cost per sample across the country. Every effort should be made to provide sponsors with some guidelines as to what are realistic cost estimates.

As previously indicated, funding should be developed to incorporate all relevant expenses involved in the research and management process. The responsibility for insuring that all costs legitimately incurred in the course of the project are built into the budget and that these costs are justified rests with the professional.

Some federal agencies require estimates of total person-hours to be devoted to a project for each different rate of salary and hourly wage. *Justification* and tight budget estimates are essential, particularly in lump sum contracts.

An important aspect of budget estimating relates to indirect cost considerations often called "overhead." These figures are specific to each institution, and represent institutional expenses incurred in providing personnel fringe benefits, basic support facilities, services, and administration for the research grants and contracts held by that institution. Indirect cost charges are generally calculated as a standard percentage of salaries and wages, or of the total direct costs of a specific budget. This device saves the institution and the sponsor the trouble of, for example, attempting to allocate the costs of institutional maintenance of a building or the time of an accountant, among the several research projects using the building or the time of that accountant.

Institutionally-specific indirect cost rates are es-

tablished by internal audit in accordance with institutional guidelines for calculating overhead rates as applied to particular cases. Negotiations between granting agencies and institutions may form the basis for indirect cost schedules which best reflect the needs of the institution in administering management research grants and contracts. For example, some institutions have a different indirect rate for research and administration performed on campus and that done away from campus. Some state-funded academic institutions, or independently funded foundations, because they are sometimes provided with an annual budget which in part subsidizes their basic research support costs, may have lower institutional indirect costs rates than other research organizations or institutions. The latter may often be required to fund their administrative facility upkeep entirely from contract or grant funds, unless they have substantial endowments used for this purpose. Guidelines for calculating indirect cost rates have been developed by most federal agencies and, depending upon the rate, a federal agency may wish to audit a contractor's books before agreeing to a particular rate. Overhead costs normally reflect the amount of "hidden" or subtle backup capability an institution has for supporting a project. Low overhead can mean either low backup capability or subsidized support from other sources. Of course high overhead can reflect inefficient management. The sponsor has an obligation to determine which factor is operative rather than simply applying a "low overhead equals lower total cost" formula to the decision-making process.

Another budgetary concern relates to the idea of institutional contribution. In the years of salvage archeology, institutions were asked to contribute some time and/or resources to research projects, but this is now inappropriate. Cultural resource management on the scale required by law must be undertaken by contracting institutions in a business-like fashion, and sponsors responsible for potential destruction of resources are required by law to provide for the research necessary as a result of their proposed project.

*Funding Abuses* Some members of the profession have been informally accused of cashing in on the federal dollar, and indeed the sizes of budget proposals developed now as opposed to a few years ago would serve to strengthen that suspicion. However, even without problems of rising wages, and costs, competent archeological research is becoming more and more expensive due to recognition of the need for increased data recovery and study demands and higher standards of performance (see Appendix C).

On the other hand, such activities as overzealous requests for funds—for things such as purchases of major equipment—should be challenged particularly on short-term projects. Similarly, funding research spin-offs demonstrably irrelevant to the project should not be condoned. Project-specific rele-

vance is often difficult to define, because in the current world of archeology, data previously viewed as peripheral may now constitute information central to problem-oriented archeological inquiry. The solution to this dilemma rests with justification of the research design in terms of regional management and research needs, combined with peer review and liberal doses of professional honesty and integrity.

## THE REVIEW PROCESS

The process of peer and agency review is an important management tool. It is not one necessarily restricted to the final report on research undertaken (see pages 76–77 for further discussion of peer review of reports).

While it would not be practical to subject every research design to review by peers as well as by the sponsor such broader review is to be recommended for larger (say in excess of \$50,000) and more important projects. In this way the public and the profession achieves, at the outset, a measure of protection from the expenditure of a portion of the resource base by archeologists with a too narrow research orientation who are employed by sponsors who are either unconcerned about or uninformed as to the best use of that resource base.

Another form of management review is appropriate for larger projects as well. This involves including, as part of the contract, financial and other provisions for bringing in several professional peers to view and comment on the actual field and laboratory procedures while they are in process. These reviewers should be provided in advance with all relevant data including the research design. They should spend at least one day and preferably a somewhat longer period observing the field procedures and data as it comes from the ground and is processed in the laboratory. They should then provide the archeologist and the sponsor within no more than a week of this visit a written commentary making such suggestions as their observations and experience indicate are appropriate. This should be done after the field research is well enough along to begin producing results but still in time to enable the research team to incorporate and profit from any appropriate suggestions or comments made by the reviewers.

The sponsor also should provide for periodic reports during the field research, and inspection by sponsor representatives should be a normal procedure though it is not appropriate for the sponsor to interfere with the execution of the scientific research.

Certain additional review opportunities are already provided by the procedures for compliance with the National Historic Preservation Act. For example, when an agency, the State Historic Preservation Officer, and the Department of the Interior determine the eligibility of an archeological property for the National Register, they ordinarily do so

through the review of a survey report and the surveyor's recommendations. Concerned archeologists can participate in this review by contacting the State Historic Preservation Officer and/or the National Register Division, Office of Archeology and Historic Preservation. When an agency develops an archeological mitigation plan pursuant to the Advisory Council's procedures, this plan is reviewed by the State Historic Preservation Officer, the Advisory Council, and the IAS prior to its incorporation in a Memorandum of Agreement. Concerned archeologists can contribute to this review through any or all of these agencies.

## THE INSTITUTIONAL BASE

Most research contracts and grants currently are awarded to institutions, rather than individuals. This makes sense in most cases, because an institution can provide a locus of responsibility and continuity that will be maintained even if the principal investigator for some other reason is unable to complete a project. Furthermore, institutions can provide the essential support services that an individual or a private enterprise business generally cannot. These services include basic fiscal administration, support staff, work space and facilities for laboratory analysis, vehicles and other major permanent equipment, a reference library, archeological reference collections, and special services such as photography, drafting, and editing, as well as the continuity necessary for permanent curation of records and collections. Institutions being more permanent can also better insure that these facilities are adequate and that curated materials will be available to scholars in the future.

In the past, most archeological research was performed by long-established institutions, usually universities, larger museums, and occasionally four-year colleges. Having been active in research for a number of years, many of these institutions have established programs in which students are trained in this area. Such institutions generally can provide the basic requisites of research support, although occasionally a project may need to seek special outside services such as drafting, editing, or particular reference materials. However, not all academic institutions have well-organized systems for permanent curation.

In recent years there has been a substantial expansion of the archeological profession into two- and four-year colleges, new universities, and museums previously lacking these specialists. Many such professionals are well-trained and willing to conduct research. With the increased demand for research created by the development of cultural resource management, some archeologists based at these latter types of institutions have become involved in contract research; this trend seems likely to continue, and perhaps to accelerate, in the next few years. Furthermore, a number of archeologists have

set themselves up as independent consultants, or have formed archeological research firms or institutes, or have joined the staffs of independent multidisciplinary consulting firms. In most cases, the institutions and enterprises that are entering the field of archeological research are "starting from scratch" with regard to facilities, curatorial capacity, and the other basic support requirements.

The aforementioned need for cultural resource management programs is not only resulting in an increase in institutional and independent professional involvement, but is also producing management research specialization. Some institutions, because of their capacity for taking on larger projects, are concerning themselves more with large-scale surveys and mitigation studies than those with less in the way of facilities and manpower. Some institutions are limiting themselves with respect to types of research and field project locations in accordance with logistic and other constraints. Institutions with burgeoning resource management programs, on the other hand, may take on increasingly complicated projects as their program capacities expand.

### **Requisites of the Full Range of Archeological Research**

Because an institutional base is essential and because continued care and accessibility of research records and collections is necessary for the conduct of archeological research which results in the accumulation of original field data and of artifacts, a minimum set of requisites for institutions engaged in a full range of archeological research is outlined below. It is not implied here that all types of cultural resource management activities will require this total institutional support package, although the full range of such research will. Likewise, all institutions engaging in cultural resource management work will not necessarily need or be able to meet these standards in-house; it may often be more reasonable for the smaller institutions to solve these problems through cooperative agreements with larger institutions.

#### *Administration*

Administration of research grants and contracts requires periodic billing or requests for payment, and detailed accounting of how funds were spent. These services generally will be performed by an institution's business office; the principal investigator or other research directors provide information to the accountant or business officer on the financial needs and progress of the research. In addition, the business office generally handles research staff payrolls, insurance, withholding of taxes and social security payments, purchasing, inventory, and other aspects of general fiscal control. In most institutions, the project director is required to have cost estimates or proposal budgets checked by the busi-

ness or research office before they are submitted to the prospective sponsor. This insures that the institutional administration accepts the commitment of institutional resources, indirect cost rates, salary levels, etc., specified by the principal investigator in the proposal. In addition, the principal investigator will probably be constrained by institutional regulations on hiring personnel, and may have to receive approval from the business office or from another institutional administrator before developing a staff and hiring other employees for the project. These constraints include policies regulating equal opportunity employment and affirmative action programs which must also be considered.

None of the above is to imply that business officers or other administrative officials should make decisions on the course of the *research*; the responsible scientist or principal investigator generally has both authority and responsibility for the selection and disposition of staff, use of such facilities as are allocated to the project, the acquisition of supplies and equipment within budget limits, and the conduct of the research in general. Research projects housed within an institution do, however, have to operate within the institution's financial and administrative policies. It is incumbent on both research directors and institutional administrative officers to recognize these relationships and work out a *modus operandi* prior to initiating a research program, and to maintain good channels of communication thereafter.

It is also essential for institutional administrators, and particularly the business office, to be aware of and compliant with, the research, administrative, and fiscal needs of particular project sponsors. The sponsor, for example, may require information or have billing procedures somewhat different from those generally in use at the institution.

Some cultural resource management programs, particularly those developed by private organizations or individuals, will find it necessary to retain their own bookkeepers and other administrative personnel. This policy is often necessary even in larger institutions, where such personnel can maintain more up-to-date accounting records, assist in the processing of project-specific administrative matters, and act as liaisons in this area between the research staff and the institution administration. Such support people can be viewed as functioning in capacities complementary to those of institution-wide administrators, and therefore are part of the indirect cost of operating the program.

Which costs should be budgeted as direct and which as indirect are sometimes difficult to determine; the principal investigator, when preparing a budget, should determine his/her own institution's policies and should also be aware of any sponsor guidelines on this subject. Institutions and research directors occasionally dispute the subject of indirect costs or overhead because some directors see indirect costs as an unwarranted deduction from their

research funds, or even as an outright "rip-off" by the institution. Archeologists are reminded that the project does, in fact, require services such as accounting, general administration, space, permanent equipment, maintenance, security, staff parking, insurance, library resources, etc., that generally are not direct line items in a budget because they are shared in a complex way among many projects and subdivisions of the institutions.

If there is a maximum ceiling to the funds available for a project, then indirect costs do, in fact, reduce the amount of money available for the research itself. In cultural resource management studies, the amount of direct funds needed for the research project should be computed first and the indirect costs added to that.

In addition to fiscal control and services and general administration, the institution needs to supply a range of general services, some of which have already been listed. Maintenance and security services are obviously essential. Adequate and secure work spaces, with proper lighting, temperature control, and ventilation are also basic needs. (Specific facilities requirements are detailed on pages 57-58.) It is important for the institution to recognize that the growth of funded research will at some point require a proportional growth in these general services and facilities, and that some of the overhead payments brought in by the archeological research should be directed toward providing for these increased needs. In other words, the institution cannot encourage growth in a funded research program on the one hand, and on the other, fail to provide additional space, facilities, services, and general support staff.

### *Staff*

In order for an institution to undertake the full range of cultural resource management projects, it is necessary to employ a core staff of full-time professionals. Part-time and seasonal employees can be used as necessary to expand the staff, but the existence of a full-time core team will greatly aid the institution in developing program continuity and consistency in responding quickly to sponsor needs, and in producing quality research and reports on schedule. It is recognized, however, that many of the smaller programs must operate largely with a part-time or seasonally employed staff.

In a fully-developed program, several levels or types of staff are needed to cover different functional areas (Table 1). The first functional area is overall program administration and management. Here, the goals and priorities of the program are set, and personnel and operations evaluated against these standards. Decisions are made here as to which projects to undertake, which contracts to negotiate, and which staff to assign for projects that are accepted. Basic responsibility also rests here for the scheduling of work, personnel, and facilities, and

for fiscal accountability (the latter is generally a responsibility of the parent institution's administration though this may be shared with management program administrators). The program administration provides an interface between the program on the one hand, and the parent institution, the research sponsors, and the public, on the other. In this area, too, the program administrator or one or more individuals working with that individual must undertake the responsibility for the often lengthy and complicated contract development and negotiation and for maintaining the necessary contact with the sponsor during project execution.

A second area that must be covered is project design, including research strategies. The program staff must include a person or persons with the ability to design projects that will make substantive contributions to archeological knowledge. Projects must be designed to provide the level of information needed by the sponsor for management decisions. This necessitates staff sophistication both in current academic research and in resource management.

A third area is project execution. Here the project design is implemented (and often modified as the work progresses) in the field and lab. At a minimum, staff abilities must cover the usual range of survey, testing, and excavation procedures and laboratory processing and analytical skills. Additional special skills may be needed for innovative research designs or for particular types of sponsor management requirements.

Reporting is a fourth functional area. The program must have the ability to produce, on schedule, a variety of reports ranging from periodic field progress summaries to preliminary reports to final publications, which should be directed to the sponsor, the profession, and, whenever appropriate, the public.

Finally, the collections and other data resulting from the work done by the program must be properly curated (which includes accession and catalogue information, field and analysis data, and the artifacts themselves) so they will be preserved as a permanent record of the research and as an information source for future workers.

This enumeration of functional areas is crosscut with a classification of staff by levels or types, as follows (see Table 1).

Level 1 we have called "Senior Personnel." Here one would expect to find persons holding the Ph.D. or its equivalent in research experience and publications, and having an established standing in the discipline. These individuals are responsible for developing and maintaining the professional quality of the program and include the scientist with final responsibility (program director) and the principal investigator (which may be one and the same) for contract projects. It is at this level of expertise that the sophistication is necessary for the development of innovative research designs and the execution of professional quality research.

TABLE 1. CORRELATION OF STAFF LEVELS AND FUNCTIONAL AREAS

Staff Level	Functions				
	Program Administration and Management	Project Design	Project Execution	Reporting	Curation
<i>I. Senior Personnel</i>					
Program Director	xx	x	x	x	xx
Principal Investigator	x	xx	x	xx	x
<i>II. Senior Research Specialist</i>					
Field, Lab and Curatorial Supervisors		x	xx	xx	xx
Research Assistants			xx	x	xx
<i>III. Research Specialist</i>					
Field Labor			xx		
Lab Assistants			xx		
Curatorial Assistants					xx
<i>IV. Support Staff</i>					
Secretarial and Clerical	xx	x	x	x	x
Accountant	xx				
Administrative Assistant	xx				
Conservator					xx
Photographer			xx	xx	x
Draftsman				xx	
Editor				xx	

xx means primary responsibility or involvement

x means secondary responsibility or involvement

Ordinarily, the principal investigator will be involved in the implementation of research and reporting of the results as well as development of the design. For the potential of cultural resource management to be achieved, a preplanned problem-oriented study is essential not only for major projects, but for smaller "routine" ones as well.

In the larger programs, there may be a need for a separate position such as program director in addition to a principal investigator(s). Although the program director would be heavily involved in administration rather than in field research itself, that individual should have the credentials and standing of senior personnel, and should continue to be involved in project design, execution, and review at a number of points. Senior personnel should be on permanent appointment (i.e., not hired on a project-by-project basis) and should have academic rank if the parent institution is a college or university. If it is a museum, research institute, or similar organization, senior personnel should be encouraged to develop affiliations with academic institutions, since teaching and graduate student supervision are important components of maintaining scientific currency and standing.

A second staff level or category is that of "Senior Research Specialists." Here are included field, lab,

and curatorial supervisors and their principal assistants. Such supervisory personnel will probably hold a Ph.D. or M.A. or their equivalent in background and will in all cases have substantial and appropriate work experience, both field and laboratory on projects of the sort in which they are to be involved. Their primary assistants will ordinarily be trained at the M.A. or B.A. level and have a lesser amount of work experience. Senior research specialists may work under the general direction of the project principal investigator so far as project implementation (e.g., research) is concerned, and under the program director, with regard to general program requirements (e.g., curation). They will have substantial responsibility for execution of project designs and specific management objectives in these areas. Supervisory archeologists will interact with the principal investigator in developing and modifying project designs, and they may have considerable involvement in report writing. Persons at the senior research specialist level often may be advanced graduate students at the contracting institution or working elsewhere to gain experience before returning to graduate school. In the past, the profession has tended to think of such positions as temporary and having the qualities of a graduate assistantship. Increasingly, however, such positions will

involve full-time permanent employment, and staff members will be aiming for careers at this level or which begin at this level. Cultural resource management programs should develop jobs at the senior research specialist level which have sufficient security and remuneration to be career jobs. Such a development cannot fail but increase the continuity and professionalism of such programs.

A third level of staffing is characterized as "Research Specialists." This would include field, laboratory, and curatorial assistants. These jobs do not presume extensive initial formal educational background in archeology. Work experience can vary from little to great. This area can most easily accommodate seasonal and part-time employees but in the larger programs some of these too may become year-round funded positions of more or less permanence.

The fourth category is a variety of activities that can be grouped as "Support Staff." Some of these jobs require significant technical expertise, but none is archeological *per se*. Included are administrative assistants, secretarial, clerical, and book-keeping help, conservators, photographers, draftsmen, and editors. These services can be shared with other programs within the institution, or may sometimes be contracted for on a project-by-project or piecework basis.

An ancillary area of project staffing not included in the above analysis is consultant relationships. Development of project designs and execution of research may benefit from, or require, consultation with nonstaff archeologists having specialized expertise and interaction with specialists in other disciplines such as geology, zoology, palynology, law, personnel management. It is the responsibility of the senior personnel and senior research specialists to develop contacts with potential consultants and to utilize them on projects as necessary. When longer term affiliation of such inter-disciplinary personnel is warranted by the project (and, increasingly, personnel with combined archeological/related speciality capability should be developed by the academic training programs) they should become part of the staff at the level of senior research specialist.

The parent institutions or agencies with cultural resource management programs have obvious responsibilities in the staffing of such programs. The primary responsibilities are to recruit competent senior personnel and hold them accountable for the quality of the results produced by the program they develop. Important in attracting and keeping qualified people at the senior personnel level is the guarantee of "hard money" support for these key positions (institutionally budgeted or allocated funding), access to academic rank and tenure where appropriate, and the time and support for participation in the community of scholars. Involved also for all professional personnel is giving resource management research a standing along with academic research con-

tributions. The parent organizations must also recognize that while cultural resource management programs may have valuable institutional functions in training students, providing students with thesis and dissertation material, supporting faculty research, and bringing in institutional overhead funds, these functions are secondary to overall conservation-management concerns.

### *Facilities*

The effective operation of a cultural resource management program requires proper facilities at the institution for program administration, preparation and cataloguing of research records and collections, laboratory analysis of data, report writing, permanent curation of collections and records, and field equipment storage. For program administration, office space and desks, files, typewriters, calculators, telephones, and copying machines must be available. Basic field equipment should include items such as surveying instruments, cameras, excavation tools, screens, field laboratory equipment, and vehicles. Preparing field collections for study usually requires a receiving area accessible to a loading dock or some other place from which boxes and bags of specimens can be unloaded from vehicles. The preparation space minimally should be equipped with shelving, work tables, and facilities for cleaning, drying, and conserving specimens. Laboratory analysis and report writing require short-term storage cabinets or shelves, large layout tables, and adequate lighting. Microscopes, measuring devices, and other special equipment are likely to be needed, as are typewriters and calculators. There should be access to drafting and photographic facilities if these items are in fact not directly assigned to the research program. Through the institutional affiliation of the cultural resource management program or through other arrangements, computer facilities and a research library containing the basic reference books, journals, and other materials for the region and for the type of research performed should be available. Parking space for field vehicles and provision for their regular maintenance is necessary, as is storage space for field equipment.

The obligation of the institution to provide or make adequate arrangement for permanent storage and curation for research records and specimens means a permanent commitment of or arrangement for secure and temperature-humidity controlled space. Cases of shelving should be sturdy, and there must be careful provision for security and protection from deterioration of the objects. Storage of such things as basic catalog and accession records, research notes, maps, and photos must be provided for as well. Work tables and file areas. (Additional comments on curatorial needs are given under Curatorial Capacity.)

Institutions attempting to enter the field of cultural resource management may find this initial in-

vestment in facilities an imposing challenge. In some cases, it may be possible for at least some items of capital equipment to be purchased with funds provided by the research sponsor. Research funds may also be used to rent or lease space or equipment. If sponsors see benefit to their programs in encouraging the development of additional research capacity in the field of cultural resource management, they will be well advised to assist entering institutions in obtaining necessary equipment and facilities. In the final analysis, however, the institution cannot escape making a significant commitment to the program, initially in the form of basic facilities and space to house the program and resultant collections, if it wishes to become involved in contract archeological research. Ultimately, cultural research management programs must become, at least to a large degree, self-supporting because neither private nor public research entities are in a financial position to assume any major proportion of the costs. If the program is a part of a larger institution it must be recognized that an appropriate portion of the overhead must be channeled to the specific needs of the program if this self-supporting goal is to be achieved on any realistic cost accounting basis.

#### *Curatorial Capacity*

The situation with regard to providing for permanent curation is particularly difficult. In some cases institutions may be able to provide the facilities for the conduct of certain kinds of research, but may not wish to commit themselves to permanent curation of records and collections. A number of smaller institutions or nonacademic research entities already have agreements to deposit such materials in museums or university research collections upon completion of the research. Both the institution accomplishing the research and the research sponsor have an obligation to see that the repository institution does have, in fact, adequate curatorial capacity to care for the materials and to make them available to the scientific community, as needed. Furthermore, sponsors and research institutions cannot consider repository facilities as "public dumping grounds". Curatorial services are costly and must be subsidized. Given this situation, sponsors or institutions without storage facilities should be prepared to contribute to appropriate curatorial services at the repository institution. In the long view it seems probable that mechanisms must be developed for providing appropriate public funding to such repository institutions, if they are to continue to function in a manner appropriate to collection perpetuation while maintaining their other responsibilities. Curation costs continue to increase year after year and as collections increase costs increase such that they could soon absorb the total operating budget of the institution unless some form of relief can be provided. This is an extraordinarily critical problem

area, the scope and complexity of which is only now becoming apparent.

Minimal elements of proper curatorship include the following:

- (1) systematic retention of research collections or if retention of total collections is demonstrably scientifically unnecessary retention of appropriate and representative materials from all cultural categories
- (2) a systematic storage and record keeping system, preferably cross-referenced, permitting ready access to the collections
- (3) facilities expediting the conservation and use of specimens and data records, including space, lighting, and tables
- (4) access as appropriate for study purposes to qualified scholars and students
- (5) adequate safety and security measures to protect the records and specimens
- (6) appropriate storage space with necessary temperature and humidity control.

#### **Archeological Consulting**

A special case is presented by independent archeological consulting corporations, which seldom have or could support a full range of research and curatorial facilities. Such firms usually cannot, and probably should not expect to implement major research and insure permanent curation of records and collections as do chartered, nonprofit, educational and research institutions. A potential for abuse exists because independent corporations may lack the continuity and professional controls that characterize established public or semipublic institutions, and because they often may lack sufficient support staff, research equipment, and permanent curatorial facilities. Like smaller institutions, private corporations may be well qualified to work independently on projects that do not include collection of materials requiring curation, and they may be the most viable entities for taking on some kinds of cultural resource management planning programs. They are often uniquely equipped to undertake multi-disciplinary planning studies, and often have kinds of flexibility that are quite unusual in traditional research institutions. Before contracting with such a corporation, however, the sponsor agency should be satisfied that the corporation has adequate access to sufficient professional and support staff and facilities to develop and implement the requisite project according to professional standards, sponsor needs, and legal requirements. If an independent research corporation is considered for work on a project that does involve the collection of material requiring curation, then a formal link, including funding for curation, with an institution or institutions capable of providing the curatorial facilities and services, must be demonstrated by the corporation.

New organizational approaches to archeological resource management are developing, will develop, and should be encouraged; the profession cannot assert that existing institutional and organizational formats are and always will be the only ones that can accomplish needed research and management objectives. On the other hand, the new nature of an organizational format does not guarantee its effectiveness. Continued concern for the conservation and wise use of the resource base should be the major guiding principle in the implementation of programs and the granting of contracts.

## **THE ROLE OF STATE AND REGIONAL PLANNING**

Planning for cultural resource management ultimately requires that the resource base be managed at both state and regional levels if effective stewardship is to be achieved. As commonly noted, prehistoric cultural boundaries are often more likely to conform to physiographic boundaries than to current political borders. Regional planning is therefore important if we are to obtain the early planning information necessary to understand and manage the remaining resources. It should be possible to initiate this aspect of the planning process through a series of conferences. These would result in overviews for each selected region, from which planning documents for cultural resource management can be prepared (see "A Model for Regional Planning," page 62).

Many kinds of state and regional plans are being or have been developed by various agencies. Examples include State Outdoor Recreation Plans (which treat archeological resources in terms of recreational/educational potential), Regional Water Resource Development Plans, State Land-Use Plans, and State Historic Preservation Plans. Each of these, as they establish priorities to be considered, goals to be achieved, and methods to achieve these goals, will have a direct impact on the cultural resources with which we are concerned. If archeologists, historians, and others fail to have input into their own state and regional management plans, or do not work to insure consideration of cultural resources by general land-use planners, then it is certain that cultural resources will not appear in the priority listing.

A basic assumption of the National Historic Preservation Act is that someday statewide surveys will be sufficiently complete (though subject to updating) and that state plans will attain sufficient sophistication to serve as central (if not sole) planning tools. That day is obviously some distance in the future but archeologists should work toward it.

The processes involved in statewide planning are intellectually challenging and entirely compatible with modern archeology's focus on regional and explanatory research. While there will always be a need for project-specific surveys, assessments, and

mitigation programs, there is also a need for increased comprehensive planning to structure and guide such activities. These can begin at virtually any point in the data collection process, provided that process itself is well-organized, controlled, and problem-oriented. State and regional planning may begin with a very small data-base, identifying deficiencies and methods of correcting them. It should then proceed to develop and steadily refine models of historic property distribution, significance measure, and methods of preservation. The evaluation of the plan should be toward increasing reliability and utility in guiding land use and development, but with the appropriate controls the plan should be able to provide some guidance quite early in its development. Some states have made considerable progress toward the development of useful plans based on incomplete but reliable and steadily improving bodies of survey data. Some federal agencies that manage large land areas, notably the Forest Service and the Bureau of Land Management, have also begun the development of sophisticated planning tools based on reliable partial survey data.

It is important to keep in mind, however, that, at least today, extant state and regional plans cannot function as the sole planning tool for agencies who design projects involving land modification. No state has complete data on the numbers and types of sites present within its borders. Without underestimating the long-term importance of such planning documents, they should not be used as a substitute for project-specific surveys, assessments, and mitigation programs for potentially impacted sites on land slated for alteration.

### **The A-95 Agency**

A-95 refers to a circular issued by the Office of Management and Budget (OMB), requesting each state to designate one agency within that state to inform pertinent state agencies of impending federal programs and to provide them an opportunity to comment and make recommendations to the governor concerning such programs. The governor of each state has assigned such a role to a state agency (usually a department of planning, independent clearinghouse, or its equivalent). Of importance to archeologists is the fact that notification of all federal actions (from huge land-modifying projects to permit applications) must be channeled through this agency. The A-95 agency has a purely coordinating role, but an important one.

At present it may be that, if an archeologist does not know about the A-95 agency, the A-95 agency does not know about the archeologist. The A-95 agency will notify any archeologist about all pending federal action in an area. However, if the state has a large number of archeologists it is hoped that these researchers will have communication and coordination mechanisms so that the A-95 agency need notify only the State Historic Preservation Officer, State

Archeologist, the Executive Director of the state's archeological council, or some similar coordinating agent.

### **Role of the State Historic Preservation Officer**

The State Historic Preservation Officer (SHPO) is the single individual in the state responsible for the development and implementation of a State Historic Preservation Plan as far as federal agencies are concerned. This role was established by the National Historic Preservation Act and reinforced by Executive Order 11593 and is described in the Policies and Procedures Manual for Historic Preservation prepared by the Office of Archeology and Historic Preservation, National Park Service.

The SHPO, who is normally appointed by the governor in each state, is charged with the responsibility to direct a comprehensive statewide survey of cultural resources—architectural, historical, archeological, and cultural. These surveys are intended to serve as the basis of the state's historic preservation plan. This plan was originally presented in three documents: (1) background, historical summary, and preservation goals; (2) the state inventory of historic resources (within which are included cultural resources); and (3) the annual work program (36 CFR Part 60). This information is now presented in a single document. The State Historic Preservation Plan is the state's official document concerning the policies and long-range plans for the protection and development of its important cultural resources. It should be clear, then, that some of the planning and management efforts we have described as the proper task of professional archeologists are already under way at the state agency level—and, in most cases, with *very little input* from the community of professional archeologists in each state.

The State inventory, as the title suggests, is the roster of cultural resources in the state which appear likely to meet the criteria for nomination to the State and the National Register of Historic Places. These rosters are updated regularly on the basis of information derived from the continuing statewide surveys. Federal agencies review this document as part of their project planning. In conjunction with project-specific assessments of land modification impact on cultural resources and other known sources of information, the State inventory should provide a comprehensive updated listing of known sites. If there is no input from the community of professional archeologists, then it is much less useful as a part of the state's planning tools. It is therefore essential to emphasize that, even with state archeological input into the state inventory, in only the rarest of circumstances are the data contained in the state inventory alone adequate to assess properly the archeological resources potentially threatened by a specific project.

Another point to recognize is that the state regis-

ter is almost certain to include information generated by surveys conducted many years ago. If there has been no recent field check, such information cannot be considered an accurate reflection of the condition or significance of sites which are known for a project area. This fact should be made clear to potential inventory users. Finally, the profession should consider the problem of placing precise site locations in a document which is readily available to the public. Such information has always been protected by archeologists because of the dangers of nonprofessional destruction of the resource base. The profession should encourage SHPO's to withhold precise locational data from the state inventory and to consider it privileged state information, available only to those with a specific need-to-know for research or managerial purposes.

The Annual Work Program, which is the state's Action Plan, is submitted each spring to the National Register Office. This plan describes the resource management activities scheduled by the state for the following fiscal year, its budget, the scope of work, and a statement on how the work will help implement the State Historic Preservation Plan. Since federal matching grants-in-aid can be used (when available) to share in the purchase price of non-federally owned or controlled archeological sites worth preserving or for investigating and developing sites for public interpretation *in situ*, professional input into the preparation of the Preservation Work Program is vital. In this way a state can acquire and develop significant sites that might otherwise be destroyed.<sup>10</sup>

### *Compliance with Section 106 and E.O. 11593*

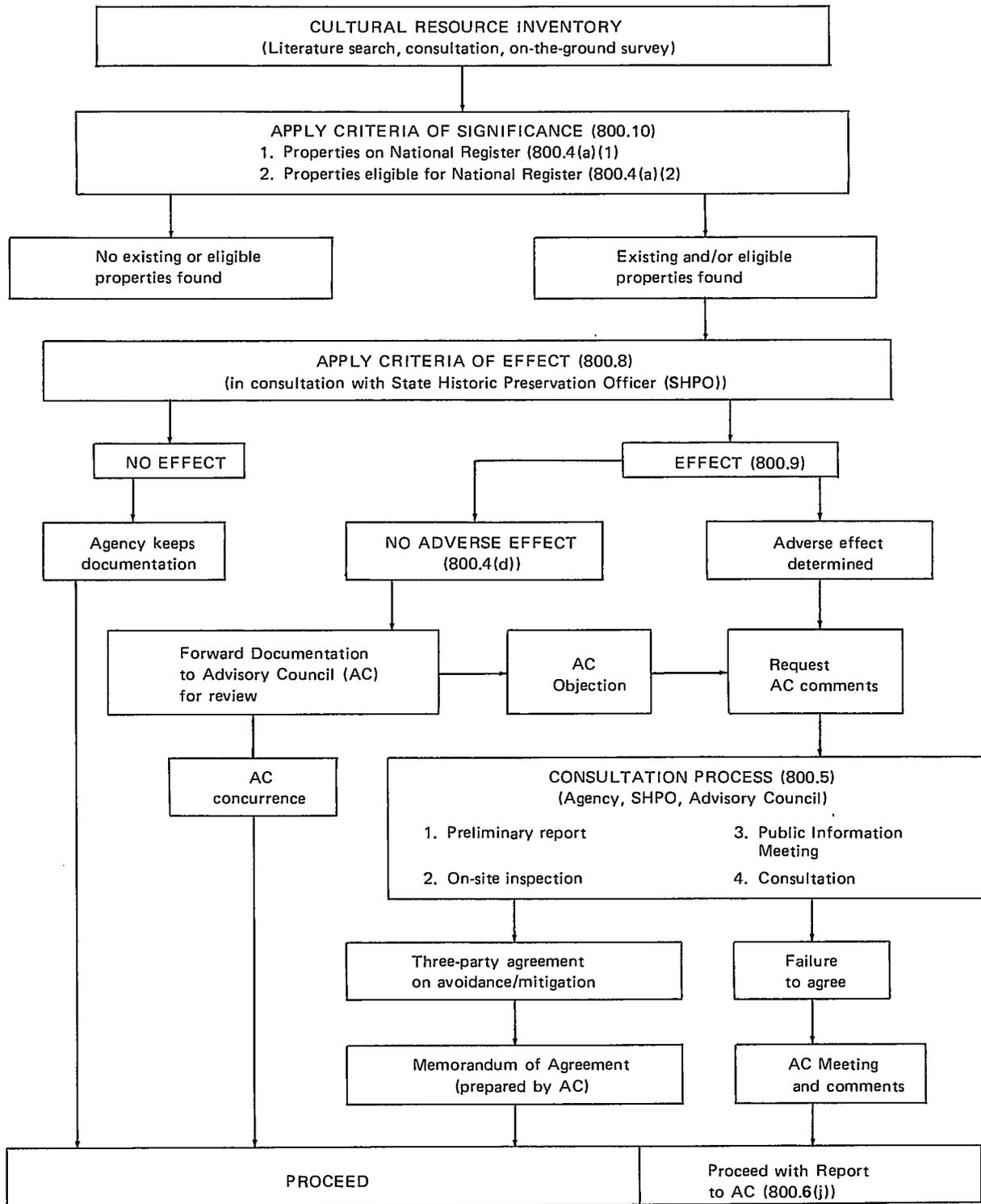
The SHPO is the state's representative in matters relating to the compliance of federal agencies with Sec. 106 of the National Historic Preservation Act of 1966 and Executive Order 11593 when there is possible danger to cultural resources on or eligible for nomination to the National Register. The federal agency, the SHPO, and the archeological institution involved in project resource management cooperate to effect this compliance. Since the data provided in the exchanges between the agency, the profession and the SHPO are the basis for the Advisory Council's comments on appropriate mitigation of National Register quality sites, the importance of professional input is obvious. It is here that much preservation decision-making occurs, and professional archeologists must take part.

### *Environmental Impact Statement Review*

Another responsibility of the SHPO is the review of cultural resource impact sections of draft and final

<sup>10</sup> New procedures for state historic preservation planning, providing for flexible reporting, more systematic survey strategies, and more clear-cut participation in the environmental review process, are now (fall 1976) in final preparation by the Office of Archeology and Historic Preservation, National Park Service.

FIGURE 2. PRESIDENTS ADVISORY COUNCIL SECTION 106 PROCEDURES.



Environmental Impact Statements. If archeologists with access to an EIS (and *everyone* can have access) recognize errors of omission of fact, it is appropriate to call this to the attention of the agency preparing the document. It would also be effective to contact the SHPO, requesting that the errors or omissions

be commented upon in the response to the EIS. The SHPO speaks for the state, and the recommendations and comments he or she makes must be carefully considered. Since the National Register Office has insisted that each State Preservation Program have a qualified archeologist as a staff member, it is

hoped that professional links with state programs will be increased and facilitated.

### Summary

The foregoing has provided a review of the duties and responsibilities of the SHPO and suggests where, and the reasons why, close liaison by archeologists with the SHPO is important. There are other areas in which the SHPO can help, such as supporting more adequate preservation legislation and aiding in the change of existing legislation to make it more effective. The professional archeologist interested in the best management of the resource base should utilize all of these options in the course of resource management planning.

### A Model for Regional Planning

The following outline suggests a simple series of conferences which could be held to initiate the planning process at both the regional and state level. These conferences should be considered working sessions, rather than outlets for the presentation of, for example, work reports. All of these conferences should be coordinated with the development of the appropriate State Historic Preservation Plans.

#### A. Workshop Description

- (1) Regional Conference I. This meeting should discuss the goals of regional and state planning, define the area to be treated as a region, assign individual areas of responsibility in preparation of a regional research design and specify the body of data to be included in each participant's report.
- (2) State Conference I. Participants should be invited to discuss the goals for the state as they relate to the regional goals, to assign areas of information to be assembled by participants to describe the resource base, and to define areas of critical concern and their relevance to regional research designs. A particular need that should normally be addressed is the need for systematic statewide archeological surveys. Most State Historic Preservation Officers are not intimately familiar with modern methods of predictive archeological survey (cf. Mueller 1975) or how these methods can be applied in their own states to statewide or local management needs. Such methods, applicable to both historic and prehistoric archeological resources, attuned to the particular nature of the state and its management problems, and responsive to regional research needs, should be developed by regional professional groups in cooperation with the State Historic Preservation Officers.
- (3) State Conference II. Participants should discuss the information assembled concerning

the resource base and make recommendations for protective measures and research designs for areas of critical concern. State Report I should be prepared at this time.

- (4) Regional Conference II. Participants should discuss method of presenting pertinent data derived from the state's first reports and discuss management and research measures which can be implemented. Results should be compiled as the Regional Research Design and Management Plan. This should include all appropriate regional and sub-regional research designs.
  - (5) Annual Regional Conference. This should be an updated regional session, with participants prepared to discuss what has happened to the resource base during the year and to propose any modifications in the Regional Research Design and Management Plan which are deemed necessary.
- #### B. Suggested Format of the Regional Plan
- (1) Background: the philosophical base for the Plan.
  - (2) The Resource Base: A section dealing with the distribution of resources, their age, nature, classification, significance, what is known and not known, obvious gaps in knowledge, the reliability of present data, and areas of critical concern because of proposed land modification projects, or other factors.
  - (3) Research Designs: A section setting forth the regional and, as appropriate, sub-regional research designs. A framework of broadly defined research goals should be provided, but detailed specifications and standardization above the sub-regional level are not appropriate.
  - (4) Management Goals: A section describing actions that might be taken to best conserve the resource base. These should include:
    - (a) long-term goals
    - (b) short-term goals, immediate action which should be taken in critical areas.
  - (5) Planning Needs: A section discussing requirements in order to effect long-range planning goals, i.e., legislation and legislative interpretation at state and federal levels, the status of professional research, public education, close monitoring of critical aspects of the resource base, and the effect of short-term goals, such as scheduling surveys, scheduling available manpower distribution, and equipment. The regional and sub-regional research designs should be related to (though not determined by) these.
  - (6) Regional Resource Centers: Regional and state plans should address the question of the feasibility of a system of regional resource centers for long-term care and maintenance of collections and attendant data, for the development of data storage and retrieval sys-

tems, and for the implementation of conservation activities. The accelerated pace of survey and excavation threatens to inundate and overwhelm the storage facilities currently available for archeological collections. While a number of institutions at the local, state, and national levels have the curatorial expertise and longevity to provide perpetual care for archeological data, present facilities for storage and retrieval are inadequate and will not be able to handle the projected influx of records and materials. As the profession foresees the attrition of resources in terms of remaining sites, the data and objects placed in repository facilities will assume increasing scientific value, in contrast with the immediate past when museum collections were largely regarded with disdain as research resources.

We have achieved a legal basis for funding archeological investigation through NEPA, the National Historic Preservation Act, and the Archeological and Historical Preservation Act, but no clear route to increase the repository capacity of the nation has been recognized. One approach would be a system of state or regional resource centers throughout the country, facilities where museums and academic institutions can place collections for permanent care. Although not necessarily in constant or active use, collections available to scholars and museums devoted primarily to display and communication, could be drawn upon for study materials and exhibits. These resource centers would be physical facilities that would provide at a minimum: (1) adequate maintenance and conservation of the collections, (2) access to collections and records and data retrieval for scholarly study, (3) continuing flow of materials and exhibits to local display units, and (4) communication and education services of a wide variety based on the collections housed therein. Such centers could be developed as adjuncts to existing institutions having substantial collections, or they might be developed as entirely new, specialized facilities.

#### C. Effective Use of a Regional Plan

- (1) There are several uses for a Regional Plan. The first, of course, is to focus attention on the fact that the unmonitored and unplanned reduction of any part of the resource base affects all of the states in a region, not just the state in which the reduction occurs.

- (2) The Regional Plan should serve to coordinate the activities of professionals in a region and facilitate communication among them.
- (3) Planning will also serve as a yardstick to measure the effectiveness of research on and management of the cultural resource base. An annual review will provide an opportunity to see what information has been developed and what has happened to the resource base during the year, to review research information obtained from surveys and excavations and its potential impact on existing priorities, to discuss the attrition of the resource base, to reorder priorities as necessary, and to call attention to any changes in critical areas and knowledge within the region.
- (4) The Regional Plan can provide a tool which other agency planners will find useful and which should be distributed as widely as possible. Most agency planners need to know as much as possible about the general management requirements of a project area. They must be able to take such factors as archeological resources into account during the earliest planning stages, and, if the system of archeological priorities is lucid, logical, and convincing, archeological resources will be given due consideration.

#### *Sub-Regional Planning*

Region-wide planning on the scale of a culture area or geographic region as discussed above is essential for effective coordination of various state and institutional research programs and for the establishment of general priorities and research goals.

Nonetheless, recent experience has shown that attempts to provide too broad a standardization on this level of either specific research designs or of terminology is likely to be counterproductive. Variations within the region begin to appear and the direct comparability of descriptive data tends to be less sharp than is desirable.

For specific project research designs, a sub-regional framework within the broader regional context would seem to be a more viable approach. Communication and planning on the sub-regional level of a nature similar to if less elaborate but more frequent than that outlined above on the regional level should serve to achieve the necessary coordination.

# 3 Guidelines for the Preparation and Evaluation of Archeological Reports

*with Particular Reference to Cultural Resource Management Studies*

## EDITOR'S PREFACE

One of the first things which was apparent as archeologists became increasingly involved with agencies and cultural resource management was that the simple two-part division of archeological field research into survey and excavation was no longer adequate.

If asked to provide archeological input appropriate to a Comprehensive Basin Plan for the Lower Mississippi Alluvial Valley, it obviously is not appropriate to propose that an intensive field study of the entire area be conducted. Different levels of archeological input are appropriate for different agency planning stages, but in order to determine how much information is necessary and when, to enable project planners and managers to make appropriate decisions in the light of known or potential cultural resources, it is necessary to learn something of typical agency planning stages.

Thus the report writing seminar undertook, not just to determine what elements should be covered in a normal archeological report in order for it to be accepted as adequate, but also to identify various agency planning stages and to correlate these with the varying levels of archeological input appropriate to each in the various contract situations.

The report writing seminar served to point up two important differences between contract archeology and the more traditional approaches. Cultural resource management studies have to be completed within a specified time. This creates certain problems but has even greater advantages. One of the major criticisms of salvage archeology was the long delay, if not total failure, in issuing reports, a problem not unknown to traditionally funded archeology. Undue delay in producing a report is not acceptable in contract archeology and the fact that the research is conducted under contract is a powerful stimulus to timely reporting of results.

Further, at least a portion of a cultural resource management study *must* be written in such a manner as to be meaningful to a layman, perhaps, even probably, an uninterested and archeologically uninformed layman. Therefore, a section of the report must be written so that such individuals can make appropriate decisions, decisions which will affect, for all time, what all of us will be able to learn from the past. That difference too would appear to be one from which archeology, and eventually everyone, will ultimately benefit.<sup>11</sup>

<sup>11</sup> It should also provide summary information necessary to permit review by the State Historic Preservation Officer, Department of the Interior, and Advisory Council on Historic Preservation to determine the adequacy of the work done, the presence or absence of National Register eligible properties, and/or the effectiveness of proposed mitigation methods. A persistent problem with archeological reports submitted to federal agencies is that they do not provide, or do not provide in a readily accessible form, information appropriate to the interagency review and planning process.

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Cultural resource management studies must reflect the highest level of archeological research or they violate the intent of the laws which brought them into existence. The results of cultural resource management studies, the reports, both because of their scientific content and because of their influence on the decisions of nonarcheologists which will affect the resource base, are going to largely determine the future of the past. This was the challenge to which the seminar directed itself.

## INTRODUCTION

The purpose of the Archeological Reports seminar was to determine "what constitutes a good archeological report, and why, in each of a number of different circumstances." The organizers of the Six Seminars on the Future Direction of Archeology expressed special concern about the increasing importance of archeological reports in the broad and expanding field of cultural resource management. Archeological reports in this field must be submitted on schedule, meet contract specifications, provide sponsors with information that will enable them to plan effectively, in addition to contributing to the basic store of archeological knowledge and furthering the goals of modern archeology.

Conservation of a diminishing resource base is a primary goal of modern scientific archeology. *All* treatment of cultural resources, whether initiated by archeologists independently or in response to the needs of others, should be as comprehensive as possible with respect to given goals, including compliance with governing legislation and adherence to principles of scholarship and scientific standards of reporting.

It was agreed that a primary concern of the seminar was the development of guidelines for the preparation and evaluation of reports resulting from expanded federal, state, and private funding of archeological research, and it was also agreed that such reports had to be of research quality equal to any other archeological report. Thus, though particular attention is devoted to details of reports resulting from cultural resource management studies, the basic guidelines developed are thought to have applicability to all archeological reporting.

A principal objective of this chapter is to outline the content of various classes of cultural resource management studies. Attainment of this objective is dependent partially on describing the relationship between sponsor goals and necessary research activities at various stages of project planning. Definition of these relationships should serve as a basis for the negotiation of project report requirements at various stages of planning, the evaluation by the sponsor of reports submitted, the review of reports by the professional community and review agencies, and an assurance that an adequate level of research is conducted at each stage of planning.

Five general levels of archeological research activity are defined in relation to five general stages of sponsor project planning. Based on this generalized outline, five classes of archeological research reports have been developed, each appropriate to the needs of sponsors at various levels of planning.

In order to further the aims of the discipline of archeology, it must be stressed that investigators should address themselves both to current archeological research needs and to the needs of the project sponsor in order to fulfill obligations before the law and to the public. Lipe (1974:234) has further emphasized this by indicating that archeologists utilizing contract funds have an obligation "to attempt to collect representative samples of all types of data . . . (so that the) . . . target list of variables would attempt to cover the research concerns of all segments of the profession." This dual problem orientation of resource management studies insures that cultural resources are exploited in a productive, responsible, and justifiable manner. Such an approach is in the spirit of legislation requiring statements of environmental impact and concern for cultural, historic, and scientific values.

It seems appropriate, in light of the above discussion, first to consider archeological reporting within the framework of general scientific standards of reporting and professional expectations. Cultural resource management studies are simply one variety of empirical research in archeology. In view of the fact that general content guidelines for reports of empirical research are not in wide use in archeology, these have been defined here more precisely. This scientific format has been used in drafting guidelines for the preparation and evaluation of cultural resource management studies.

The general content guidelines for any archeological report include nine categories of information.

*Research goals and strategies* should discuss the context in which the research is initiated and conducted, including place and time of implementation, personnel involved, and resources utilized. A description of the background and purpose, of the research and of the sources of support should be included. Special emphasis should be placed on detailing specific research objectives.

*Theoretical base* should specify all principal assumptions underlying the statement of problem and its resolution. The researchers' orientation and conceptual framework, the linkage between the theoretical assumptions and problem or hypothesis formulation should be made explicit.

*Methods* should describe the specific research activities and justify them in terms of research goals, theoretical base, and research constraints.

*Analysis* should include the description, classification, and qualitative and quantitative manipulation of the relevant data.

*Summary of analysis* should synthesize the result of analyses derived from the data and ancillary research.

*Comparative synthesis* should place the summarized data in broader perspective by comparison with relevant studies.

*Interpretation* should present the research objective achieved. Perceived patterns should be identified and relevant processes discussed.

*Evaluation* should provide for comments on the adequacy of any or all aspects of the study's research design, application, and results.

*Recommendations* should indicate areas of research potential and suggest measures for resource conservation.

The guidelines just enumerated define the necessary categories of content in an archeological report based on empirical research. *The listing should not be construed as a required sequence of presentation of information.* Researchers should retain the flexibility of organizing a presentation in a manner reflecting current needs and interests. However, it is incumbent on the archeologist to explain why, if one or more of the categories of information listed above are absent from or combined in a report, as may well be appropriate for short or specialized studies.

Having established these general scientific guidelines, an extensive review of other guidelines and of a large number of contemporary archeological works (Appendices A and B), resulted in initial content definitions for archeological resource management reports. These definitions contain, in part, a specialized terminology, some of which originates outside of archeology. In all other respects these reports should conform to general scientific standards of reporting, and all conclusions drawn must be founded on research conducted with modern methods, techniques, and theory.

## **SPONSOR INFORMATION NEEDS AND ARCHEOLOGICAL RESEARCH ACTIVITIES**

### *Sponsor Planning Stages*

Land managers and project sponsors whose activities affect the terrain have particular information needs concerning cultural resources. These needs can be broadly divided into information for general management programs, and information for specific projects. General management programs usually do not have as their immediate goal the design, engineering, and construction of land modifying features. More often, general programs involve developing plans for land use but not necessarily land modification, and they frequently focus investigation at the broader regional level. Examples of this level of planning include National Park and National Monument Master Plans, Bureau of Land Management and Forest Service Planning Unit studies, Corps of Engineer and Soil Conservation Service River Basin studies, and Department of Transportation reviews. As in the case of River Basin and Trans-

portation studies, some general planning programs may lead to specific project planning.

A project as defined here is an undertaking planned for a specific purpose in a designated location, the carrying out of which will alter or affect natural and/or cultural features. Examples of projects are highway construction, transmission line placement, dam construction, and reservoir development, open pit mining, and river channelization. Archeological studies whether prepared for general programs or specific projects, should be designed to obtain substantive data necessary for planning and evaluation of the impacts, either known or potential, of such projects (Figure 3).

Reports for general management programs should provide adequate information to allow planners to

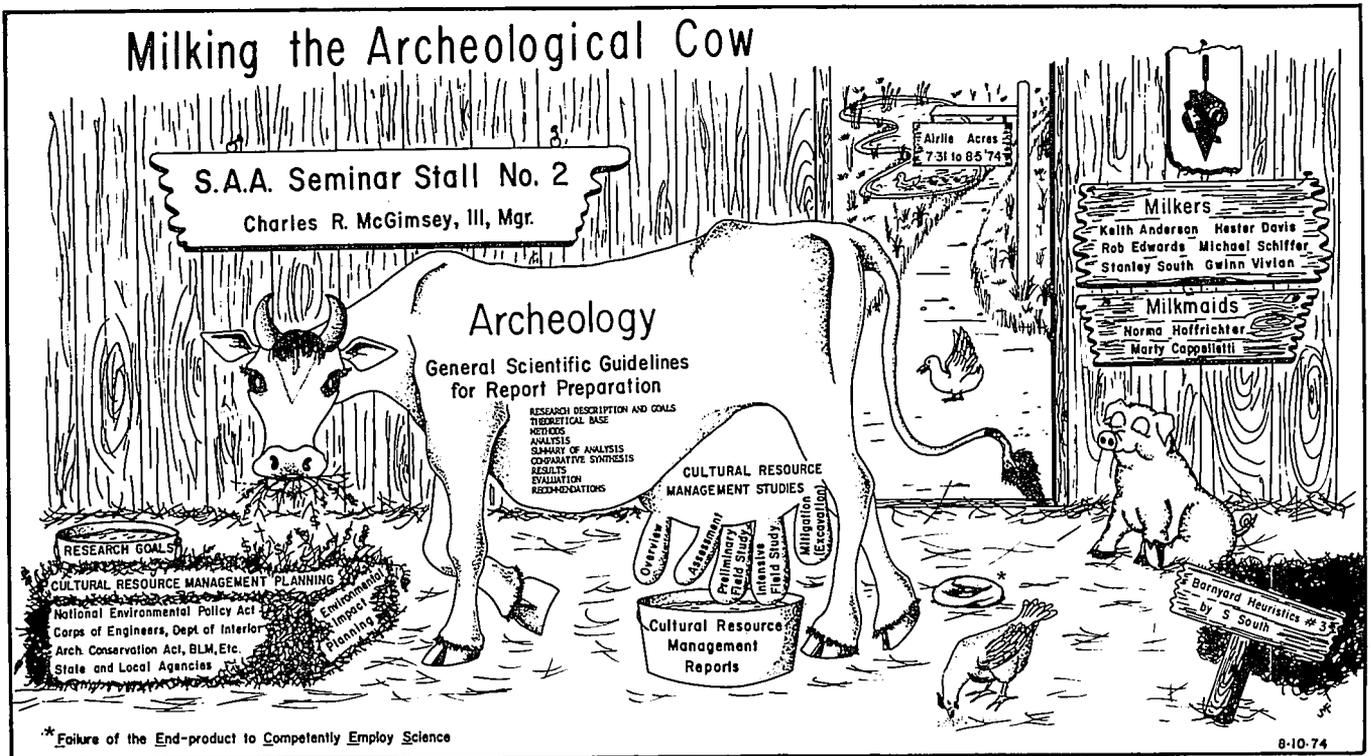
- (1) program effectively the future course of land use within the study unit with respect to known and potential cultural resources
- (2) relate better the anticipated and scheduled short-range and long-term projects in the study unit to the management of archeological, historical, and other cultural resources
- (3) integrate more easily other resource management programs with those developed for cultural resources.

Reports for specific projects should provide adequate information to allow planners to

- (1) consider and evaluate alternatives in project design, such as excluding specific areas from the project, or relocating or redesigning the project to avoid or minimize the effect on archeological and other cultural resources. (It is important that resources be identified at the earliest planning stage possible to facilitate preservation.)
- (2) consider the cost of adequate archeological studies along with other project costs
- (3) have adequate research designs or mitigation recommendations prepared to aid in making decisions relative to the project
- (4) to program and budget for appropriate mitigation well ahead of construction schedules.

The outline of planning stages reviewed (Figure 4) is idealized in assuming a progression from regional planning on the general management program level to the execution (usually through construction) of a specific project. No single undertaking necessarily progresses through all five stages, or in the order given, but the stages do reflect an orderly development of study of the cultural resources to be affected. Variation is possible in this scheme, of course. For example, it may be more feasible for an Intensive Field Study to be accomplished at the Preliminary Planning stage if the project is small, or some planning stages may actually be skipped. In such cases some of the preliminary archeological research stages may be combined with later stages.

FIGURE 3. MILKING THE ARCHEOLOGICAL COW.



The primary operative factor determining the level of archeological activity appropriate to a given level of project planning is the relationship of the planning level to the last point at which public participation is possible in project definition short of litigation. For example, if review of an Environmental Impact Statement and associated review of a project by the Advisory Council on Historic Preservation occurs at the Alternative Design stage, and there is no provision made for further review and modification at the Final Design stage, then an "Intensive Field Study" is normally appropriate during Alternative Design planning. In all cases, of course, the earlier such intensive study is done, the better planning is likely to be, but if there are opportunities for significant public participation and project modification at later planning stages, and full intensive fieldwork would be unduly burdensome at early stages, a postponement may be proper.

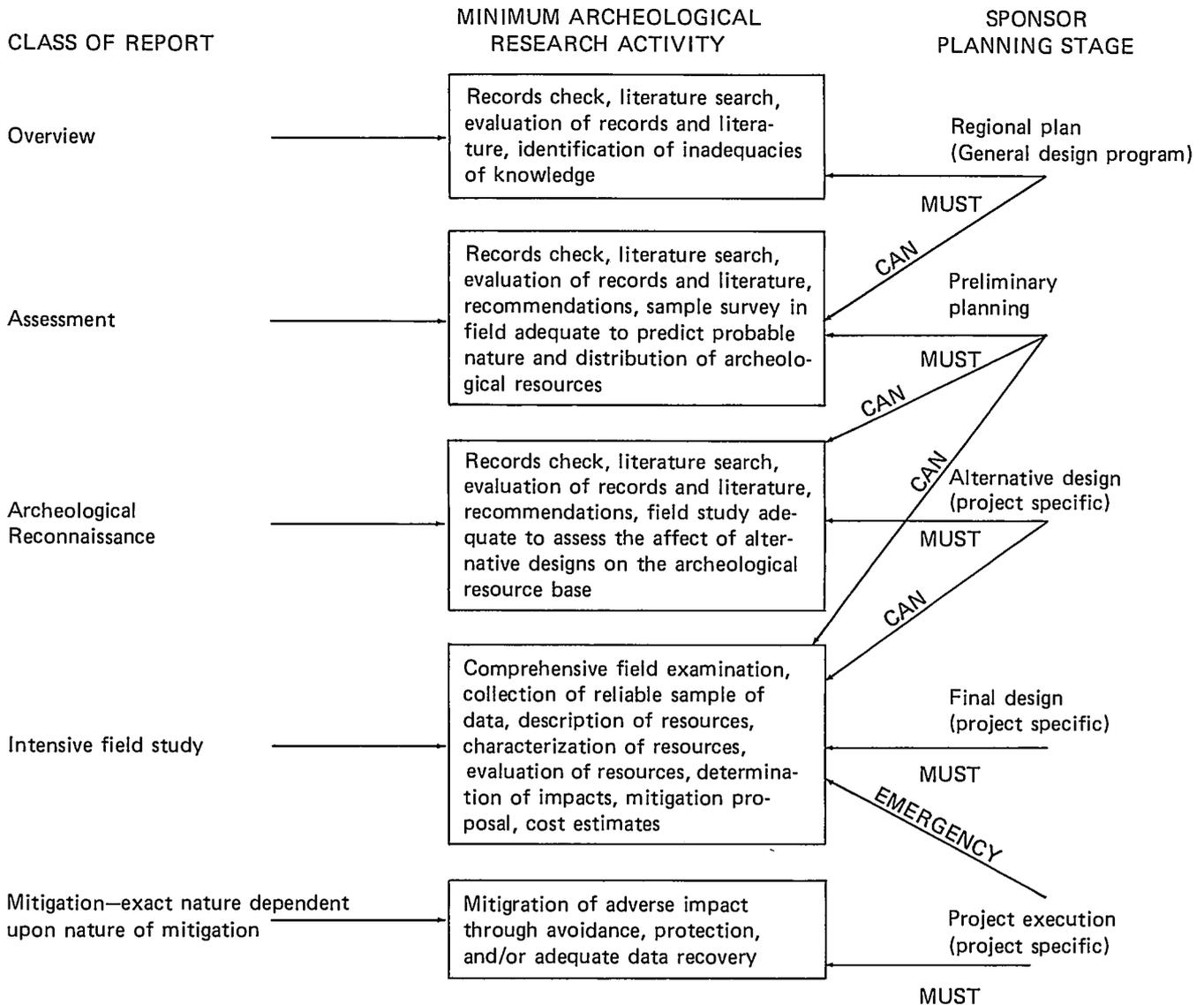
**Regional Plan** A Regional Plan is usually developed as part of a general planning process that involves consideration of cultural and other values. It is the initial stage of planning that provides the comprehensive background upon which long-term development programs are proposed within a physiographic region or any agency Planning Unit. Regional plans determine current patterns of land use, demographic change, natural resource utilization, municipal growth, and other factors as a basis for

projecting future development and critical areas of concern. Examples are: River Basin Studies, State, Regional, or Local Planning Units, and Federal Land Management Units such as National Forests, Bureau of Land Management Planning Units, or National Parks. At this stage of planning, an archeological "Overview" and "Overview Report" is appropriate (see page 74).

**Preliminary Planning Stage** In the Preliminary Planning stage, the general location, character, and feasibility of a proposed action within a region are identified but not precisely defined. In other instances it might be project-specific but at an earlier level with locational alternatives. An approximate consideration of impacts is possible, but planning data and project specifications have not been determined. Steps necessary for gaining these data are identified as a basis for programming more detailed planning. At a minimum this should include an archeological "Assessment" and "Assessment Report" (see page 74). In some instances it will be desirable to undertake an "Archeological Reconnaissance" at this stage, or even, in some instances, an "Intensive Field Study."

**Alternative Design** At the Alternative Designs stage preliminary studies are drawn up identifying components and related activities of a project. Required alternatives to the project, including changes

FIGURE 4. CORRELATION OF ARCHEOLOGICAL ACTIVITY WITH AGENCY PLANNING STAGE.



in project and/or component location, are considered and described for agency planners and decision makers. A substantive data base, up to and including an "Archeological Reconnaissance" and "Reconnaissance Report" (see page 75) is a minimum necessity for predicting impacts of all alternatives. It frequently is desirable to schedule an "Intensive Field Study" at this stage so studies can be programmed to obtain reliable resource data basic to the necessary decisions.

**Final Design** In the Final Design stage of a project, the specification, design and areas of impact of the proposed action are determined. At this stage impacts can be more accurately predicted and a full statement on the benefits and adverse unavoidable effects of the project should be possible with adequate resource data. This requires an "Intensive

Field Study" and "Intensive Field Study Report" (see page 75).

**Project Execution** The Project Execution stage involves implementation of a project with specifications drawn up in final designs, resulting in most cases in some type of land modifying activity. A full "Mitigation Study" and "Report" is necessary, including discussion of actual mitigation action taken to alleviate impacts. This should be scheduled prior to project execution or, if necessary, in phases during project construction. (See page 75).

#### Archeological Research Activities

The above discussion reviews general stages of planning activities that may be common to most project sponsors. The research activities considered

necessary and archaeological information needed at those stages for proper evaluation of impact are dealt with next. Research activity levels are identified in terms of reports prepared. The precision of information that is made available at each stage should correspond to the precision of the planning objectives of the sponsoring agency. Without such information it is impossible to insure consideration of the scientific, historical, interpretive, and heritage values of such resources within the context of other needs of our society. Shared general objectives of these reports are: definition and distribution of resources; scientific and public values of the resources; evaluation of impacts of project alternatives, and recommendations for preservation, and interpretation of the resources.

Maps should be included as appropriate but as discussed in the Cultural Resource Management chapter (page 46) maps showing specific site locations generally should be provided separately from the published report.

*Overview* An overview is a study carried out for general management programs on a regional and usually nonproject-specific basis. For this study, present knowledge is gathered, evaluated, and analyzed to make general statements regarding the nature, distribution, and significance of the resources in a generalized sense. Recommendations for future research and predictions of potential impacts on the resource base within the region are made.

Specific research activities at this stage usually include consultation with knowledgeable informants, examination of published and archival sources, assembling of information on the effective environment, identification of areas that lack data, evaluation of the reliability of the gathered information, and a general determination of resource potential. Since an in-the-field survey usually is not conducted at this stage, demographic, environmental, or other models may be used to estimate resource potential and distribution. If data are inadequate to accomplish this, sufficient field study to provide such a base may be necessary. Gross predictions can be made on potential impacts of long-range development within the region. Research potential, significance, and public interpretive values should be discussed in the light of the synthesis of available cultural, environmental, and other data. More detailed research, such as reconnaissance or intensive field studies may be recommended for future needs. Site or district recommendations for national or other registers may be made if requested and insofar as the data permit.

*Archeological Assessment* An Archeological Assessment is a study that is similar to general research goals in an Overview. An Assessment, however, is usually more limited in area, perhaps even project specific, and somewhat more explicit in terms of potential impacts, although it could also be appro-

priate for a more general management study. All of the research activities covered in an Overview should be considered in an Assessment. Fieldwork adequate to predict the probable nature and distribution of resources and for the purpose of establishing logistic requirements in subsequent studies probably will be necessary. Most areas of research are evaluated in more detail and related to the proposed project. Recommendations as to the effect on cultural resources of project alternatives and for more detailed research, based on synthesized data, are appropriate.

It must be recognized, however, that the area assessed may need to be larger than the area of the project itself. To evaluate the sites potentially affected, it is necessary to have an adequate knowledge of the immediately surrounding area. This area will vary in size, but should be sufficient to make it possible to place sites in the proper cultural context and thus evaluate their scientific potential.

Specific research activities that are to be carried out at this stage include informant and specialist consultation, records and literature search, environmental data collection and correlation, and field orientation. An evaluation of data adequacy and reliability should be made. Synthesis of cultural, historical, and environmental data should allow categories of resources to be formed and evaluated for significance. Research potential and priorities should be made clear, and the evaluation of potential direct and indirect impacts on the known and predictable resources should be made. Recommendations for further research (Archeological Reconnaissance, Intensive Field Study), preliminary research designs, and costs should be proposed. If appropriate, and if the data permit, recommendations of sites or districts for national or other registers should be made.

In most instances this level of research will require some field research and probability sampling of varying scope and intensity (depending upon such factors as the area included, the nature and amount of potential impacts, the type and density of resources present), but in every case this research must be adequate to make preliminary predictive statements.

On the basis of an archeological assessment, archeologists should be able to provide planners and managers a tentative predictive model as to the probable nature and disposition of resources in the area concerned such that the planners may take potential effects adequately into account during immediate subsequent planning for specific projects. Unless the assessment reveals that much of the area has been fully surveyed, such a model should be regarded as very tentative and subject to testing in subsequent states of research.

*Archeological Reconnaissance* An Archeological Reconnaissance may follow an Assessment; however, it often is desirable for this level of research to be undertaken at the Preliminary Planning stage

rather than waiting until the Alternative Design stage. It expands upon the general goals considered in an Assessment or develops such goals and at the same time narrows the investigation geographically. Presumably at this stage of project planning, design alternatives will have been formulated, thereby limiting the areal scope of the study and more precisely defining potential impacts. If an Assessment has not been conducted, all the research activities undertaken in Assessment should be considered in a Reconnaissance (including sampling of adjacent areas in order that the specific project areas may be evaluated in context). If such a study has been accomplished, it should be briefly summarized and updated.

A field survey of all alternative project locations should be performed at the Reconnaissance survey level. Reconnaissance surveys may be carried out in a number of ways, but some form of probability sampling is often most appropriate and can provide results best suited to the planning stage. The report should indicate the probable impact on cultural resources of each alternative, based on synthesized data, and should indicate any need for additional detailed research if the project continues.

To assess adequately the nature and extent of resources present in an area, it often will be necessary to conduct the Reconnaissance survey in at least two stages: the first to determine the nature and density of sites; the second a program of subsurface testing to permit determination of the significance of sites encountered (see discussion, pages 38-40). Fieldwork on a reconnaissance level will entail more detailed research methods and also significantly increase the data base for evaluation of each project alternative.

At a minimum, a Reconnaissance survey must incorporate sufficient field, library, and records investigations to enable the archeologist to develop an adequate predictive model of the archeological and historic resources potentially present. By adequate is meant one sufficient to enable the sponsor to make planning decisions with a full awareness of the probable effect those decisions will have on the resources potentially present, and the approximate level of budgetary provision which will be necessary to prepare and carry out a mitigation plan. The two stage Reconnaissance survey should also develop enough detailed field information about those sites known and discovered in the course of the investigation to determine their significance and possible eligibility for the National Register.

While such a study is appropriate to some kinds of EISs, in most cases an Intensive Field Study is necessary. An adequate EIS should document compliance with the Procedures of the Advisory Council on Historic Preservation (36 CFR 800) which in turn require identification and evaluation of properties listed in or eligible for the National Register of Historic Places. (See also discussions on pages 35ff, 41ff, and 46ff.) If surveys are not already com-

plete in the area under study, it is normally necessary to complete such surveys in order to identify all significant properties. Cases in which less-than-complete surveys are adequate for EIS purposes are presently exceptional, not the rule.

For small areas or for projects which will result in near total destruction of resources (e.g., small SCS reservoirs), and for which there is no feasible alternative location, or for which planning is already well advanced, it normally is necessary to skip the Reconnaissance, and start directly with the Intensive Field Study.

Since a Reconnaissance survey is frequently based on a sample of the archeological resources in the study area, once a decision has been made between project alternatives, an Intensive Field Study must be conducted of the area finally chosen in order to identify as nearly as possible all of the specific resources to be affected and the exact nature of the impact. Only on the basis of this detailed information is it possible to develop a full mitigation plan.

*Intensive Field Study* An Intensive Field Study must provide the most thorough data possible before the project execution stage. If based on an Archeological Reconnaissance, all of this data should be summarized and updated for incorporation in the Intensive Field Study.

Although specific research activities associated with an Intensive Field Study will vary in relation to the archeology of the area and to sponsor plans and needs, attention will be directed to summarizing and updating previous reports, records, and assessments, intensive collection of field data, evaluation of recorded and field information, conduct of ancillary studies as required, description and analysis of data, and development of a detailed mitigation plan. Fieldwork ideally should involve complete survey and testing in the entire project area. If the area is so large that sampling must also be used at this level of investigation, the sampling techniques must be rigorously justified as adequate for providing the level of information needed. A detailed description of the resources must be provided as a basis for evaluation of significance and determination of the extent and magnitude of impacts. Mitigation plans assume critical importance at this level for this normally is the last opportunity for implementation of any alternative other than increased data recovery. It must be recognized that by this time the options are much more restricted than during the Alternative Design stage. Nonetheless, the archeologist should consider providing a number of alternative approaches with priorities identified, for reducing or avoiding adverse impacts.

The Intensive Field Study must be conducted at a level sufficient to insure that appropriate mitigation alternatives are identified and evaluated as to time requirements, costs, and effects on archeological resources. Highest priority normally should be given to the avoidance of resources or preservation in

place. Estimated costs for alternative measures should be provided, if requested, though detailed costs may be dependent upon the specific mitigative programs decided upon. Data necessary to determine the eligibility for the National Register of all resources identified should be provided. It is vital that the archeologist not simply make off-the-cuff recommendations about properties that he/she thinks "should be nominated," but that each property discovered be carefully evaluated with reference to the National Register criteria (36 CFR 800) and documented in such a way as to facilitate the review process (see 36 CFR 63, Appendix A).

The procedures developed by the Corps of Engineers (33 CFR Part 305) succinctly summarize these last two investigative procedures:

(e) "Cultural resources reconnaissance." A literature search and records review plus an on-the-ground surface examination of selected portions of the area to be affected, adequate to assess the general nature of the resources probably present and the probable impact of a project. Test excavations may be required at some sites so that evaluations may be adequately accomplished. This level of investigation is appropriate to preliminary planning decisions and will be of assistance in determining viable project alternatives.

(f) "Cultural resources survey." An intensive, on-the-ground survey and testing of an area sufficient to permit determination of the number and extent of the resources present, their scientific importance, and the time factors and cost of preserving, recovering or otherwise mitigating adverse effects on them. This level of investigation is appropriate when the project has been authorized and finally formulated, and will thus be accomplished during the Phase II GDM stage of project planning [Federal Register, Sept 8, 1975, 40 (174): 41636].

**Mitigation** Mitigation is the alleviation of adverse impact by taking action to avoid, protect, or scientifically investigate the resources. Research associated with mitigation may include a range of activities, whose archeological research priorities are dependent on sponsor decisions at the Project Execution stage. Specific research activities at the Project Execution stage are not described here. Any such list of activities would be too generalized to be of value. Such decisions are dependent on a large number of factors including research priorities and needs, sponsor plans, research activities at earlier stages of planning, resource significance, and the nature of the resource base. Normally mitigation that involves further field investigation takes place just prior to or even during project execution but should take place at the earliest possible planning stage when a firm well-founded decision can be made that field investigation is the best possible alternative.

It should be emphasized that in its broadest sense *mitigation* encompasses a number of options, including various forms of preservation, as well as different forms and degrees of data recovery and analysis. Options exercised for avoidance, protection, or data recovery all must be based on a decision as to which alternative or variation thereof is the most viable and must be made in the context of the total public good.

## GUIDELINES FOR RESEARCH PROPOSALS AND RESEARCH DESIGNS

### Introduction

We are basically concerned in this Chapter with the contents of reports which describe the *results* of archeological research. However, as was spelled out in the chapter on Cultural Resource Management research proposals and research designs are to be written *before* research begins. It seems appropriate, therefore, to provide guidelines for the preparation of these documents, also.

### Research Proposals

A research proposal is written in response to a request by a sponsor as to whether a prospective contractor can perform a particular service, i.e., do the research necessary to provide needed information on cultural resources or with respect to a particular project. The proposal will vary in content depending upon the project, the contracting agency, and the contractor. However, the following items of information normally should be included or considered for inclusion.

#### *Elements of a Typical Research Proposal*

(1) Name and address of individual or institutional proposer; and of principal investigator.

(2) Brief summary of status of information on cultural resources in project area.

(3) Research proposed to provide information requested by scope of work, e.g., reconnaissance survey, intensive field study with testing; provides enough detail to give peers an ability to judge whether a sponsor's needs will be met, and to provide sponsors with justification for budgeted items; include a statement on the mechanism whereby the research design will be drafted and approved prior to initiation of the field research (see discussion on pages 49-50).

(4) Qualifications of principal investigator, and other major professional personnel contributing to the project. *Vitae* are appropriate.

(5) Specifically indicate where materials and records are to be housed, and who is responsible for curation.

(6) Time frame including in the field, and date of submission of draft and of final report.

(7) Budget estimate. The particular entries noted below are ones frequently occurring in and appropriate to such budgets. However, institutions and agencies will vary as to how various costs are categorized and which are to be included. The following is intended simply as a general guide:

Salaries (numbers and ranks of individuals at different rates, and time each will devote to the project).

- 1 Supervisory Archeologist 2 mo. @ \$XXX/mo.
  - 2 Field Assistants 4 mo. @ \$XXX/mo.
- Wages (Note if there is a difference between field and lab wages.)
- 8 Field Crew 6 wks. @ \$X.XX/hr.
- Overhead (normally a percentage of salaries and wages; may include different percentages for on-campus and off-campus research; if fringe benefits are included this should be noted.)
- Fringe Benefits (sometimes included in overhead; normally figured as a percentage of salaries and wages.)
- Travel (mileage, normally figured at a standard rate per mile, an estimate of the number of miles should be given.)
- Per diem (usually established on a per day rate to cover food and lodging, depending upon local circumstances. This may or may not include the crew as well as professional personnel.)
- Equipment (except on larger projects sponsors generally will not approve purchase of permanent equipment such as cameras, vehicles, or transits but small items of nonexpendible equipment are appropriate, such as wheel barrows, or soil augers, or machetes.)
- Specialized studies (C<sub>14</sub> dates, pollen or soil analysis, faunal, floral analyses, dendro, etc. If specific individuals are to be employed by the contractor for this, the salaries should be under that category.)
- Rental of equipment (normally is listed separately and can include rented vehicles, generators, backhoes, etc.)
- Preparation of Report (this can include preparation of special illustrations and drafting, and should include cost of reproduction and distribution of an adequate number of copies to the scientific community and other directly concerned audiences. Typing time, if extensive, could be included under salaries/wages.)
- (8) Other specific information may be requested, e.g., whether other contracts have been awarded within the past few years, and the reporting record of the institution and principal investigator(s).

## Research Designs

### Introduction

A research design should cover the whole planning and investigating sequence from the initial statement of problem, through general assumptions, to operational statements. Specific procedures to be used should be described and the steps of data recovery and analysis should be explained and justified in terms of the stated aims and theoretical orientation of the study. It must be recognized that predictability of research results is limited, and any investigator should always have the flexibility to modify and revise the research design. The research

design for a data recovery project conducted under the authority of the Archeological and Historic Preservation Act should insure the recovery of those data whose existence or predicted existence makes the property eligible for inclusion in the National Register. Also, research designs of different level of detail and complexity will be appropriate to different types of projects (see pages 49-50).

### *Purposes of a Research Design*

- (1) To provide the research with a vehicle to express and to develop explicitly the rationale behind the proposed research, giving the theoretical orientation, justification for problem selection, logic, specific criteria or archeological significance, and procedures for the research strategy.
- (2) To define the universe of study and realistic minimal expectations of research.
- (3) To permit the sponsor and professional reviewers to identify and assess the reasoning and validity of the design in the perspective of current professional capabilities and standards.
- (4) To provide a realistic, logically developed, and adequate schedule of research.
- (5) To provide for the productive, efficient and justifiable recovery of archeological data.
- (6) To permit comparison of the proposed research with actual accomplishments and reduce the discrepancies between research expectations and results by coordinating research goals with procedures.

### *Elements of a Research Design*

- (1) The basic archeological and anthropological perspective governing research formulations. This should include, minimally, the purpose and reasons for the research, underlying assumptions, and the theoretical organizational, and methodological base of the approach. Explain why these perspectives and emphases are applied, and in particular, why they apply to the research project proposed.
- (2) The environmental, archeological, and relevant ethnographic or ethnohistoric content of the project area. Include, where obtainable, period of occupation, cultural affiliation, and the relationship and significance of the project area to environmental and cultural regions of which it is a part. If there are serious deficiencies in the knowledge of the area relative to these concerns, these should also be identified.
- (3) Research goals and their rationale. Based on information developed in 2, this section should develop in detail the questions to be answered or hypotheses to be tested and their test implications, the applicability of these hypotheses in the project area, and the reasons for selection of the research goals.
- (4) Research strategy, schedule, and priority. This

should include discussion of the following, and a statement of their relationship to research goals

- (a) For survey, identification of environmental situations and categories of cultural data to be sampled.
- (b) For excavation, identification of sites, or groups of sites or other resources to be studied.
- (c) Reasons for selection of locations, sites, or other variables to be sampled.
- (d) Sample size and sampling procedure for (1) selection of sites, and (2) data recovery within site.
- (e) Project implementation techniques and their relevance to the aims and purposes of the study.
- (f) Data recovery techniques to be used and their relevance to aims and purposes of the project.
- (g) Analysis procedures to be used and their relevance to the aims and purposes of the project.
- (h) Plans for dissemination of research results.

## CLASSES OF REPORTS

### Introduction

A general correlation can be established between different levels of sponsor planning, research activities necessary for acquiring information needed at a particular level of planning, and classes of archeological reports resulting from such research. Broad sponsor planning stages have been briefly discussed and equivalent major research activities outlined. This section deals with an idealized typology of reports that may be prepared on the basis of information generated by research activities. Information presented in reports should be in the form sufficient for meeting contract specifications, cultural resource and management requirements, and archeological research needs.

Five classes of cultural resource management reports are defined. Just as all cultural resource management work cannot be easily classified in terms of sponsor planning stages, final archeological reports cannot and should not be stereotyped. Variation in report content and presentation is both necessary and desirable under certain circumstances. At the same time, much resource management work is or will be similar, and consistency in report coverage and presentation should be expected. Consistency will insure more reliable negotiations of project report requirements at various stages of planning, better evaluation by sponsors of reports submitted, and more applicable reviews of reports by the professional community and review agencies. On the other hand, "consistency" must never provide a cover for unthinking conformity.

Cultural resource management report content at various states of project development should reflect adequately the level of study completed. Variation, therefore, is to be expected. There are, however, certain categories of information which should ap-

pear in every report, and variation should be adequately justified. For each of the five classes of reports outlined below, which reflect the five research activities defined earlier, there are seven categories of information which should be included.<sup>12</sup>

**Abstract** A scientific abstract (not an annotation) of pertinent findings, conclusions, and recommendations should be provided.

**Management Summary** If a report is directed in part to an audience of project planners and/or managers who will use it as a base for decision making, a short one-to-four page management summary is desirable which will provide the decision maker with all essential data in a concise manner. This summary should include such elements as: why the work was undertaken, a summary of scope of work and budget, limitations encountered in carrying out the scope of work, the results, their significance, and any recommendations (including cost estimates), with references to the main body of the report. The repository of the records and artifacts also should be noted.

**Introduction and Description of Study** Identify the sponsor, and sponsor's reason for the study; provide a general statement on the nature of the archeological study to be undertaken; give details of location and boundaries of the study area; place study area in its cultural and regional context; identify, when possible, all impact areas (direct, indirect, potential); refer to scope of work and budget, both of which should be included as an appendix; include a categorized breakdown of person-days utilized on the project. In any study reporting on field research which resulted in the collection of artifacts or other data, the disposition of these artifacts as well as the disposition of original records and data should be set forth.

**Effective Environment** Describe the environmental setting considering relevant phenomena such as geology, vegetation, fauna, climate, and topography in as broad a context as possible (contemporary, historical, ethnographic, prehistoric). The relationship of the environmental setting to the cultural resources of the study area should be emphasized. Simple species lists do not provide this information. If this research has been adequately performed in another recent publication that publication can be referenced with the most pertinent data summarized and any aspect particularly critical to the present study discussed.

<sup>12</sup> For projects conducted under the authority of the Archeological and Historic Preservation Act, regardless of sponsor agency, certain specific formal requirements have been issued by IAS to facilitate microfiche filing and retrieval. For details see 36 CFR 66, Appendix A.

**Research Goals and Strategies** Make a specific statement of the sponsor's and the discipline's goals for this study; discuss the theoretical base of the researcher's orientation; describe the specific research strategies to be applied in achieving the goals. This should constitute the final version of the research design (see page 72).

**Methods of Data Collection and Analysis** Describe and, if appropriate, justify specific archeological activities undertaken to achieve the stated goals (e.g., literature search, specialized studies, sampling and/or other field techniques, ancillary research).

**References** Provide standard bibliographic references for every publication cited in the report.

If we take the above categories of information as necessary for all archeological reports, then there are other categories which are more specific to the different levels of research activity being undertaken. In order to provide the most specific detail possible, the five recommended classes of reports are outlined below, with a summary of their general nature and an outline of the content categories. Where these categories are specific to that level of report, detail is provided.

### Overview Report

Overview Reports normally are provided for general management programs on some kind of regional basis. Presented information reflects current knowledge of the nature, distribution, and significance of cultural resources within the study area. Recommendations may be made concerning the direction of future research, and predictions as to potential impacts on the resource base might be appropriate. Provision of the exact location of known sites is not necessary or appropriate. The report should contain the following categories of information:

- Abstract
- Management Summary
- Introduction and Description of Study
- Effective Environment
- Research Goals and Strategy
- Methods of Data Collection and Analysis
- Summary of Current Knowledge: Review and summarize the information on cultural history and culture process derived from a records check and literature search; discuss the relation of the resources to the effective environment, provide insofar as possible and within the limits imposed by available information, predictive statement on site density and distribution.
- Inadequacies in Current Knowledge: Discuss the reliability of available data; identify areas of inadequacy in data within and without the

study area for dealing with relevant culture history, culture process, site location and density; discuss deficiencies in supportive (ancillary) studies; provide an evaluation of past research.

**Cultural Resource Management Options:** Outline known and predicted impacts in the study area; discuss the potential in the study area for future archeological and historical research; recommend research, preservation, and protection priorities in regard to sponsor planning goals; make preliminary recommendations with respect to the eligibility of sites for national and other registers if the data permit; suggest methods of interpretation of resources to the public.

**Research Tools Available:** Provide a listing of collections, field records, and archives related to the archeology of the study area and their location; provide a bibliography of preliminary and secondary archeological records and reports for the study area.

References

### Archeological Assessment Report

Assessment reports usually are prepared for area more limited than overviews or for specific sponsor projects. The scope of the report should be more explicit in terms of potential impacts on cultural resources. Avenues of research are explored more thoroughly, especially as they pertain to possible project alternatives. This type of report should include evaluations of all known and feasible project alternatives, and additional detailed research, sufficient to predict the probable nature and distribution of the archeological resources present. The report should contain the following categories of information:

- Abstract
- Management Summary
- Introduction and Description of Study
- Effective Environment
- Research Goals and Strategy
- Methods of Data Collection and Analysis
- Summary of Current Knowledge: Review should include results of field orientation and other research as well as an updated records check and literature search; it should be possible to provide predictive statements on site density, nature, and distribution though this may require some field research; if so, there need to be additional sections on "Analysis of New Data," "Summary of New Data," "Comparisons of New Data," and "Results."
- Inadequacies of Current Knowledge (see Overview)
- Evaluation: Evaluate the known and predicted resources relative to impacts; discuss potential of study area for future archeological and histori-

cal research, resource protection, and resource preservation.

**Recommendations:** Recommend research priorities; provide specific research suggestions and a cost estimate for the next stage of archeological research (Archeological Reconnaissance or Intensive Field Study) with regard to sponsor planning goals and viable sponsor alternatives; evaluate the eligibility of the sites for the national and other registers where appropriate and if the data permit.

**References**

### **Archeological Reconnaissance Report**

Archeological Reconnaissance reports are prepared for limited geographical areas but usually at a more developed level of project planning (e.g., the Alternative Design stage) than an Assessment. Impact areas and degree of impact can be defined more precisely, providing for more refined research programming. Evaluations are based on more extensive field data in addition to data already recorded. This additional field data may require revisions in or additions to the archeological evaluation of project alternatives. Reports at this level should provide detailed evaluations of project alternatives with respect to archeological resources, should evaluate the significance of the resources known or predicted to be present and should recommend any research necessary at the Intensive Field Study level and/or for mitigation. If project planning is speeded up, this level of research can be bypassed so that the Intensive Field Survey phase is entered directly. The report should contain the following categories of information:

Abstract

Management Summary

Introduction and Description of Study

Effective Environment

Research Goals and Strategy

Methods of Data Collection and Analysis

**Analysis:** Describe and justify analytic techniques and activities; discuss the classification of the data recovered; describe quantitative and qualitative manipulation of the data recovered for establishing culture history and culture process.

**Resource Synthesis:** Summarize the relevant data. Include sufficient empirical data to allow for independent assessment of research results. Some data may be presented in tabular form if appropriate, and may include: site physical characteristics, amounts and kinds of material objects found; relations of sites to land forms and impact areas, cultural analysis, identification and age. Some descriptive information may be more appropriately placed in appendices to the report.

**Evaluation of Research:** Discuss the reliability of data; relate results of analysis to stated goals; identify change in research goals; synthesize and compare the results of the analysis, integrate the ancillary data, identify and discuss perceived patterns and relevant processes.

**Evaluation of Cultural Resources:** Provide predictions on distribution and densities of sites; evaluate the significance of the resources; identify the potential for future research.

**Recommendations:** In addition to information mentioned under this category in Assessment, at this stage of research it is necessary to outline the various choices with their advantages and disadvantages with respect to the cultural resource base.

**References**

### **Intensive Field Study Report**

Intensive Field Study reports are project specific and represent the results of thorough survey and records research on specific impact areas. The degree of impact is identified and alternatives to adverse impact, including recommended final project modification and variations in research programs, are discussed. Reports at this level provide a firm evaluative basis for project and research decision making at the Final Design stage recognizing that at this time only relatively small changes are likely to be possible. Nonetheless, recommendations for project alternatives are still appropriate at this level if based on substantive information recently developed. The intensive field study provides the necessary firm basis for the development of detailed recommendations for excavation or other mitigation. The report should contain the following categories of information:

Abstract

Management Summary

Introduction and Description of Study

Effective Environment

Research Goals and Strategy

Methods of Data Collection and Analysis

Analysis

Inventory of Resources

Evaluation of Research

Evaluation of Cultural Resources

**Recommendations:** In addition to information required under Assessment, at this stage it is appropriate to propose final mitigation alternatives and provide cost estimates for each.

**References**

### **Mitigation Report**

Mitigation has been defined as the alleviation of adverse impact by taking action to avoid, protect, or investigate scientifically the resources. Correspondingly, the type of report prepared for mitigation will

depend upon the final decision of the project sponsor regarding project implementation. If cultural resources will not be adversely impacted by the project as a result of project modification or permanent cancellation of the project, nor further formal report may be necessary, although recommendations for future protection of cultural resources in the project area are appropriate.

### *Avoidance or Protection Studies*

If a project proceeds, but project sponsors agree to implement necessary avoidance or protection measures (e.g., fencing, burying) for cultural resources, a mitigation report may be appropriate to document this decision, provide a review of the recommended protective measures, summarize the implementation of these measures, and ideally, evaluate the effectiveness of these measures. Although evaluation may require a time lapse following implementation of protective measures, these data would be valuable to future preservation programs.

### *Investigative Studies*

If a project proceeds and adversely affects cultural resources, some level of scientific study and data collection will be necessary. The level of study and intensity of data collection required are determined by the investigative needs within the constraints imposed by the particular effects of the project on the resources, the availability of funding, logistic requirements for data recovery, etc. Investigative reports are based on the results of field studies, and, although report formats may vary because of the nature of the investigation, a report should, in general, contain the following categories of information, though not necessarily in this order:

Abstract

Management Summary

Introduction and Description of Study

Effective Environment

Research Goals and Strategy

Methods of Data Collection and Analysis

Analysis  
Summary of Analysis: Summarize and relate relevant environmental, historical, archeological, and ancillary data; discuss intrasite relationships; provide a synthesis of the results of the analysis.

Comparative Synthesis: Place the above synthesis in broader perspective through comparison with relevant studies.

Results: Summarize the above research syntheses, particularly with regard to new data added to our information pool.

Evaluation of Research

Evaluation of Cultural Resources

Recommendations: In addition to that information required in the above categories, it is appropriate here to discuss possible site or area development and/or interpretation. Normally there should be a statement to the effect that, on the basis of all presently known or controllable factors, archeological clearance should now be granted. If appropriate, it should also be noted that there is a continuing need for archeological monitoring of subsequent land alteration activity during construction.

References

### **Absence of Cultural Resources**

In the event that no cultural resources have been identified as being present in areas affected by a project, a letter report may be submitted. Information in the letter report should include the following:

(1) A description of the area examined and its relation to the project(s); if necessary for clarity a map showing the project boundaries should be included at a scale adequate to identify the surveyed area.

(2) A brief description of the scope of the work, in relation to the examination procedures used including size of area studied, extent of coverage, and person-days utilized.

(3) An assessment of factors beyond the control of the investigator (e.g., ground cover, access refused) which affected the determination that no cultural resources are present.

(4) A statement that on the basis of all available data no cultural resources are known to be present and a recommendation that archeological clearance be granted.

(5) If appropriate (because of the likelihood of buried sites or other factors), adequate monitoring of the land alteration activity should be recommended.

### **THE EVALUATION OF REPORTS**

Mechanism for review should include both a critique by the discipline and sponsor evaluation. Review procedures insure that the contractor (individual or institution) is maintaining basic standards for meeting the needs of the sponsor and the law by producing research results relevant to current archeological inquiry on a scale appropriate to the project.

Review at the professional level may be organized differently in various states or regions, but basically consists of peer evaluation wherein the profession attempts to establish research standards and upgrade its performance by drawing on the expertise of a number of its members. All major research designs, and final reports prepared for management research should be reviewed for quality of research content by an objective group of professional peers.

In some cases this can be done effectively within the contracting institution, or outside reviewers may be solicited. Peer review of a major project, while it is in process, may also provide valuable input while there still remains an opportunity to implement recommendations.

The review process at the agency or sponsor level is a procedure to protect the sponsor by providing an evaluation of a management research project by a professional(s) aware of both relevant management needs and archeological considerations. This type of review is designed to insure that a product is in compliance with all legal and contractual requirements. Many sponsors employ professional archeologists who become familiar with legal strictures and sponsor-specific needs for this process.

Sponsors should also see to it that relevant cultural resource management proposals and all reports are sent to the State Historic Preservation Officer in each state affected by the project in order that the agency can facilitate the review process.

In every case the reviewer should first consider the planning stage as it relates to the scope of work set forth for the research. If there are problems or areas of concern here these should be noted. Both the sponsor and the archeologist have a responsibil-

ity here. Once the scope of work has been evaluated (which implies that it must be incorporated in the report, not now a universal practice), the various constraints imposed on the research (technical or financial restrictions, field complications beyond the ability of anyone to predict) must be reviewed and their effect on the end product assessed. Only then can the research be properly evaluated.

This research evaluation should take the form of a critique of the methods employed and the end product produced in relation to its scientific validity and its appropriateness in the context of various regional research designs. The scientific end product and any recommendations should be reviewed against the planning stage and resultant administrative decision-making needs of the agency. Special note should be taken of innovation techniques utilized or potential opportunities lost.

If the report being reviewed is for a draft or final EIS and has already been published, in addition to the authors, the sponsor, the SHPO, the appropriate National Park Service Regional Director (who has EIS review responsibility), the President's Advisory Council, and the CEQ should be apprised of the review when it is felt that the report is in any major way defective.

# 4 The Crisis in Communication

## EDITOR'S PREFACE

Somewhat to the surprise of all members of the Communication Seminar, the Seminar discussions proved to be most concerned with the problem of increasing communication between the archeological profession and an increasingly wider audience. True, some attention was devoted to how archeologists can better communicate among themselves, but the major thrust was that the principal concern today was in the area of communicating archeology to others. Without an increased base in public support resulting from an increased public awareness of and appreciation for archeology, the profession will be in for a very rough future.

Nathalie Woodbury undertook the task of first making our sometimes rambling discussion into a coherent whole. Her draft was then reworked by Bob McGimsey and tied in more closely with the other chapters of the volume which Nathalie, of course, did not have available.

The Airlie discussions and subsequent developments pointed out the urgent need for more rapid and effective communication not only among professional archeologists but also with all individuals interested in archeology. It is our belief this could involve a tabloid-sized newspaper which could revolutionize information flow to the vast benefit of archeology, its practitioners, interested bystanders, and the public as a whole. Another major need touched upon by the seminar is for a central office manned by a professional staff. Until a way is found to provide for a centralized communication hub, archeologists will continue to suffer from an underdeveloped and inappropriate public image and from inefficiency brought about by being inadequately informed. The medium for more rapid communication and a central office will be difficult goals to attain and will require the dedicated efforts of many individuals.

## INTRODUCTION

Any discipline which does not communicate adequately to its own followers and to the general public cannot contribute to an area of knowledge, let alone prosper or even survive. The need to increase and upgrade communication constantly escalates with the growth of a profession and with increases in its activity; the need becomes critical when special demands are made upon that discipline.

Archeology deals with the fascinating history of man. It also is an exciting scientific enterprise with interesting results. But there are other equally important reasons for developing and maintaining an ability to communicate. Archeology depends on a limited and constantly decreasing resource base, and support and understanding by the widest possible audience is needed if that resource base is to be utilized to its maximum capability. Since much archeological research is supported by public funds, professional archeologists are under an obligation to inform not just their colleagues but also the gen-

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eral public of the results of that research. They now also have an obligation to advise those responsible for making decisions concerning the archeological resource base so that those individuals can make the best decisions concerning its use.

## THE CRISIS

Archeology, traditionally the more action oriented, but often the most intellectually introverted, subdiscipline of anthropology has reached the point where more effective communication within and without its boundaries are urgently needed. Despite its popularity with the lay public, who can participate in a way that is not possible in other areas of anthropological research, widespread understanding of archeology, as distinguished from simple popular interest, is still lacking. Furthermore, despite archeology's position as one of the four principal fields within anthropology, the generalizations derived from archeological data often are not presented in an understandable or useful manner to other anthropologists and their students.

This weakness in communication has been brought sharply into focus by the upsurge in archeological activity resulting from legislation requiring appraisal of sites threatened by the advances of our technological civilization. Increased contract activity by archeologists has brought the profession even more into public view. It also has served to remind the social/cultural anthropologists that there exists a rapidly expanding potential source of information on such topics as cultural growth, social change, and demographic problems.

To respond to the existing public interest adequately, to provide usable data for the anthropological study of human beings, to protect basic cultural resources so that they may receive maximum consideration and conservation, will require many changes in the type, quality, quantity and direction of communication, both within the profession and from it to other audiences.

The cause of this communication crisis is not just the legislation requiring the utilization of archeologists in environmental impact statements and related reports. While this might be viewed as a triggering mechanism for a reconsideration of the nature and lack of success of archeological communication, there are other causes of longer standing and certainly of more far reaching concern: the ever-growing awareness and interest of the public (and the response to this interest by the media, ranging from excellent through misleading to fanciful), highway development and leisure time resulting in increased travel, the population explosion which brings encroachment on sites by increased land alteration, an increase in the number of school, college, and other organizational groups such as Boy Scouts who study archeology and then wish to participate in field situations, and increased diversity among archeologists themselves in their approach

to the resource base. All of these conditions and others are threatening this resource base and have created the need for changes in the basic communication patterns. The public's right to know is exceeded only by the archeologist's need to know what is going on among his colleagues.

## ARCHEOLOGY'S VARIED AUDIENCES

At least three distinct, rather widely diversified, but nonetheless overlapping audiences can be identified. The manner and media required to communicate effectively with each of these, the nature of the information to be communicated, and the problems inherent in establishing effective communication will vary depending upon the audience. It is convenient, therefore, to subdivide the remainder of this discussion on the basis of these three groups: (1) those actively participating in and contributing to archeology; (2) the more passively involved general public; and (3) those individuals who, because of their ownership of land or their administrative position and activities, must by law or moral obligation take the archeological resource base into consideration during the course of their decision-making activities and/or their own business or professional activities.

In all cases it is necessary to communicate, by whatever media, clearly, concisely, and precisely. It is not only permissible but appropriate for communications directed to the active participants in archeology to be couched in specialized terminology and set forth in rather elaborate detail. When communicating with the general public it must be kept in mind that the majority of them will not have the specialized knowledge or vocabulary possessed by the active participants. Therefore the language employed must be understandable to the person on the street. For this audience the amount and kinds of detail may be different and sometimes must be bolstered by background information which would be superfluous to a professional audience. In communicating with those making decisions affecting the land and therefore potentially, the resource base, it is necessary to provide the type of information which these individuals need in order for them to take into account the effect of their decisions on that resource base. This information cannot be phrased in professional jargon; the necessary specifics must be provided in a manner and in a language which the decision makers can rapidly accommodate to their own needs.

## COMMUNICATION AMONG ACTIVE PARTICIPANTS

A number of similar though disparate audiences, with constant intergrading among them, make up the active participants in archeological activity. There are the professionals, normally with advanced degrees who are engaged in the vocation of archeol-

ogy as teachers, research personnel, or administrators. There are also students training for professional level activity in one or more of these three areas, ranging from undergraduate college majors to those in a postgraduate capacity.

In addition, archeology is fortunate in that it has attracted and can utilize effectively a wide variety of avocationalists who spend varying amounts of time participating in archeological field, laboratory, or other research, and who often bring to the profession backgrounds in other disciplines which serve archeology well.

Finally, there are professionals trained in other disciplines who utilize archeological data and contribute to its development as an adjunct to their own professional activities.

### Present Approaches

Active participants in archeology need a wide variety of information. This ranges from discussions of theoretical propositions and scientific laws, to details on methods and techniques developed, and to basic data and descriptions. The end products of research, the analytical interpretations, are needed by all, as well as evaluations of these results by those doing the research and by their colleagues.

#### Monographs

Information on current research has traditionally been communicated in a number of ways. For reporting the results of research of considerable scope, the most frequent mechanism has been the monograph—the published archeological report normally distributed through a museum or university, though occasionally by commercial publishers. These reports record, in what is considered to be adequate detail, all the information on that project needed by other archeologists.

#### Journals

Publication in professional journals is a major communication mechanism among active participants. These include such nationally oriented journals as *American Antiquity*, *The American Journal of Archaeology*, *the Journal of Field Archaeology*, *Historical Archaeology*, and, in some cases, *Current Anthropology* and *the American Anthropologist*. Other journals such as *Archaeology*, serve as a common ground between the professional audiences and the informed lay public, while journals such as *Science* serve as links between the archeological profession and other disciplines.

Regional coverage even within the United States, is by no means complete. A number of journals such as *Plateau*, *El Palacio*, and *Kiva* have served well in the southwest as, in another area, has the *Plains Anthropologist*, while *Archaeology of Eastern North America* and *Man in the Northeast* well serve that

section of the country. The *Midcontinental Journal of Archaeology* has just appeared on the horizon, and the Southeastern Archeological Conference has been discussing issuing a regular journal. Even so, major sections of the country are not served.

State journals normally derive their financial backing and readership from avocationalists working in cooperation with professionals rather than from the profession itself. There are a number of excellent journals of this nature, such as the *New York State Archaeological Association Bulletin*, *The Pennsylvania Archaeologist*, *The Missouri Archaeologist*, *The Massachusetts Archeologist*, *The Journal of Alabama Archaeology*, and the *Bulletin of the Texas Archeological Society*, but well over half of the states have not developed such publishing capability.

Information on major excavations or survey programs normally is made available in full-scale archeological reports, though all too often there is an inordinate time delay between the completion of the field research and the availability in print of the resultant data. In the Old World particularly, but also in the New, the time lag sometimes amounts to one or more professional generations, an incalculable loss. In instances too numerous to be comfortable, there is no report at all.

The information included within journals covers a much wider range than that normally found in archeological reports, ranging from trivia to substantive, technical articles directed toward either original data or theory, or both. The journals provide a much more rapid mechanism for making information available, but even here it can range from three or four months on the state level to twelve or even twenty-four months or longer on the national level.

The suggestion has been made that the role of national journals, such as *American Antiquity*, should be devoted to an integrative role for the entire profession, largely restricting their content to regional summaries, or to articles which are of profession-wide interest (though perhaps using a particular site as an example).

It follows from this philosophy that organizations such as the Society for American Archaeology should encourage the development of regional journals to provide useful outlets for substantive articles which are of primary importance to a particular region rather than to the profession as a whole. (The Society for American Archaeology recently provided just such encouragement to the *Midcontinental Journal of Archaeology*). The fact that a considerable portion of the country does not have such outlets is obviously of great concern and it cannot be assumed that the various state journals adequately fill these gaps. For one thing there is no nationwide distribution of regional and state journals and, equally important, the distribution of these journals does not always cover the audience to which the information contained might be relevant. This flaw could be remedied partially by more widespread communication of journal contents, so that individuals and

agencies who were in need of information found in a particular state or regional journal could subscribe or obtain particular issues of interest to them. As yet, no such mechanism exists. An abstracting service is an obvious need of the profession.

### *Newsletters*

A major mechanism for communicating news of specific interest to archeological participants is that of the various newsletters. While journals tend to be national, regional, and state oriented, most newsletters are state, local, or subject-specific in orientation. The possible exception is the *Anthropology Newsletter* which is directed to both a nationwide and profession-wide audience. The other nationally-oriented newsletters restrict themselves to particular research areas, such as the *Newsletter of the Society for Historical Archaeology*, *The Newsletter of Lithic Technology*, or *The Newsletter of Computer Archaeology*.

A wide variety of data is published, usually on a monthly basis, in state and local archeological society newsletters, ranging from information of basic and long-lasting importance to personal reports which might be of considerable interest to certain readers but which have little permanent or scientific significance. Again, distribution of and information about these state and local newsletters tends to be a problem, so that information of considerable scientific importance published therein does not necessarily reach the appropriate audiences.

The specialized newsletters, on the other hand, fulfill a very real function, for they normally are directed to and read by those individuals who have an interest in that particular specialty. Such individuals normally are aware of the availability of such a publication and avail themselves of it.

### *Reviews*

The final area of written archeological communication currently available is the evaluative review. For years this was restricted to book and article reviews published in journals or, occasionally, in newsletters. In a period when reports were not overly numerous and projects were not particularly extensive, the fact that there was often a long delay before these reviews were published may not have been particularly critical. Now, however, delays of this magnitude are intolerable, for too much will have been done in the interim. Peer review of current research is a quality control mechanism. Such communication must take place quickly if it is to be useful at all. This problem is heightened by the fact that many journals have reduced their review sections. There are, of course, other forms of peer review which are operative, including formal and informal conversations at meetings and similar "passing of the word." Nonetheless, there is little question but that the profession needs a more effective

evaluative mechanism, one which operates more rapidly than at present.

One mechanism being experimented with in Arkansas, and perhaps elsewhere, is that of incorporating peer reviews of a report with the final publication. It remains to be seen how effective this approach will be. (It might be noted that on extensive field projects, Arkansas is also bringing in outside reviewers approximately one-third of the way through the field season.) In this way the field research itself can benefit from outside evaluations. Research designs for major projects could also be subjected to the review process.

### *Meetings*

Local, state, regional, and national meetings form a major mechanism for exchanging basic information of a theoretical or substantive nature. At these meetings papers are presented and discussions, formal and informal, are held, in which an extraordinary amount of information is exchanged. Such meetings provide an excellent mechanism for remaining up-to-date on what is going on in the profession. In the best of circumstances, however, this information exchange is only among relatively small groups, with little assurance that a major portion of the people who should be party to particular information will actually know of it prior to its publication. Further, with present increasing budgetary restrictions on travel to meetings, it may well become impossible for this particular communication mechanism to operate effectively. It can only be hoped that administrators and others controlling the purse strings will recognize the continuing importance to professional growth of such interpersonal exchanges.

### *Training Programs*

There are in some states opportunities for professionals and avocationalists to communicate through training programs. If handled properly, this can vastly increase communication. In several states, such as Arkansas, Kansas, New Mexico, and Texas, increasingly elaborate and competent training programs not only permit but encourage concerned, nonacademically-trained individuals to participate in and contribute meaningfully to professional level archeology.

### *Summary*

It must be concluded that the current mechanisms for communication among active participants in archeology are something less than adequate. National journals, perhaps quite properly, are increasingly restricting their presentations to articles of general interest, major review articles, or general news. Information in regional and state journals or newsletters does not reach a wide audience. Ade-

quate review mechanisms and abstracting services are nonexistent.

Increased financial restrictions have led to the suggestion that meetings be larger, held less often, or that several organizations could combine their annual meetings. This solution, while having certain advantages, obviously will decrease the ability to communicate on a one-to-one or small-group basis. All in all, the present picture is one of inefficient and ineffective communication.

### **Possibilities for the Future**

A number of ideas have been suggested to alleviate this situation. Certainly none of them can be considered a panacea, but perhaps institution of a number of them, and/or others, plus improvement in traditional mechanisms for communication, will enable archeology to handle the situation more adequately.

#### *A Central Office*

A constantly recurring theme has to do with the advantages of having some central communicative hub for the profession. This might be in Washington but need not be. There are good arguments for that location: close association with federal agencies, and the central headquarters of many related organizations. On the other hand, the headquarters of the American Association of State and Local History, perhaps the most efficient and effective national organization of a similar nature, is in Nashville, Tennessee.

Anyone familiar with the Society for American Archaeology should be aware that it is not reasonable to expect that the Society within its present structure to assume the responsibility for a central office. For example, all officers assume their Society duties in addition to their normally more-than-full time responsibilities as teachers, researchers, administrators. Minimal financial resources are provided them by the Society, so they are dependent for support on their home institutions. It is no criticism of any Society officer to say that when a local crisis arises, which he is being paid to handle, the more diffuse responsibilities of the profession must inevitably take a back seat. Such an administrative situation obviously cannot provide the type of innovative continuous response which the profession needs at this time.

Just what sort of response is needed and what would be the functions of such a central hub? Such a center could provide a base for rapid communication within the profession, as well as for communication between the profession and others. For example, it could and should maintain an active, regular liaison with radio, television, and public broadcasting systems, working to increase understanding of archeology, archeological ideas, and archeolog-

ical resources. This would help insure that information is presented accurately and in a manner appropriate to each media. Contacts also should be maintained with newspaper editors and other publication sources on a continuing and regular basis.

Active liaison could also be maintained with other scientific or interest groups with similar concerns. In addition, it would be to archeology's advantage to develop contact with groups responsible for developing school curricula, such as the National Council for the Social Studies or, with local or governmental organizations such as the National Association of County Officials. Of course, continuing contact with federal agencies whose programs and activities are of daily concern to archeology would be of continuing advantage to the profession. The profession currently has no capability for accomplishing any of these contacts on a regular or sustained basis.

A central office could monitor federal and, to some degree, state legislation in order to keep the profession informed in a timely manner. In somewhat reverse direction, it could provide a home base for the profession, a place to call for information and advice as to how others were handling particular problems. Personnel of such an office would be obligated to attend regional and national archeological meetings, providing a further communication link.

Other possible services of such an office might include maintenance of a file on resources and resource people, development of a speaker's bureau, creation of video and sound tapes, as well as other informational devices, which could then be promulgated regionally or nationwide, depending on their applicability.

The recently organized Society of Professional Archeologists (see Editor's Preface to Chapter 6) has as one of its goals the development of a central office with a professional staff.

#### *A Newsletter or Newspaper*

Another major need of the profession is rapid up-to-date news of what was going on nationwide and, indeed, worldwide. There is currently no mechanism for individuals within the profession to keep in touch with how others are solving problems. There is a rapidly changing job market, and there are numerous other areas of information which can be useful to the profession only if communicated quickly. Finally, as the field expands, it is becoming increasingly difficult simply to keep in touch with what is going on beyond one's own immediate contacts and yet it is essential that scientific archeological research be carried out in a topical and theoretical context which is both broad and up-to-date. A logical mechanism to fill this need is a newsletter, or newspaper. A newsletter issued bi-weekly, or monthly at the very least, similar to *Preservation News*, would be most effective.

## Abstracts

Another necessary communication device presently unavailable to the profession is a compilation of abstracts of archeological reports. The Intergovernmental Archaeological Services Division has recently announced that it will publish with its annual report, abstracts of all reports done under authority of the Archeological and Historic Preservation Act. This will vastly improve the profession's ability to benefit from current research across the country. But there is still a lot of research being performed that is not done under federal contract that needs to be made available. Professional journals which do not include abstracts of articles need to change this policy, and an abstracting service, even a commercial one, striving for complete coverage (as occurs in other professions) should be encouraged. (Communication would also be enhanced if archeologists would learn the difference between annotations and abstracts.)

## Distribution of Data

A final area of concern has to do with the actual publication and distribution of information. Obviously costs are rising to almost prohibitive levels. A means must be developed whereby information is distributed or otherwise made available to the audience who needs it most. This is going to require some decisions as to the size of publication runs, and to the possibilities of distribution to regional or state repositories, so that archeologists will know that all necessary publications are available to them. In some areas, there are already repositories of at least limited means. A number of state societies, for example, maintain libraries of materials relevant to their particular area from which members borrow. This is an approach which the profession as a whole might consider.

The development of alternative mechanisms for the promulgation of the archeological data itself must be seriously considered. Traditional publication through printed reports and journals is costly and inefficient. It is suggested that the profession should investigate thoroughly the possibilities of utilizing microfiche. A traditionally published product doubtless is desirable for those who are going to use it frequently, but seldom is the cost warranted for those who might have only occasional use, however vital that occasion might be. Having the data available on microfiche would be eminently feasible in terms of cost and space and, while somewhat less convenient than a conventional report, should be acceptable to the occasional user. Furthermore, a considerable quantity of basic data could be published in this manner so that the few individuals who vitally need this detailed information would have it readily available without burdening the publisher or purchaser of the summary data with paying for ac-

cessibility to all of the data recovered and reported upon.<sup>13</sup>

The profession's microcard series suffered partially because it was new and different, and partially because it was inconvenient. Microfiche may suffer some of these same difficulties, but in general would appear to provide a more viable alternative and certainly one to be preferred to having publications of astronomical cost or inadequate distribution. Adjustments other than personal accommodation to the use of such documents will have to be made however, for them to become a viable entity. For example, publication through such a mechanism will have to be accepted as a valid and appropriate means of publication and one which receives commensurate professional rewards through tenure and other practical results. Nonetheless, the need and the urgency is so great that the profession cannot any longer afford to ignore this approach.

Finally, the concept of videodiscs may add a whole new dimension to the storage and retrieval of data.

## Other Approaches

There are two other approaches whereby communication among active archeological participants might be increased. One of these would be for organizations to sponsor a series of seminars and/or workshops which would make specialized knowledge available to a much broader audience than now is possible.

A second idea is for organizations to increase the number of official ambassadors they now have to other related groups. At present, for example, the Society for American Archaeology has an official representative with the American Anthropological Association, the American Association for the Advancement of Science, and the Committee on the Recovery of Archeological Remains. Consideration should be given to having official representatives exchanged among the Society for Historic Archaeology, the Archeological Institute of America, the Association of Field Archeology, the American Society for Conservation Archaeology, and perhaps the American Association for State and Local History. Close coordination also should be maintained between the Society of Professional Archeologists and all other organizations.

A number of other serious problems have been recognized. Without any question they all relate to the most serious problem of all: a lack of real desire

<sup>13</sup> In 1976 IAS instituted a microfiche program for reports submitted under the authority of the Archeological and Historic Preservation Act, through an agreement with the National Technical Information Service. This program is quite new, but it is IAS's intention to eventually work through the backlog of unpublished reports to the National Park Service and, if possible, other agencies, and make them available through this program as well. Agencies are also encouraged to submit reports prepared under other authorities for inclusion in the program.

on the part of many members of the profession to communicate adequately even within the profession, much less to the general public, or to those responsible for resource management.

It is not that archeologists don't want others to know what they are doing, but rather that they often have not made the effort, much less seen the need to communicate. Now that the crisis is upon us, we must find solutions or archeology cannot expect, nor will it receive, the support (fiscal and moral) that it needs and deserves.

## COMMUNICATION TO THE GENERAL PUBLIC

A large majority of the American public seems to be of the opinion that archeology is a "good thing," that the protection and investigation of our heritage from the past is important. A vast number of that same public knows precious little about archeology or its results, much less how it might have some applicability to their own lives, over and above the level of pure curiosity. There is, however, an ever-increasing chance that these individuals will be impinged upon by archeology. This impingement might be indirect through legislation that requires environmental impact studies or conservation education paid for through taxes, or direct by request by archeologists to survey or excavate on an individual's land, or by requests that the individual give consideration to the archeological resources on land he/she owns or controls. It is incumbent upon the profession to inform these people, both individually and collectively, about archeology and why they should be concerned with it. Otherwise they may not react properly and appropriately and the resources will be lost.

Finally, communicating to the public does not, in any way, involve a lowering of professional standards. The profession should take a positive attitude toward informing the public through the media, and most realize that this is an extraordinarily demanding professional charge, one that should be appropriately recognized when evaluating professional effort. Interpreting archeology to the public is as demanding scientifically and intellectually as interpreting the materials that come from the ground to one's own peers.

### The Audiences

For our purposes, the general public can be categorized into those who are personally motivated toward archeology and those who have at best an intermittent or essentially no concern. The first group, while not actively participating, will nonetheless seek out popular publications on the subject, tune in to TV specials, take the initiative to view museum exhibits, tour parks, and in other ways express this semiactive interest in archeology.

The second group consists of those who might find themselves involved by accident—because their children insisted they be accompanied to a museum, or because there was nothing better on TV than spectacular shots of archeology at Tikal. On the other hand, there are any number of specialized groups within this second category with which the archeological profession needs to particularly concern, such as media personnel, teachers, members of minority groups, and pothunters. The archeological profession must communicate effectively with these and other subgroups if there is to be any hope of conserving and obtaining maximum scientific benefits from the archeological resource base. Though the resource managers discussed below make the final decisions (and though many of these decisions will inevitably remain on an individual or even capricious basis), nonetheless these final decisions will reflect the desires and needs expressed by the general public.

There are, of course, some problem areas in communicating with the general public. Doubtless there always will be certain individuals, generally labelled "pothunters" who are either unconcerned or simply unaware of the damage they are doing to the resource base. It is important to the profession that communication is maintained with these individuals. In individual instances it may be impossible to convince them to adhere, to whatever degree, to proper scientific methodology. It certainly is impossible if you do not talk to them at all. Even those individuals that show no prospect of being converted can be helpful in giving information on what they find, which again would be a total impossibility if they had been alienated because of the attitude of the professional. Destruction of sites or materials by pothunters should not be supported or condoned in any way, but it should be possible to remain in any communication with such individuals without doing either. At least the attempt should be made.

One major area of professional neglect in public communication has been in the education of graduate students. All too often graduate students are subtly, perhaps even unconsciously, taught to express themselves in a manner and in a language characteristic of one or another approach to archeology, some of which can be rather esoteric. This is not, in itself, necessarily erroneous in that many of these efforts are directed toward development of more exacting scientific terminology. Nonetheless, there needs to be equal training in the ability to express ideas to nonarcheologists. There also needs to be much greater emphasis on the fact that all archeologists, from the undergraduate level onward, should consider public relations as a major professional responsibility.

It is unfortunate perhaps that the most immediate need is not so much to educate the public as to educate the profession to the need for communicating *with* the public. *This* may be the first step. The profession can not expect the public to develop and

maintain *on their own* attitudes favorable to archeology and appropriate to the archeological resource base.

### The Information

The results of archeological research and interpretation must be presented to the public in language and in a format which will both hold the attention and catch the eye. The profession must present the human story being developed, as well as the importance of that story to all of us both now and in the future. Only in this way can the value of archeological materials and the proper management of the resources to be demonstrated. In fact, unless the profession can and does communicate these results to the public, the justification for its existence will be called into question. This need certainly presents the profession with a challenge, but not an impossible one. The basic interest is there. Archeology often uncovers new and spectacular things and from these, develops ideas which can be new, exciting, even spectacular. These items and ideas often are in themselves newsworthy and could and should be reported as such. But just conveying the new or the spectacular is not enough. Archeologists should convey the idea that *all* the results of research are both exciting and significant, not only to themselves and their colleagues but to the general public. There should be a strong desire to share this excitement with others.

This could be overdone of course, for there is always the danger of creating a desire on the part of individuals to get involved on their own without adequate supervision because of a false sense of scientific competence. The profession should do everything possible to encourage participation by a wide variety of individuals but always under circumstances where their participation would be accommodated in a responsible manner.

To communicate effectively with the general public, members of the profession should actively seek out the media and be available to them. An individual going into an area to do archeological research must keep the local residents informed through the local media, by reporting on the work to local civic groups, and perhaps to the local schools. It is assumed that archeologists no longer go into an area to do research without making their presence and purpose known to the local legal and legislative authorities.

An archeological logo would be extremely useful as an aid in general public identification of and with the nation's archeological heritage.

Information should be presented to the public in a manner that is understandable without being condescending; it should be accurate, readable, timely, believable, understandable, and appropriate to the media selected. Poorly presented or inaccurate information can result in a disinterested, hostile, and, most certainly, an ill-informed public, all of which

will be detrimental both to immediate projects and to the total archeological resource base. In every instance when a communication medium has been selected, the material should be prepared for that medium in the format to which it is accustomed. You cannot hand a television newscaster a three-page abstract of your research results when he has ninety seconds to get the message across.

In dealing with the media, and in making information available to the public, it is recommended that archeologists consider the following questions:

(a) "Am I sufficiently stressing the need for preservation of archeological resources?" Avoid creating the impression that archeological sites are there to be exploited by archeologists or anyone else.

(b) "Am I fully recognizing the humanistic appeal of archeology?" Avoid portrayal of archeology as a dry-as-dust activity.

(c) "Am I fully presenting the scientific nature of archeology?" Avoid looking like a treasure hunter.

(d) "Am I pointing out the pertinence of my work to the modern world?" Present the social-scientific basis for your research.

(e) "Am I representing archeological considerations in a manner compatible with the law and with good cultural resource management concepts?" Consider that next year you or some other archeologist may want the local legal authority to pass an ordinance protecting sites. Lay the ground work for that understanding and support.

(f) "Am I presenting the interconnected nature of archeology with other disciplines?" Explain that archeology is a science interlocked with other sciences, e.g., anthropology, geology, and history.

(g) "Am I making clear the limitations on archeology and archeologists?" Don't create unreasonable expectations. Avoid letting people think that if they find a site and report it, somebody will appear from the big university in the sky, pat them on the head, and excavate everything for free.

### The Approaches

#### *The Written Word*

There are a number of approaches whereby archeology can be presented to the general public, including the printed word, the spoken word, various visual presentations of items or structures, and through organizations.

The most obvious approach through the printed word is that of popular books. In the past, such books written by archeologists or knowledgeable lay persons have been relatively few and far between. Too often in the past, the public's attention has been caught by books such as those by Heyerdahl and von Däniken, to note but two best selling examples. The first is an imaginative testing of a theory and a travel account, while the second indicates the ready market for wildly conjectural and sensational theorizing about the past. Scientific archeology can be

exciting, interesting, and relevant, and, when appropriate, it should be presented in just such a manner.

Magazine articles directed to the general public tend to range from those scientifically correct and directed toward the interested, knowledgeable nonspecialists (such as those which appear in *Archaeology*), to the occasional articles that appear in magazines directed to other audiences and which almost always are written by nonprofessionals.

Another major medium for getting the archeological message to the general public is the newspaper. Though occasionally newspapers will do in-depth studies or reviews, most often they are concerned with the immediate present. It must be news. Archeologists, however, make little, if any, attempt to take advantage of the newspaper's ability to acquaint the public with information on their projects. Such awareness can work to the advantage of archeology in general and can be of direct and immediate benefit to the archeologist in the field, by making the research known to the community.

It is also incumbent upon any practicing archeologist to provide the local media with information on the results of research carried out in an area, and as rapidly as possible (remembering that if the information is to be used it must be provided in an efficient and appropriate format and language).

Newspapers can provide archeology with another kind of forum as well. Weekly papers often may be willing to consider, on a weekly or a monthly basis, material which is written to be of interest to their local readership and which takes little or no effort on their part to include.

There are also many journals and magazines directed to special interest groups (contractors, architects, engineers, farmers). A determined effort should be made to inform such audiences, members of which have a profound impact on archeological resources, of the presence and nature of such resources and how they might take them into consideration.

It is of extraordinary importance that archeologists become increasingly involved with the development of curricular material for grade schools. There is no reason for archeology to go to bat only after the ninth inning, when there is ample opportunity to make archeological data available throughout the educational experience. Just as working with the media requires understanding of the media, getting archeology appropriately considered by grade and high schools requires an approach with which archeologists generally are not familiar. The profession should make itself known to the National Council for Social Studies, and individual archeologists should become actively involved with those agencies which develop and approve textbooks in their local communities or state. Only in this manner will there be any opportunity for archeology to be presented in an appropriate manner at the earliest possible scholastic level.

Finally, with respect to the printed word, the profession should develop educational leaflets that can be distributed by university departments, museums, parks, and other similar institutions. A number of states have prepared booklets on the prehistory of the state aimed, generally, at the sixth to the eighth grade level, but which, if properly written, are of equal interest to the uninformed public of whatever age. Such leaflets and booklets should contain information as to whom the readers should contact if they wish to pursue the subject, or if they have information that might be of interest to the profession.

### *The Spoken Word*

Radio, while perhaps not in the forefront of popular attention these days, still has an important role in communication. Spot news of archeological events or projects and in-depth interviews of archeologists are appropriately and effectively communicated by this media.

Another area in which the spoken word can be extraordinarily effective is through public lectures. Civic groups, such as the Rotary, Kiwanis, or Civitan, are constantly looking for speakers. To a large degree members of such organizations are influential decision makers in the community (or state), and the more information that can be conveyed to them the better. Archeologists should make themselves known to such groups and not wait passively to be called upon and then reluctantly comply. If an archeologist is doing active field research in an area, it is part of his/her professional responsibility to seek out opportunities to explain the presence of archeologists and what purpose they are attempting to achieve. Once having done this, the archeologist should report back to the community after the analysis is complete to explain what benefits have resulted from the work.

Depending upon the nature of the situation, it also is possible for archeologists to conduct informative workshops for interested local groups. It could be desirable for such a program to be undertaken on a national basis through a central office, but it certainly is practical for archeologists to do so on a local basis. There are any number of interested groups which would be more than happy to cooperate with archeologists in developing such workshops, including scout groups, camps, and teachers. In this, as in any other area of public education, there is a real danger of encouraging individuals to participate beyond their ability. On the other hand, the danger of not having them aware, much less participating, is even more serious. Public education is sufficiently important to justify the danger of occasional over-enthusiastic, uneducated participation.

One other area of verbal communication that should be considered by archeologists is development of a series of tape-slide programs specifically

designed for a particular area or topic. The American Association of State and Local History has developed and promulgated a series of such programs that have been of great benefit to historical societies. There is no reason why archeology should not do likewise.

### *Visual Presentation*

The area of visual communication is, if anything, even more wide open to archeologists. It takes a well-thought-through expensive program to break into national television, but in a number of instances this has been and is being done to the benefit of all. On the other hand, local television stations often are looking for local interest stories, and this fact should be utilized to the utmost to inform the community about what a project is doing and what actions and reactions might best protect the archeological resource base. The public broadcasting system (PBS) in some areas has even sought out archeologists. Again this is an area where the archeologist should exhibit some initiative.

Video tapes can be developed in much the same manner as audio tapes. To be well done these require a considerable amount of time and effort on the part of the archeologists, but costs can be kept to a minimum and the audience reached can be large indeed.

There are at least three mechanisms for public education in which three-dimensional presentation of information is appropriate. One is the development of archeological kits, as at least one company has done, that use three-dimensional objects to explain to grade school students what archeology is about and what it tells about the world around us. Further developments along these lines should be encouraged.

Museums have always been outstanding mechanisms for conveying archeological information to the public. Their importance and their contributions need not be further developed here. On the other hand, displays of artifacts should be developed by archeologists in contexts other than museums. Often businesses such as banks, leading merchants, or shopping malls are happy to provide display space which can be used in a highly educational manner to benefit archeology. Similarly, schools, particularly in areas where active field research is going on, are often interested in having displays installed for their students. Libraries are another locale with such exhibit capability.

Local, state, and federal parks provide an unparalleled opportunity to introduce the public to archeology and the results of archeological research. When possible, the public should see how such results are achieved, through the opportunity to observe excavations in process, accompanied by proper interpretative discussion.

A major problem to be overcome with respect to these essential communication approaches is to

convince individual archeologists that this type of endeavor will indeed pay off archeologically, and in convincing the archeologists' colleagues and administrators such efforts should be recognized as necessary and demanding professional responsibilities.

### *The Organizational Approach*

There presently is only one organization in this country whose charge is specifically to communicate archeological information to the general public. In 1967 the Society for American Archaeology created the Committee on the Public Understanding of Archaeology. The Committee has not really been able to function on a national level as a communication mechanism because it lacks financial or staff capacity needed to operate through the media. There is one member of the Committee in each state, and the effectiveness of that person has depended upon his/her personal commitment to the idea of public education within the state. The Committee has been able to provide a degree of communication within the profession when other mechanisms did not exist, but it has not been able to fulfill its initial charge to date.

The American Society for Conservation Archeology has established a bi-monthly newsletter, and specifically encourages membership and participation by cultural resource managers outside the profession. ASCA's abilities, strengths, and contributions to communication have yet to be evaluated.

The profession is becoming aware of the value of an organized approach to communication, but has yet to provide adequate support for this mechanism.

## **COMMUNICATION WITH THOSE WHO CONTROL THE LAND**

Potentially, everyone who owns land or is responsible for a land alteration project is a resource manager. Laws (and moral requirements) necessitate that the land be managed with an eye toward appropriate decisions about the archeological and historic resource contained therein. Hopefully, with assistance from the profession, all landowners and those who utilize the land, will become increasingly aware of the need for conserving the maximum number of these resources.

### **The Audiences**

Landowners, even those controlling no more than a city lot, can benefit science and the public by exhibiting a concern for cultural resources contained on their property. It is not now possible, and may never be practical, to provide full legal protection to archeological resources on private property. Even if such laws existed they would not be effective until a sufficient number of landowners felt it to be in their and the public's best interests to obey such a law. Without question, legal requirements under

various federal and/or state laws have been a powerful influence in making landowners aware of their responsibilities and increasingly willing to meet them. But with any landowner, private or corporate, of whatever size, education is the best approach regardless of the legal situation.

A second major group who control land are public officials, particularly on the county level. While it is advantageous to have federal and state laws concerning archeological resources, in many ways the county is the unit of government best suited to archeological conservation. If a proper educational effort has been carried out, the county, which often controls a considerable amount of land, is in a position to take adequate conservation measures regarding the archeological resources on that land. Contact with county officials can be on several levels. It might well be appropriate for the profession to establish communication liaison with the National Association of County Officials. On the other hand, to be effective any program directed through the county must depend basically on the local archeologists and local communication mechanisms.

Federal and state agencies and private corporations form a third major group of resource managers. As is the situation with counties, the responsible decision makers in these various entities control vast quantities of land. They must be made aware in a positive manner as to what archeological resources they control and the effect that their management decisions will have on these resources.

The final group of resource managers consists of state and federal legislators. These individuals, while not directly controlling land, are in a position to pass legislation which will have a very marked effect upon the future of archeological resources.

## The Information

Somewhat different archeological information needs to be communicated to resource managers than to the general public and to the profession itself. It may very well be that individual resource managers will have an interest in and a concern for archeology, but this cannot be assumed. Even if it could be, by and large the manager must make decisions in a broad context, in which archeology will be only one of a great number of concerns. These individuals need to be provided with information sufficient to enable them to make adequate and proper decisions regarding the cultural resources for which they are responsible. They need to be aware of the scientific elements involved, of the nature of the resource base itself, and of the significance of that resource base in various contexts. They also need help and advice in planning for and conserving that resource, as well as time and cost estimates for various mitigation proposals should these become necessary.

## The Approaches

There is specific information that has greater pertinence to this particular group of individuals than to the public at large. The federal and state laws themselves are a primary factor in introducing archeology into their lives. Of equal pertinence are the various federal and state guidelines and procedures that interpret these laws. Since, at least in the early stages of any particular law's history, these interpretations are likely to vary, it is advantageous for archeologists to discuss practical measures for meeting the provisions of the law with those involved with implementing the various interpretations. Only in this way will it prove possible to develop techniques for conserving the maximum amount of data, while enabling the corporation or agency to carry out its primary charge.

Once archeological information has been contracted for, the archeologist must assemble data meaningful both to his/her colleagues and to management. Keep in mind that the average resource manager, whether he or she be president of a large corporation or a private landowner, is not accustomed to reading a typical archeological report and deriving the main points therefrom. The archeologist therefore has an obligation, to summarize the crucial points in such a manner that the manager can understand them and can review them in a minimum amount of time. This will enable the manager to make the best possible decision relative to all the factors that must be taken into consideration. In most instances a one- to four-page *management summary* included as an initial portion of an archeological report would be successful in achieving this goal (see page 73).

At least two other factors influence the development of a successful relationship between archeologists and resource managers. Archeologists should become acquainted with resource managers as individuals through personal contact. Communication carried out solely by mail or even by phone between individuals who have not had the opportunity to meet face to face often is unnecessarily difficult. Once personal confidence and trust has been established even the most difficult emergency situations can normally be resolved. Without such a relationship, the most minor differences can be blown far out of proportion.

Finally, to work successfully with resource managers, the archeologist should first become familiar with the planning stages of federal and state agencies and then learn the bases upon which the resource managers make their decisions. Only in this way will the archeologist's recommendations be most useful and realistic to managers. Recommendations to be of maximum benefit must consider both scientific and management factors. On occasion the archeologist should discuss alternatives for dealing with cultural resources and not present a single course of action which must be accepted or

rejected *in toto*. An awareness of the total concerns of the public should be equally borne by the archeologist and the resource manager.

To communicate archeological needs to managers the archeologist may have to learn some new vocabulary relevant to various agencies, and also may need to learn a few things about engineering or management principles. For example, what factors must an engineer consider in choosing where to build a sewer treatment plant, or an airport? When knowledgeable archeologists become involved early in the planning process, an appropriate level of archeological data can be provided the managers at every step of the planning process. There is no question but that this multistage research and planning approach will bring about the best consideration of and most effective use of the resource base at minimal cost.

For archeologists and resource managers to work together effectively it is absolutely essential that a communication network be established (see page 59). Archeologists should make themselves known to their stage A-95 agency and request information on any project taking place within their area of responsibility. They should also make themselves aware of any other state or local communication networks concerning land alteration projects.

Once an archeologist becomes involved with a project, he/she has a responsibility to the profession, to the public, and to the agency involved to

make realistic estimates, direct investigations toward scientific and management needs, and to communicate the results effectively, not just to professional colleagues, but to the public and all concerned audiences—particularly the agency responsible for acting on the archeologist's recommendations.

With respect to the last audience it is vital that archeologists understand enough about the historic preservation procedures with which agencies must comply to provide them with relevant data effectively organized. See 36 CFR 60, 63, 64, 66, and 800 for pertinent details with respect to federal agencies.

## SUMMARY

It is no longer appropriate for archeologists to operate totally within an ivory tower. Perhaps such behavior is appropriate for certain practitioners, but for the majority of archeologists to continue to act without regard for contemporary conservation and legislative needs would be a disaster.

While it will always be true that archeologists need to communicate effectively among themselves, it now is abundantly clear that unless they also communicate effectively with the general public, and with those making decisions affecting the cultural resource base, all else will be wasted effort.

# 5 Archeology and Native Americans

## EDITOR'S PREFACE

In 1971, members of the American Indian Movement from Minneapolis-St. Paul disrupted an archeological excavation at a site south of Minneapolis. They were objecting to excavation in what they called a sacred burial ground. The fact that there were no burials at this site, that it was a village midden, was irrelevant to the point they wished to make, i.e., that archeologists were digging in Indian sites without regard for Indians. The AIM protest was given wide publicity, and reaction in Minnesota by the general public was largely sympathetic. Reaction by archeologists was largely unsympathetic.

Although the severity of this incident was not repeated, it served to give impetus to other objections by Native Americans to archeological work and/or archeologists in various parts of the country. And it served to force archeologists to review their own philosophy and motives. It became obvious that there had been occasions of insensitivity on the part of archeologists. It also became obvious that archeologists had failed to communicate adequately the nature and intent of their research to Native Americans.

It was with this situation in mind that a seminar whose purpose was to review the relationship of archeologists and Native Americans was suggested as a vital part of any discussions of current archeological problems and directions. This is indeed an area which needs thoughtful consideration by all concerned parties. There are only a handful of Native American archeologists, but it was obviously vital that Native Americans be included in the seminar discussions. There was concern for representation of Native American views, and although there were more archeologists than Native Americans participating, we feel a start has been made. More importantly, some extremely important and we hope compelling steps are suggested to alleviate misunderstanding, to increase communication, to

sensitize archeologists to Native American concerns, and to sensitize Native Americans to the capability of archeology to contribute to an understanding of the heritage we all have gained from Native American cultures.

As anthropologists, should it not be archeologists' *first* responsibility to take into consideration the living descendants of those cultures they study? We hope that the dialogue reported upon in this chapter will stimulate further positive action.

## INTRODUCTION

Since archeologists are concerned with the culture and culture history of American Indians, Eskimos, and Aleuts, greater communication is essential between the archeologists and these groups and greater involvement is needed by these people in decisions affecting archeological research. There have been and continue to be many examples of close cooperation between archeologists and Native Americans, but while these examples may be conspicuous, they are too few in number.

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The question of how archeologists can enhance their professional aims and goals through better relations with Native Americans should begin with the question of how archeologists can communicate these aims and goals in terms that not only can be understood by Native Americans but can also be related philosophically and realistically to the Native American's own aims and goals. If an important part of North American archeology is a pursuit of knowledge directed toward reconstruction of the social and cultural histories of human groups, then professional efforts by archeologists toward this goal should consider ways and means for involving the Native Americans as participants and contributors in archeological pursuits.

To achieve this kind of relationship and understanding it is logical to begin at the point where both the Native American and the archeologist agree on the importance of the preservation and protection of cultural heritage, even though their respective purposes and methods may differ. This basic approach should be on a broad philosophical level, one concerning both cultural history and the future in general. Many Native Americans may relate more effectively to archeology presented in its aspect as a humanistic endeavor than as a purely scientific discipline.

Such an approach contemplates recognition by both archeologists and Native Americans of the need for Native Americans to consider the ethical and moral aspects of archeological pursuits as they are seen in the context of their own cultural perspective. By effectively voicing their views, the Native American can become an effective element in decisions concerning archeological endeavors.

The interchange between the archeologist and the Native American envisioned above should be developed in the context of viable traditions, ethics, and beliefs and that of scientific needs and practices. To this end, there should be an effort to develop direct communication between archeologists and Native American communities, both on and off reservations.

## COMMUNICATION

With notable exceptions, archeologists have not directed their attention toward public understanding of what they do. Archeological reports tend to be characterized by technical terminology that makes the report essentially unintelligible to the nonspecialist. At the same time, those individuals or organizations who do attempt to "popularize" archeological information frequently are held in disrespect by archeologists. In addition, as part of their training as scientists, archeologists sometimes develop a high degree of objectivity about their data, which unfortunately has been accompanied by a correlative degree of insensitivity about the human quality of its origins. This reflects a kind of academic

elitism certainly not unique to archeology, but not atypical of it.

The result of these and other factors has been the formation of an effective communication barrier between the archeological profession and the public. Sometimes the results of this nonunderstanding are simply amusing; sometimes there are serious consequences, as in our contacts with some Native American groups as noted earlier. Archeologists have frequently, though not universally developed an image among Native Americans as "people who dig holes" for no understandable reason, who dote on exposing burials, and who carry things away to be stored or lost in large, impersonal institutions.

It is imperative that archeologists work to correct some of these misunderstandings and, very importantly, explain the reasons for their activities. This must be done at both the local and national levels. Most of the improved communication, however, *must* come from individual archeologists who recognize their responsibilities by meeting with Native Americans on a primary, face to face basis.

Several anthropological concepts are central to any discussion of the basic premises and philosophies behind the discipline of archeology and its relevance to contacts between anthropologists and Native Americans. First, it is essential to recognize that the rationale which may provide completely acceptable and sufficient explanations for archeologists, as members largely of the western European cultural tradition, may not and frequently do not constitute either acceptable or sufficient explanations for members of other cultural traditions. Therefore, archeologists must search out those areas in which a common concern or interest is shared with specific groups of Native Americans and to expand these areas of contact and understanding to the fullest.

Archeology involves the study of humanity and because of its complex and multiple origins and the course of its history, the discipline has been dominated at various times by humanistic, historical, and/or scientific paradigms or goals. At present the scientific paradigm is the dominant element in the structuring of archeological goals and activities, although a considerable number of archeologists are oriented toward essentially historical objectives. Accordingly, a presentation of basic premises and goals will not meet with universal acceptance, even within the archeological community.

It is generally agreed by archeologists that they study humanity and the products of human activities, and that the knowledge produced by these activities is in the public good. Knowledge so derived is universalistic in character; that is, the cultures of all people everywhere are of potential interest to the scientist and to the general public. This knowledge consists of more than simply the collection of information; it also includes elements of explanation and prediction, the greater understanding of the human condition, and of the processes of

cultural change and stability. It is within the existing American intellectual tradition that knowledge and the access to knowledge is a universal human right, and that additions to knowledge are universally in the public good. Knowledge is also conceived of as a tool which, like any other, can be employed for good or for evil. Archeologists, like other scientists, are strongly oriented toward this universalistic approach, accepting many or most of these concepts as basic assumptions not subject to question.

Not all peoples necessarily view the universe as American or European trained archeologists do. The concepts of human knowledge, science, scientific explanation, and professionalism in the abstract do not necessarily hold the same priority in the value structures of nonscientists in general and those of members of other cultures in particular. The right to knowledge is likewise not considered a universal. The very objectivity which characterizes archeologists as professional scientists may result in resentment on the part of the people being studied, who feel that they are being treated as so many objects or specimens.

Ways must be found for expressing the elements of professional archeological activity so that a commonality of interests is developed or can be developed with Native American ethnic groups, and so that these activities are not only tolerable and acceptable, but even interesting, useful, and worthy of support. In most cases, the specific intent of these explanations must reflect discussion, mutual contribution, and cooperation between the archeologist and the specific community.

There are certain areas that seem particularly fruitful as possible bases for expanded communication: (1) archeology can provide a record of specific origins and cultural and historical development which may give added strength and depth to the individual and group perception of identity; (2) archeology can point out the aesthetic products and important events within the archeological record which should provide for interest in and affinity with the heritage of the past; (3) archeology can provide data based on its specific qualifications as a science, which may serve as a basis for predictive models and thus better enable people to deal with problems of the present and the future; (4) archeology can, on the basis of its study of human behavior over huge areas of time and space, make known economic techniques and/or social adaptations which may improve the physical condition of living people; (5) archeologists join with Native Americans in a common concern for the preservation and protection of monuments, art objects, and other artifacts of the past, and can cooperate with individuals or groups in joint efforts to develop and enforce legal means of carrying out protective measures.

To emphasize the importance of improving communication between archeologists and Native Americans, several actions are considered desirable and appropriate. These actions are:

(1) The Society for American Archaeology, the Society of Professional Archaeologists, and other national archeological organizations, along with other groups as appropriate, should form standing committees, to include Native American representatives, for the primary purpose of instituting and increasing communication.

(2) Archeologists should issue news releases through the American Indian Press Association when newsworthy items of interest develop in future archeological research.

(3) Where feasible, state and local archeological associations, both lay persons and professionals, should make special efforts to meet with resident Native American groups to explore grounds of common interest and to develop mechanisms for improving communication.

(4) Regional archeological societies at their annual meetings should follow a similar pattern.

(5) Archeologists in cooperation with Native Americans should make special efforts to produce both written and visual presentations and interpretations of archeological data for the general public and particularly for Native Americans.

(6) Individual archeologists should recognize their responsibility for initiating communications with Native Americans and make special efforts to meet this responsibility.

(7) Archeologists should coordinate this information with that of cultural anthropologists and others in order that the combined product may be discussed with Native Americans for the benefit of all.

## **PARTICIPATION**

An important means of increasing mutual understanding is through increased Native American participation in archeological activities and in decision making affecting archeological efforts. There are a number of ways in which this can and should take place.

### **Training Programs**

Training programs and participation in archeological activities at several levels offer an immediate and significant avenue that would be beneficial to both Native Americans and the archeological profession. The archeological profession has not attracted members of ethnic minorities to undergraduate or graduate programs and subsequent professional positions and this is especially conspicuous where Native Americans are concerned. Native American archeologists can bring unique viewpoints to the profession because of their own cultural background and these can add important new insights into cultural interpretations.

The problems of encouraging Native Americans to select archeology as a career are both philosophical and practical. If the profession is to reap the full benefit of the Native American archeologist's view-

point, he must achieve in his graduate training the delicate balance between professionalization and encouragement of the retention of the ethnic point of view. Without this balance, a special contribution of diversity of approach will be lost to the field.

Two significant and practical problems exist: (1) recruiting individual Native Americans for both undergraduate and graduate programs, and (2) financing graduate training. While several state and federal programs support undergraduate students, they usually do not apply to graduate study. The task of finding candidates may well be more difficult than finding financial support. Archeological specialization within anthropology has not attracted Native Americans for a variety of reasons, but, for whatever reason, this lack is detrimental to the profession. Active, positive recruitment is essential and it is suggested that members of all professionally-oriented archeological societies must assume this responsibility.

A number of other educational and training programs offer more immediate vocational results sought by some Native Americans. Training leading to positions as support staff, such as archeological technician, museum preparator, artist and draftsman, archeological conservationist, and others offer such opportunities. More position in these specialties can be anticipated, and as more Native American cultural centers are established archeologists should seek opportunities to assure that Native Americans are aided in acquiring the specialized skills to prepare them for positions in these careers. At present a program, initiated by the Tribe itself, is underway at Zuni.

At the most basic level a strong effort should be initiated to get anthropological and Native American oriented studies into the grade and high schools. This is particularly important in those areas where Native American populations form a significant element in the school and/or geographical population.

Undergraduate participation in archeological programs is important for students in order to provide them with the opportunity of forming an understanding of and an interest in the goals and aims of archeology. Archeologists with the opportunity of identifying those individuals who express an interest in further archeological training, should feel obligated to encourage this interest. Special efforts should be made to work with those students in independent research or lab projects, special advisor-advisee relationships, and in paid part-time positions. It may be that BIA funding, tribal scholarships, OEO, and Work Study programs can take care of the financial needs of most undergraduate Native Americans (in contrast to graduate students), but the need to earn extra money during the academic years is always present.

Summer stipends and tuition waivers to permit Native American students to participate in archeological research projects are needed. This is particularly important because many students receive no

federal or other support during the summer months and many would otherwise have to work and would not be able to gain the initial level of experience and training to make it possible to gain regular employment in archeology.

Where appropriate, part-time compensation to allow interested individual archeologists to become personally involved in counseling undergraduates and in career development for graduates should be sought. Attempts should be made in counseling to make clear both the special relevance of an archeological background for Native Americans, and of potential career opportunities on both tribal lands and at large for fully professional archeologists and for technicians of Native American origin.

In addition to financial support and specific training programs, archeologists in the academic community should work toward increasing their contact with the Native American students on campus. Attractively oriented courses on Native American culture/history/archeology should be offered. The orientation of these courses should be toward making students aware of their own culture history and of the relevance of the archeological contribution to it. Input from both the archeological profession and from the native community should be included. Where specific ethnic studies programs do not exist, these courses can be offered directly by the Department of Anthropology. Where ethnic studies programs do exist, an attempt should be made to get these kinds of courses either incorporated in the ethnic studies program itself, or cross-listed with the anthropology department.

In reviewing all the possible ways to encourage greater interest and participation in archeology by Native Americans, the one area causing most problems is that of financing graduate training. In keeping with the feeling that archeologists should make these opportunities available, it is recommended that archeological societies take action as appropriate to make funds available, from existing capital, if possible, to establish a fund for Native American Graduate Fellowships in Archeology. There are several private foundations with minority-student aid programs, and it is suggested that the aid of one of these foundations be sought as a source of matching monies and for administration of the Fund. All archeological societies should be encouraged to contribute to the fund. Such a step would be the first for any national professional organization, and might well lead to a significant improvement in mutual understanding.

Adult education programs in archeology and ethnology in urban areas and in reservation communities may also prove to be of great interest to some individuals, helpful as a communication device, and worthy of experimentation.

### **Cultural Centers**

Cultural centers, conceived of and operated by Native Americans, offer an opportunity for profes-

sional archeologists to contribute effectively to better mutual understanding between the two groups. Many of these cultural centers have already been established, and while most do not take the form of the traditional museum and may function as activity centers, many do have some space which can be used for the display and interpretation of archeological and ethnographic materials. Some are urban centers which focus on pan-Indianism while others are reservation, or tribal or regional centers. Whatever their nature and setting, the archeologist should actively encourage these developments. It would be reasonable, realistic, and hopefully feasible to support the establishment of regional cultural interpretation centers planned and operated by Native Americans, perhaps at least one in each major Native American culture area of the United States and Canada. These regional centers could have a major impact through tourism on the knowledge and understanding of Native Americans by the general public. It should be emphasized that these centers should be supported and operated by Native Americans, and that they should present Native American viewpoints. If this develops they could offer an exceptionally fruitful area for cooperation, development, of mutual understanding, and commitment to others.

It must be cautioned, however, that there are a number of federally financed culture centers now in existence where interpretative display space is available, but which do not measure up to the accepted museum requirements of (1) security, (2) proper curatorial arrangements, and (3) formal loan arrangements. This fact frequently prevents the loan of archeological/ethnographic objects for use in these centers, and certainly the federal and state governments who financed their construction must be made aware of the conditions and be asked to upgrade these facilities. Archeologists should take a positive role of leadership in remedying such situations.

Whatever the nature and setting of the Native American Cultural Centers, archeologists should encourage their development through

- (1) offering assistance in seeking funds for construction
- (2) urging state and federal support for continued operating funds
- (3) offering assistance in planning the establishment of training and internship programs in museology and archeological interpretation
- (4) making archeological and ethnographic materials from documented collections available for display subject to standard museum policies on loans from collections.

### **Other Areas of Participation**

There are other areas of archeological concern where Native American participation in the decision-making processes should occur. One of these areas

is the nomination of sites for the National Register. In those states where archeological sites form a large block of the nominations made to the Register, it seems appropriate that archeologists recommend to their State Historic Preservation Officer that there should be Native American representation in the composition of the State Review Committee charged with the review and nomination procedures.

Where state organizations of professional archeologists exist, it is recommended that these groups take positive action to compile an annual list of archeological field research projects to include not only the location of the projects and the names of participants, but also a statement of the archeological justification for the work. Excavation solely or primarily for training by field schools or other groups without adequate problem orientation and scientific rationale cannot be justified. State professional groups should examine the rationale for field research projects and discuss projected plans with Native American peoples where this is appropriate.

### **SENSITIVE AREAS**

There are a number of areas of archeological concern that are particularly sensitive to the Native American. These include the destruction of sites, sale of artifacts, private commercialization of archeological sites, tribal law, certain museum exhibits, the treatment of human skeletal materials, and certain kinds of site excavation. It is obvious that certain of these areas are complex and will require continued dialogue. Problems arising from any of these sensitive areas are solvable, however, and each was discussed by the seminar. It is incumbent upon archeologists and Native Americans to review the issues and work toward a mutually acceptable solution.

#### **Excavation and Tribal Law**

Failure to recognize the status of tribal law on reservations or, worse, the lack of good judgment and courtesy in failing to discuss planned excavations on lands within the statutory boundaries of allotted reservations, can cause problems that could and should be easily avoided.

Excavation of archeological sites on reservation lands, under whatever sponsorship, requires a federal archeological permit issued by the Secretary of the Interior through the Bureau of Indian Affairs. Official permission must also be secured directly from the local reservation tribal government; an effort should be made to ensure that the opinion of persons representing a traditional view is represented. Because native lands are held in trust (not owned) by the United States, the materials collected from an excavated site on tribal land are the property of the resident native community and not the federal government. Some Native American reservation groups have also adopted antiquities acts to

protect archeological sites from unauthorized excavation and destruction. The archeologist must become familiar with and follow the guidelines set forth for Native American lands.

### Protection of Sites from Vandalism

Archeologists must also recognize that the members of such a reservation group are directly concerned with preventing site destruction through vandalism or illegal excavation and that this mutual concern offers a fruitful area for cooperation.

Both archeologists and Native Americans are concerned with needless, thoughtless destruction of archeological sites. Each abhors the destruction purposely done for private gain through the recovery of artifacts for which there is a commercial market. There should be equal abhorrence of needless destruction of sites and information by poor or bad archeological techniques and approaches (i.e., insufficiently trained "archeologists" being given positions of responsibility for excavation projects, or some teaching situations where a site is excavated solely for teaching purposes and not for scientific needs). Unfortunately some Native Americans do not distinguish professional archeological research from pothunting—a remarkable comment on our failure to communicate effectively.

Pothunting and vandalism, whether through ignorance or guile, can be tackled in two ways: (1) through the law and (2) through education. The first can be quick and risky, the other long with the results not assured. Both approaches should be used. There are already several laws that can be used to protect sites from wanton vandalism: statutes concerning trespass, theft, and destruction of property, and in some states landmark statutes and permit regulations. For federal lands, there are several preservation and antiquities laws (see Chapter 1).

Archeologists have an ethical responsibility to aid Native Americans in their efforts to decrease vandalism.

### Collections and Exhibits

On June 7, 1973, the membership of the American Association of Museums passed a resolution and policy statement on human remains. The resolution states that:

In recognition of the current concern over the use of human skeletal material in museums, the American Association of Museums has formulated a general policy statement covering certain basic issues for consideration by those museum trustees and staff members who seek guidance in a complex and unresolved problem.

In the search for knowledge, we seek answers to the Universe, our world, all living things, and in ourselves. As educational institutions, museums are vigorously searching for understanding—most particularly about ourselves as human beings. Much of what we have learned about human development and prehistoric cultures has been derived from burials. There is merit in continuing such investigations but if we are to achieve wisdom, yet adhere to an honorable position as

humanists who are concerned with the quality of life and the worth of the individual, the study of skeletal material must be undertaken with dignity, and with regard for the feelings of the most sensitive among us. Research must be accomplished in a manner acceptable not only to fellow professionals, but also to those of varying religious beliefs.

In particular, Native Americans feel a kinship to ancestral peoples and museums must seek means of achieving scholarship and interpretative goals acceptable to the actual and spiritual descendants of the peoples under study or run the risk of alienating the segment of our population most closely related to the subject of those studies.

BE IT THEREFORE RESOLVED THAT: Although there is sometimes a need to use skeletal material in interpretive exhibits, this must be done with sensitivity and understanding of the feelings for human dignity held by all peoples. It is presumptuous to interpret people unless we respect their rights and intrinsic dignity. The objective of an interpretive exhibit is to help the visitor understand, indeed, to identify with, those who lived or live under very different circumstances. The curiosity of the visitor is no justification for the violation of beliefs concerning the dead.

AND BE IT FURTHER RESOLVED THAT: It is the position of the American Association of Museums that the human being of whatever century and of whatever place is entitled to the same concern that would be accorded a member of one's own family, thereby confirming our belief that we are all indeed of one family.

The AAM members drafting that resolution were William E. Marshall, Robert G. Baker, Helmuth J. Naumer, Milton F. Perry, George I. Quimby, and Frederick J. Dockstader, Chairman.

It is appropriate that archeologists working in museums or associated with them in any way, make a special effort to see that museums adhere to this policy, and that individual museum boards be urged to declare firm policies concerning the exhibit of human burial remains and other objects of a sensitive spiritual or religious nature in accordance with the above expressed policy.

Many museums and archeological laboratories contain collections of human skeletal remains accumulated over the past several decades. Some of these collections have been studied by physical anthropologists; the majority have not. Every effort should be made to assure the proper care of these materials.

Because of some native groups' attitudes toward osteological material removed from the earth, the sentiment is sometimes expressed that human skeletons in museum collections should be reburied. When this situation arises with respect to remains with demonstrable cultural and/or biological affinity to specific living groups, traditional spiritual leaders of these groups should be sought out, and decisions made as to the proper disposition of these remains after appropriate study. When osteological remains cannot be specifically identified with a contemporary group, the interests of a particular group are no longer applicable but the institution charged with care and custody of the collection should continue to maintain a responsive and responsible attitude toward them.

Finally, all archeologists deplore the commercialization of archeological sites, particularly burial sites,

seen frequently in roadside traps for the unwary tourist. Archeologists are urged to take the initiative in attempting to discourage these practices by any legal means. The sale of artifacts, both ethnographic and archeological, is also deplored, whether they originate through illegal import, commercial pothunting, or the sale of private collections.

In an effort to increase proper documentation of material, archeologists should refuse to serve as appraisers for undocumented privately held collections, and, insofar as it is within their ability to do so, refuse to accept such collections as gifts to their institution. In addition, archeologists associated with institutions holding collections are urged to do everything possible to see that the collections are properly stored and cared for. Archeologists have a special responsibility to these collections both as scientific data and as a vital segment of the Native American heritage.

### **Excavation of Burials**

Many peoples are concerned about the excavation of human skeletal materials, and archeologists are concerned as well with the importance of such skeletal material for understanding past human cultures. Archeological excavation of burials, however, must always be conducted with dignity and with a recognition of basic human values and sensitivities. It is suggested that the previously cited American Association of Museum's policy statement on human skeletal exhibits applies as well to the conduct of burial excavations.

Many Native Americans have expressed special concern over this particular archeological activity. The excavation of burials of demonstrated cultural and/or biological affinity to a specific living ethnic group is particularly sensitive and should be undertaken only as part of a planned research design, and, whether Native Americans or other extant ethnic or cultural affiliation, only after appropriate consultation and very careful consideration of the moral attitudes of the group involved and of society in general.

Emergency salvage operations and/or the accidental encounter of burials in excavations of other kinds present special problems, and should be dealt with in good conscience by the archeologist, keeping these same considerations in mind.

It should be noted that many state laws on the disturbance and exhumation of human remains often are highly discriminatory, normally referring to Christian cemeteries, marked graves, or legally registered cemeteries. It is urged that archeologists, whatever the legal situation follow the moral guidelines outlined above and assist wherever possible in the modification of the laws as necessary, so that the end result is equal treatment and respect for all exhumed human remains. Such modified laws should be carefully researched, in order to protect

graves with known living descendents, to insure the adequate study of human remains where appropriate, and to assure the prosecution of those who disturb graves in their search for artifacts.

### **Secret or Sacred Areas**

Inadvertent problems sometimes arise in archeological work, whether on reservations or not, with respect to places held to be secret or sacred by Native Americans. Frequently, such places are not publicly known, but whatever the case, archeologists must be particularly sensitive to the fact that a potential occurrence of shrines, localities considered sacred, and any objects connected with them, will require more prior investigation on their part and initiation of a real effort toward communication between the archeologists and the involved Native Americans.

Some interpretive aspects of archeological data such as religious practices may also require special treatment with respect to their secretive or sacred nature and again archeologists must exercise both good judgment and a willingness to discuss the issues with the groups directly concerned prior to making information public.

Extensive consultation with the Native American groups potentially involved well in advance of the initiation of investigations should do much to alleviate this problem.

### **SUMMARY**

There is little doubt that many specific occasions can be cited in which archeologists have been insensitive to Native American interests with regard to prehistoric and early historic occupation of areas of mutual concern. By and large, archeologists, acting on the assumption that they were working with "extinct" cultures, have ignored the actual descendents of those cultures. Native Americans, by bringing this issue to the attention of archeologists and to the general public in a rather forceful way, have succeeded in bringing some light to a situation that needs a great deal of exposure.

There are several areas where archeologists, either individually or as groups, can and should take some positive action. We have suggested some of these, and some of the appropriate approaches. We wish to stress that for most areas needing attention—opportunities for training for Native Americans, encouragement of cultural centers, responsiveness to Native American interests in archeological work—archeologists must take the first positive steps toward creating an atmosphere of mutual trust and communication. A few of the areas discussed are appropriate for action by national organizations but, for the most part, it is the responsibility, indeed an obligation, of each individual archeologist to take the initiative.

# 6 Certification and Accreditation

## EDITOR'S PREFACE

Unlike the other five chapters, which the compiler(s) and then the editors made every effort to bring up to date to the time of submission to the publisher, this chapter remains as it was written and distributed to the membership of the SAA on 10 February 1975. It provides a comprehensive review of the profession's increasing concern for establishing guidelines and standards of professionalism. Thus, it stands here as an historic formulation upon which to build, rather than as an updated report. Since it does lay the groundwork for what has been going on in the period since it was distributed, the editors felt it was most relevant in its original form.

Much has happened since February 1975 and the editors endeavor, here in the editor's preface, to provide an update to the time of publication. Certainly the Society for American Archaeology has assumed a leading role in developments. The Society took the initiative to act on the report's recommendations following the Airlie House Seminars. Upon formal petition by its members, it funded a mail ballot concerning the establishment of a Registry, and it funded the final meeting of the Interim Committee on Professional Standards which met in Fayetteville in late January 1976.

The proposal for a Registry, as outlined in Thompson's compilation, has been modified in several important ways. At first, it was assumed by everyone closely involved that the Society for American Archaeology should and could serve as the instrument through which a Registry could be established and maintained. This is the position taken in Thomp-

\* Unlike the other five chapters, which were revised and updated, sometimes extensively, by the editors subsequent to submission by the compilers, this chapter remains as submitted in late 1974. It was felt that it had a valuable place as a base document from which subsequent events developed. The developments over the past two and a half years are summarized in the editor's preface to this chapter.

son's report and is specifically stated by McGimsey in a letter sent to the SAA membership on April 9, 1975. That letter also indicates the possibility of a major shift from the initial concept, i.e., of the Registry becoming an entity legally separate from the SAA.

This shift had its basis in two factors. Legal council had indicated that for various legal reasons (e.g., the particular tax status of the SAA, and the potential for possible future legal action against the organization) it would be better for a Registry to be a separate legal and corporate entity. Secondly, the membership of other organizations of professional archeologists who were not also members of the SAA felt that for a Registry to be an arm of the SAA would require them to become members in the SAA, a prospect which they viewed as coercive. In addition, the feeling of such groups was that, while the SAA contained a considerable proportion of the professionals in this country, there were many professionals who did not belong (and, of course, as is wholly appropriate given the SAA's stated

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purpose, many SAA members are not professional archeologists). A sample survey by one of the editors, for example, suggested that more than one quarter of the people listed in the 1976 AAA Guide to Departments as "archeologists" or "prehistorians" were not SAA members. In fact, no one knows what proportion of the SAA membership consists of practicing professional archeologists. Thus, despite the justly prominent position of the SAA in the profession, there was serious question as to the appropriateness or the capability of the SAA endeavoring to represent the archeological profession through a Registry or otherwise.

In late April of 1975 an Interim Committee on Professional Standards (named partly by McGimsey and partly by Struever in their capacity as presidents of the SAA), consisting of Richard Woodbury, Jesse Jennings, and Charles Cleland, plus McGimsey and Struever, met in Chicago. This group drafted a document entitled "The Proposed National Registry of Professional Archeologists." This document set out the details of the proposed purpose and functions of a Registry, its administration, a set of standards, and a rather detailed policy and procedures manual. This document was put into final form by McGimsey and was distributed to all registrants at the SAA annual meeting held in Dallas in May 1975. It served as the basis for an official evening-long discussion at that meeting and for a lengthy discussion at the Annual Business Meeting. At the Annual Business Meeting the following action was approved by the four to five hundred people present with only a scattering of negative votes.

It is moved that the Society for American Archaeology supports the establishment of a National Registry of Professional Archeologists working in the United States of America, and that the Society for American Archaeology be closely associated and cooperate with such a Registry in every way consistent with their mutual goals.

However, the Executive Committee of the SAA had received a legal request that the motion also be submitted to the total membership through a mail ballot. Accordingly, on November 1, 1975 the packet of information distributed in Dallas, a questionnaire, and a ballot were mailed out to the SAA membership. This was the first expense incurred by the SAA in connection with the proposed development of a Registry. The official return on the ballot was counted on December 15 with 950 (approximately 78% of those voting) voting for and 269 voting against the motion.

In view of this vote favoring the idea of a Registry, but also with a healthy awareness of the serious concerns being expressed by a number of professionals, and of the desire of other archeological organizations to be represented, the Executive Committee of the SAA again played the role of lead agency and set up an enlarged version of the previous Interim Committee on Professional Standards consisting now of Jane E. Buikstra, Charles E. Cleland, Jesse Jennings, Thomas F. King, William D.

Lipe, and Charles R. McGimsey III. In addition, the Archaeological Institute of America, the American Society for Conservation Archaeology, and the Society of Historic Archaeology were asked to name representatives to the Committee. William McDonald was appointed by the AIA, James J. Hester by ASCA, and Edward B. Jelks by SHA. The latter was also appointed Chairperson. It should be noted that Jelks was a member of the 1961 SAA Committee (as had been Fred Wendorf, who was also a member of the Airlie House Seminar). This earlier SAA Committee, which wrote the much quoted "Four Statements for Archaeology" (*American Antiquity* 27:137-138), had been established at the suggestion of then retiring President Jesse Jennings. Jelks was also chairperson of an SHA committee to study this problem in the 1970's. As President, Stuart Struever served *ex officio*. (Struever was able to participate for only one day of the Committee meeting in Fayetteville so Hester A. Davis, member of the SAA Executive Committee, participated throughout as an *interim ex officio* representative of the SAA.) Richard Woodbury, a member of the earlier committee had resigned. Although one member of the Committee had been designated by each society as its official delegate, in fact, all four societies were represented on the Committee by at least four members.

The Executive Committee of the SAA was of the opinion that the Interim Committee should not restrict its discussions and actions to the Registry as designed eighteen months earlier but should explore all options in the light of the memberships' interests and concerns and the facts and ideas which had developed during those months. Accordingly, the charge to the Interim Committee was as follows:

- (1) To explore, in the light of the new understandings resulting from the debate and referendum, the several options available to the archeologists of the country for promoting professional standards
- (2) To assess the needs of the profession at this time and to determine whether the Registry as proposed is adequate to satisfy those needs
- (3) To develop a modern statement of professional standards with special attention to the problem of coordinating with the criteria and standards being developed by various agencies of government
- (4) Make recommendations for an appropriate course of action;
- (5) Submit a report to the Executive Committee and to the cooperating societies as soon as possible and certainly before the annual SAA meeting at St. Louis (May 1976).

The Interim Committee on Professional Standards met in Fayetteville, Arkansas from January 27 through January 30, 1976 with several members staying over another day to work on particular sections of the report. The first draft of this Committee's

report was sent to the presidents of the four Societies in mid-April.

In brief, that report included a Code of Standards for the profession in its relations with the public, colleagues, employees, and clients. It set forth standards for research performance, and for institutions sponsoring archeological research. It also set forth minimal requirements for training and experience that must be met for recognition as a professional archeologist.

The Interim Committee took one further crucial step. It expanded upon the idea of a static Registry and undertook responsibility for founding, on January 29, 1976, a Society of Professional Archeologists (SOPA). The eleven members of the Interim Committee became the founding members. Legal counsel was employed and the Society was incorporated in the state of Illinois on April 26, 1976, with the following Directors Jane E. Buiksta (Northwestern University), Charles E. Cleland (Michigan State University), Hester A. Davis (Arkansas Archeological Survey), James J. Hester (University of Chicago), Edward B. Jelks (Illinois State University), Jesse D. Jennings (University of Utah), Thomas F. King (National Park Service), William D. Lipe (Museum of Northern Arizona), William McDonald (University of Arkansas), Charles R. McGimsey III (University of Arkansas), Bert Salwen (New York University), and Stuart Struever (Northwestern University). (Salwen having been added to the original eleven to provide representation for the Association for Field Archaeology.) The Directors met for the first time on May 5 in St. Louis, at the time of the SAA meeting, adopted By-Laws, and elected Edward Jelks as President, Charles Cleland as Vice President, Thomas King as Secretary, and Jim Hester as Treasurer, all for one year terms.

The Interim Committee on Professional Standards made its final report to the Executive Committee of the SAA on May 6. The Executive Committee passed a resolution, thanking the Interim Committee, wishing success to SOPA, and urging that all qualified members of the SAA join SOPA.

SOPA's purposes, as stated in the Articles of Incorporation are:

- (a) to strengthen the identification of archeology as a profession and of qualified archeologists as professionals;
- (b) to encourage high standards in the training of archeologists;
- (c) to require high standards of performance from practicing professional archeologists;
- (d) to communicate to the public the importance of proper practice of archeology;
- (e) to assist governmental and other organizations, using archeologists in the course of their activities, to identify those properly qualified for the purpose.

A major service of SOPA will be to compile and maintain current a Directory of Archeologists who

meet the Qualifications for Recognition as a Professional Archeologist, and who also subscribe to SOPA's Code of Ethics, Institutional Standards, and Standards of Research Performance. The Directory will be made available to federal, state, and other agencies, to private firms, and to individuals who seek the services of qualified archeologists. The Directory will be designed to indicate topical, regional, and other specialities. (The first edition was published in November 1976, listing those individuals meeting the qualifications whose applications had been processed up to that time.) Additionally, and perhaps of even greater importance, the organization will assume major responsibilities for continued updating of professional standards for archeologists, and the task of presenting archeology and the archeological profession to the various publics that it serves.

Membership in SOPA is open to all applicants who meet the qualifications, agree to conform to the Code of Ethics and Standards of Research Performance, and subscribe to the Institutional Standards set forth by the Society of Professional Archeologists. All SOPA members will be included in the Directory of Archeologists. Anyone will have the option of applying for inclusion in the Directory without becoming a member of SOPA, but such applicants must satisfy the same requirements, including subscription to the Code of Ethics and Standards, as SOPA members (see Appendix C).

SOPA is designed to supplement, not supplant, present active archeological organizations all of which are currently serving important functions. Indeed it should serve as a cohesive element linking them more closely together, supportive of them all and supported by all of them.

Thus, while the Registry as outlined in the following report did not develop precisely as proposed therein, the report which constitutes Chapter 6 served, nevertheless, as a major step toward the achievement of a viable organization of professional archeologists, one capable of providing assistance to the profession and of representing the profession to the public. Such capability has long been needed and is now an urgent necessity if the archeological profession is to maintain its credibility.

## INTRODUCTION

The Society for American Archaeology, ever since its founding almost forty years ago, has taken a strong stand *against* the destruction of archeological resources and an equally strong stand *for* professional approaches to the planning, excavating, reporting, and interpreting of archeological remains. These high standards were clearly set forth by Arthur C. Parker, first President of the Society, in the inaugural issue of *American Antiquity* (Parker 1935:2-3).

Time brings changes and new attitudes. It has been so with American archaeology during the past score of years. The older emphasis of gathering great quantities of archaeological

material for its own sake has given way to that of selecting archaeological sites as specific problems and gathering data cumulatively for the purpose of interpretation. . . . Only by pursuing the latter method may archaeology be built up as a deductive science and only from the body of facts so brought together may we hope to shed any adequate light upon America's prehistory. . . . These facts are generally known but until now . . . effort has been scattered and methods individualistic. . . . Through the Society for American Archaeology it is hoped that standards will become more uniform. . . . There are many things we hope to gain. . . . One of the most important of these is the conservation of sources. . . . It is impossible to guess how many unique sites, key locations and individual objects of surpassing interest have been lost or destroyed by inexperienced hands. . . . As a society we now have in our hands an organized means of overcoming the unhappy practices of former years. We should now use every effort to exercise the power that is ours. It is an obligation as important as our desire to further explore.

Parker was speaking primarily of destruction of sites by commercial looters and amateur collectors interested only in objects and his call for standards was primarily directed toward the need for uniform terminology, classificatory systems, and interpretative methods. Nevertheless his ringing words of exhortation have as much meaning today as then.

## BACKGROUND

The archeological community has done much to protect the nonrenewable resources that constitute the heritage of the past. Tennessee Valley Authority, Works Progress Administration, Civilian Conservation Corps, River Basin Surveys, Highway Salvage, Contract Archeology, Environmental Impact, Moss-Bennett, Conservation Archeology—these are the many names of the progress that has been achieved in what Parker called the "conservation of sources." Although archeologists have been less successful in developing professional standards of quality performance, they have not ignored the problem. The very forces that brought about the development of salvage archeology also built the foundations for the delineation of standards. Shortly after World War II, the various federal agencies responsible for the growing archeological programs petitioned the Society for guidance in identifying and recruiting qualified professionals.

At the eighteenth meeting of the Society in 1953 in Urbana, a subcommittee consisting of Waldo Wedel and Frank H. H. Roberts, Jr. was appointed "to prepare a statement in regard to the qualifications of professional archaeologists" (SAA 1953:195). This report, which recommended a half-dozen levels of archeological competence paralleling the Federal GS 5 through GS 14 ratings, was read by Roberts at the nineteenth Annual Meeting at Albany in 1954. "After extended discussion, the membership voted to authorize the President to circulate the report to the membership for study and possible adoption as the official statement of the Society" (SAA 1954:196). The report was circulated to the membership but the officers of the Society received many mixed, conflicting, and adverse comments. Albert C. Spauld-

ing, Secretary of the Society, read a comment on the "Statement on Archaeological Standards" at the twentieth Annual Meeting in Bloomington in which he "explained the original purpose of the Statement, summarized various objections which had been received by the officers of the Society, and recommended that it not be adopted as an official declaration of the Society" (SAA 1955:211-212).

At the twenty-fifth Annual Meeting at New Haven, in 1960, an occasion for serious review of the program of the first quarter century and for some soul-searching about the future, Jesse D. Jennings, the retiring President of the Society, led a discussion of "the need for the establishment of professional standards and a code of ethics" (Jennings 1960:302). The discussion included "the question of the desirability of a reorientation of the membership of the Society so as to differentiate a professional group." As a result of a motion passed in that Annual Meeting a broadly based Committee on Ethics and Standards was appointed and instructed to have recommendations ready for consideration well in advance of the next business meeting. The committee consisted of John L. Champe (Chairman), Douglas S. Byers, Clifford Evans, A. K. Guthe, Henry W. Hamilton, Edward B. Jelks, Clement W. Meighan, Sigfus Olafson, George S. Quimby, Watson Smith, and Fred Wendorf. The report of this committee was accepted as the policy of the Society at the twenty-sixth Annual Meeting at Columbus in 1961 and was published as "Four Statements for Archaeology" the same year in the October issue of *American Antiquity* (Champe and others 1961:137-138).

The "Four Statements" have played an important role in helping to meet the goals set by Parker. Teachers and students, amateurs and professionals, public agencies and private employers have all used the 1960 statement to great advantage.

By the 1970's it became apparent that the concerted efforts directed toward the conservation of the archeological resources of the nation, were also building pressures for properly trained professional archeologists to handle the burgeoning work load mandated by the growing body of federal law. The federal agencies responsible for carrying out these archeological programs began to express concern about the quality of some of the work being done under contract. This concern soon led to questions about the qualifications of the individuals responsible for the contract work.

Twenty years earlier when the Society asked Roberts and Wedel to review the question of "the qualifications of professional archaeologists," there was little appreciation of the problem outside the federal agencies. In contrast, by the early 1970's the concern for professional standards had become nationwide. The passage of the National Environmental Policy Act in 1969 helped alert the profession to the need for standards. As a result of this legislation, it was necessary to assess the significance of all threatened archeological resources throughout the nation. At

stake were not only the resources, but also the funds to investigate and mitigate the threat when national needs called for the destruction of sites. It became clear that if trained archeologists did not prepare the environmental impact statements, others would make the appraisals required by law. The immediate response to this problem was the emergence in various parts of the country of specific programs designed to guarantee that the impact statements and the research that might result would be the responsibility of qualified professional archeologists.

The national scope of the concern about professional standards is indicated by the following list of organizations actively involved: the Texas Antiquities Committee, the Environmental Policy Committee of the Society for California Archaeology, the Board of Supervisors of San Diego County in California, the Committee on Standards and Contract Archaeology of the Illinois Archaeological Survey, the Committee Preservation and Professional Standards of the Society for Historical Archaeology, the Committee on Public Archaeology of the Society for American Archaeology, the Arizona Archeological Center of the National Park Service, the California Region of the Forest Service, and the Committee for the Recovery of Archaeological Remains. In effect, archeologists all over the country were beginning to realize that if they did not set standards for archeology, others would.

The Society for American Archaeology was identified by many interested groups as the proper organization to assume the responsibility for developing national standards for professional archeologists. Representatives of the National Park Service and members of the Committee for the Recovery of Archaeological Remains discussed the problems of standards in 1972. The CRAR passed the following resolution at its March 1973 meeting (Haurly 1974:56).

The CRAR urges the Society for American Archaeology as the major professional organization in the nation to develop a set of guidelines for the preparation of archeological reports that will establish minimal standards of quality for archeological studies of the nation's heritage.

J. O. Brew, chairman of CRAR, appointed a subcommittee on professional standards, consisting of Rex Wilson of the National Park Service, Charles R. McGimsey III, Raymond H. Thompson, and Fred Wendorf. Later that year at the thirty-eighth Annual Meeting of the Society for American Archaeology in San Francisco, the membership adopted a resolution offered by Thompson on behalf of CRAR (SAA 1973:513):

Be it resolved that the Society for American Archaeology develop a set of professional guidelines for the preparation of archeological reports that will establish minimal standards of quality for archeological studies of the nation's heritage.

In the meantime, the Society for Historical Archaeology Committee on Preservation and Professional Standards was deeply involved in a considera-

tion of certification. Ivor Noel-Hume presented a motion on licensing at the 1973 meeting of SHA in Minneapolis. The report of the Committee was presented at the SHA business meeting in San Francisco, January 10, 1974. Included in its recommendations was a strong statement that SHA should work closely with the Society for American Archaeology in developing professional standards.

An important meeting for the refinement of ideas on certification was the 1974 Cultural Resource Management Conference held at the Denver Federal Center, April 11 and 12, under the co-chairmanship of Alexander J. Lindsay and Lloyd M. Pierson. Donald S. Miller (1974) presented a paper on certification based on the experience of the Forest Service in California and concluded with a strong recommendation for SAA action on professional standards. William J. Mayer-Oakes (1974a), speaking for a concerned group at the Conference, announced the formation of a new organization, the American Society for Conservation Archeology (ASCA), that would serve "the several professional interests in contract and conservation archeology" (Mayer-Oakes 1974b:2). Among the major concerns of ASCA are certification of qualified professionals and definition of standards of quality. The approximately 125 archeologists and federal environmental specialists from nineteen western states who attended the Conference passed a resolution directing the Committee on Public Archaeology (COPA) of the Society for American Archaeology to appoint a committee to request that the SAA Executive Committee take action on certification, professional standards, and related matters. Hester Davis, chairperson of COPA was asked to serve as chairman of this ad hoc committee. She appointed four other members: James Judge, L. Ross Morrell, Floyd W. Sharrock, and Raymond H. Thompson. The Conference specifically instructed the ad hoc committee to recommend action on the linked topics of professional standards and certification to the Society for American Archaeology in time for consideration the following month at the annual meeting in Washington, D.C.

The SAA Executive Committee recognized the new responsibility that the profession was placing on the Society and adopted a resolution on certification that was reported to the membership in May 1974 at the thirty-ninth Annual Meeting in Washington (SAA 1974b:651).

Resolved that the Executive Committee endorses the principle of certification of archaeologists and archaeological institutions and that a committee be constituted to spell out minimum qualifications of archaeologists and those of institutions, corporations, and other organizations which propose to carry out archaeological research.

A Committee on Certification was appointed and instructed to present its recommendations at the November 1974 meeting of the Executive Committee. The membership was informed that the final recommendations on certification would be re-

ported at the next Annual Meeting. The members of this Committee on Certification are Raymond H. Thompson (Chairman), Edward B. Jelks, James Judge, Charles R. McGimsey III, Stuart Struever, and Fred Wendorf (SAA 1974b:652). In appointing the Committee, Douglas Schwartz, outgoing President of the Society, and McGimsey, incoming President, attempted to provide continuity from earlier committees and overlap with the committees of other organizations dealing with comparable matters. Both Jelks and Wendorf had helped prepare the Four Statements in 1961 and Wendorf was chairman of the Texas Antiquities Committee when it proposed its guidelines for state-sponsored archeological activities. Jelks was chairman of the Society for Historical Archaeology Committee on Site Destruction and Professional Standards and a member of the Illinois Archaeological Survey Committee on Standards and Archaeology. McGimsey, Thompson, and Wendorf are members of CRAR. The members of the Committee received many thoughtful and useful comments on certification from colleagues all over the country. These valuable contributions from the profession at large enabled the Committee to expand its effective membership well beyond the appointed group.

During the time that these ideas about certification were maturing, Charles R. McGimsey III, President of the Society, was developing a proposal for six seminars which would focus on aspects of the Management of Archeological Resources as a basis for defining the Future Direction of Archeology in this country (McGimsey 1974a). In his statement at the Annual Meeting in Washington, he had emphasized the new responsibility facing the archeological profession. He exhorted members to build upon their traditionally high standards of individual professionalism to create a corporate conception of those standards that identify archeology as a profession rather than a brethren (McGimsey 1974b:652-653). It is not surprising, therefore, that the first two of the proposed seminars were to be devoted to certification and standards of report preparation.

The proposal was funded by the National Park Service Interagency Archeological Services Division. The first two seminars were held at Airlie House, Virginia, from July 31 through August 4, 1974. The participants in the seminar on certification were the members of the SAA Committee on Certification. The Committee had held one meeting in Washington during the annual meeting. At that time, it became clear that the topic was complex and difficult enough that it would be helpful to carry out most of the Committee's business in full meetings rather than by mail and telephone. The opportunity for the Committee to meet for four full days on a face-to-face basis as well as to profit from interaction with colleagues on the Seminar on Archeological Reports made it possible for the Committee to write a much more thorough and satisfactory report than would have been possible in a more traditional format.

## RECOMMENDATIONS

The Report of the SAA Committee on Certification is the result of the Seminar on Certification. The primary recommendation of the Committee is that the SAA should establish a National Register of Professional Archeologists (NRPA) which would list qualified archeologists and their supporting institutions.

Before making this recommendation, the Committee carefully considered the ideas presented by McGimsey (1974a:6-8) in his proposal for the Seminar on Certification, the thoughtful comments provided by many members and friends of the Society, the reports of the committees of earlier and related groups, and information obtained from professional organizations with programs of certification. In all cases, the Committee attempted to avoid suggesting action that would involve going beyond the first steps toward a program of recognizing and recording professional competence and potential.

Thus, the Committee rejected a proposal that there be several levels of registered archeologists based on years of experience, education, and other factors. If the Society should see the need to identify several kinds of registered archeologist or several levels of professionals at some future time, the Registry as recommended will allow for such a development.

Similarly, instead of trying to establish criteria for accrediting the several kinds of archeological institutions and organizations in any formal or academic way, the Committee simply called attention to the close linkages that exist between a practicing registered archeologist and a supporting institution. Therefore, we have not included formal accreditation of institutions in our recommendations. Rather, we have tried to phrase our statement in such a way that accreditation might be a possibility for future consideration by the Society. We believe the experience to be gained by the Society in developing and administering NRPA should determine the course of future action. At this preliminary stage of development, therefore, the Committee has limited itself to minimal recommendations.

### **National Registry of Professional Archeologists**

The National Registry of Professional Archeologists is a component of the Society for American Archaeology. The Society, recognizing the widespread public concern for the nonrenewable resources of archeology and the need to insure a high level of research performance, believes that the identification of qualified professionals is essential to the proper preservation, wise management, and careful investigation of these resources.

Archeology provides an approach to the study of man through the analysis of material culture. It involves the scientific investigation and interpretation

of the archeological record. This record consists of all changes in the natural and cultural environment occurring as a consequence of human activity throughout all past time right up to the present and in all parts of the world. Interpretation of this record includes the interdisciplinary study of the relevant historical, biological, and geological context.

### *The Registered Archeologist*

The scholar who carries out the scientific investigation and interpretation of the archeological record is an archeologist. Such a scholar who meets the minimum requirements stated below is qualified to be identified as a Registered Archeologist. A Registered Archeologist is considered to be the equivalent of the "qualified archeologist" specified in various legislative and governmental documents. The "recognized authority" in these documents is interpreted to refer to a Registered Archeologist, or a professional archeologist who is qualified to be a Registered Archeologist, or an official of an agency or institution who has statutory or other responsibility for, or concerns for, archeological resources and who has obtained the advice and counsel of a Registered Archeologist.

An individual may qualify for listing in the National Registry of Professional Archaeologists by demonstrating the following combination of professional education and experience:

(1) A post-graduate degree in anthropology, with a specialization in archeology, from an academically accredited institution.

(2) Sufficient field and analytical experience to design and conduct archeological research and to prepare a final report on the results.

(3) A demonstrated capacity to disseminate the information derived from archeological research.

(4) The professional competence of the applicant must be verified by two Registered Archeologists in good standing.

The Committee on Professional Standards may accept equivalencies for educational experience and, in exceptional cases, may approve substitutions for the above minimal requirements.

Many Registered Archeologists will expand their basic competence through additional training in such areas as teaching, administration, and management of cultural resources, as well as in regional and topical specializations.

It is recognized that in addition to Registered Archeologists, there is also a need for active participation in the field of archeology by specialists in other disciplines, skilled technicians, avocational archeologists, and trainees.

### *The Supporting Institution*

The Registered Archeologist bears responsibility for protecting, conserving, and interpreting the archeological heritage of mankind. Because of the

complexity of archeological research, an archeologist needs the laboratory, library, and curatorial resources of an institution to carry out these responsibilities. Thus, a partnership exists between the Registered Archeologist and the supporting institution in that both must share in the careful investigation and wise management of these scarce cultural resources. The institution, as well as the Registered Archeologist, should be expected to meet certain minimal standards. A qualified institution is one which

- (1) assumes responsibility for insuring completion of the research;
- (2) utilizes the services of qualified archeologists;
- (3) has access to the facilities necessary to carry out fieldwork, analysis, and report preparation;
- (4) serves as the repository for the proper curating of the research collection, or develops a satisfactory arrangement with such a repository;
- (5) has the capacity to assure dissemination of the results of the research to both scholars and the general public.

### *Procedures*

The interim period, during which the Registry is to be established, is defined as the first year (May through April) following the approval of the NRPA program by the membership of the Society for American Archaeology. Several related activities must take place during this initial year in order to establish the Registry of Archeologists in a fair and impartial manner, and, at the same time, to provide a mechanism for the maintenance of the list during the interim period. We recommend the following sequence of activities.

The proposal to establish NRPA will be submitted to the Executive Committee at the November 1974 meeting in Mexico and to the membership of the Society at the fortieth Annual Meeting in Dallas in May 1975.

*Interim Committee on Professional Standards* An Interim Committee on Professional Standards shall be established as soon as possible after the Executive Committee takes favorable action and shall be charged with the responsibility of preparing for the Registry. The Interim Committee shall consist of distinguished archeologists representing the profession as a whole, who are appointed by the President in consultation with the President-elect and with the approval of the Executive Committee. No more than two members of the Committee on Certification that met at Airlie House and submitted this report may be appointed to the Interim Committee.

When the NRPA is approved by the membership, the Interim Committee on Professional Standards shall receive, review, evaluate, and approve or disapprove the applications for listing in the Registry.

The members of the Interim Committee, by virtue of their appointment by the Executive Committee, shall be designated Registered Archeologists.

Applications will be accepted from all members of the Society for American Archaeology who desire registration and consider themselves qualified. The Interim Committee will be empowered to admit applicants to the Registry by a simple majority vote of its members. The requirement that the applicant be sponsored by Registered Archeologists is waived during the interim period. It is essential that present day practicing archeologists not be penalized by arbitrary application of the recommended qualifications.

Inasmuch as there are many individuals whose professional careers have developed without the required formal educational backgrounds, it is expected that the Interim Committee will exercise considerable discretion in applying the "equivalency" clause. Careful appraisal of equivalencies is necessary not only to maintain standards, but also to provide the flexibility for registering historical archeologists and other specialists with related training and experience. Should the application of an archeologist be rejected during the interim period, however, such rejection should in no way prejudice future application by that individual to the Committee on Professional Standards.

At the end of the first year of the Registry the Interim Committee on Professional Standards will be replaced by a continuing *Committee on Professional Standards* consisting of no more than twelve Registered Archeologists elected by the members of NRPA to serve staggered three-year terms. No member may serve more than two consecutive terms. The Nominating Committee of the Society shall present a slate of nominees drawn from the list of Registered Archeologists. No member of the Executive Committee, except for the President who serves *ex officio*, may serve simultaneously as a member of either the Interim Committee or the Committee on Professional Standards.

The Committee on Professional Standards shall maintain the National Registry of Professional Archeologists, provide leadership in the definition of professional standards, and receive, review, and evaluate applications to the Registry.

Any applicant who has been denied admission to the Registry by the Committee on Professional Standards has the right to appeal that decision. The Committee on Professional Standards shall develop and submit to the Executive Committee for approval procedures for appeal, for policing the membership of the Registry, and for refining the mechanisms for removal of individuals from the Registry.

The Committee on Professional Standards shall be responsible to and derive its budget from the Executive Committee. The costs of operation shall be borne in part by the application fee and in part by dues of the Registered Archeologists. The initial application fee and dues will be established by the

Executive Committee. It is expected that the Registry will be self-supporting soon after it is fully functioning.

### By-Law Changes

The establishment of NRPA will necessitate changes in Articles III and IV of the By-laws of the Society (SAA 1974a:669-670). The following revisions are recommended by the Committee on Certification.

#### *Article III*

Rewrite and revise as follows:

Section 1. Membership is open to any person in sympathy with the objects of the Society, as set forth in Article I, without regard to sex, race, religion, or nationality.

Section 2. Membership in the Society shall include the following categories: Active Members, Spouses of Active Members, Registered Archeologists, Benefactors, and Life Members.

Section 3. Applications for membership shall include written subscription to the ideals, objectives, and accepted standards of the Society.

Section 4. Membership in the Society shall be denied to any person who violates accepted standards of archeological conduct by misusing archeological materials or sites for commercial purposes, or by failing to behave in a responsible manner with respect to the archeological record.

Section 5. Annual dues of Active Members shall be fixed by the Executive Committee.

Section 6. Spouses of Active Members may become Active Members upon subscription to the objects of the Society and upon payment of special dues to be determined by the Executive Committee.

Section 7. Each Active Member shall receive all the Society's regular publications for the year covered by dues and shall have one vote in the transaction of the business of the Society. An Active Member shall be eligible for any elective or appointive office in the Society, subject only to restrictions defined elsewhere in the Articles of Incorporation and these By-Laws. No member who as spouse of another member pays less than the full amount in the form of special dues shall receive any of the Society's publications except on payment therefore of the difference between the reduced rate and the dues paid by an Active Member.

Section 8. Any Active Member may become a Registered Archeologist by satisfying the professional qualifications as established by the Executive Committee and upon payment of special dues to be determined by the Executive Committee. Such a qualified archeologist shall be listed on the National Registry of Professional Archeologists which shall be organized and maintained by the Committee on

Professional Standards to be elected by the Registered Archeologists.

Section 9. Any person in sympathy with the objects of the Society may become a Benefactor by the payment at one time of \$500.00 or more.

Section 10. Life members, as of May 1947, and Benefactors shall have during their lives all the privileges of Active Membership but shall be exempt from the payment of dues.

Section 11. Any library, museum, university, school, or other institution may subscribe to the publications of the Society without privilege of membership. The annual cost of subscriptions will be fixed by the Executive Committee.

Section 12. The Executive Committee may, by three-quarters vote, remove from the membership rolls any member whose acts are contrary to the ideals, objects, and accepted standards of the Society as set forth in Article I and Article III, Section 4, or who otherwise makes improper use of membership in the Society. The action of the Executive Committee may be subject to an appeal to the Society at the next Annual Meeting.

#### *Article IV*

Add to Section 2, the following sentence after "three member candidates" and before "All prospective nominees . . .": "The nominating Committee shall nominate at least two and no more than three Registered Archeologist candidates for each vacant position on the Committee on Professional Standards.

#### **SUMMARY**

For almost forty years, the Society for American Archaeology has worked for the protection of archeological resources and the definition of qualifications for the individuals who are responsible for the prudent management and use of those resources. Since World War II, the Society has taken several major steps toward formal recognition of professional archeologists as a group. In the past few years, the rapidly growing threat to the resource

base of archeology has led to a new sense of national responsibility, new laws and programs, and new opportunities for the Society.

In May 1974, at the thirty-ninth Annual Meeting of the Society in Washington, D.C., a Committee on Certification was appointed. This Committee has recommended the establishment of a national Register of Professional Archeologists for the purpose of identifying and recognizing Registered Archeologists and their supporting institutions. The details of the Committee's recommendations are summarized in the following time schedule.

November 1974: Committee on Certification reports to Executive Committee. Executive Committee adopts report of Committee.

January through March 1975: Report of Committee distributed to membership.

May 1975: Membership adopts recommendations of Committee at Annual Meeting. Membership approves changes in By-Laws. President appoints Interim Committee on Professional Standards.

May-June 1975: Interim Committee establishes procedures for administering Register until April 1976.

July 1975-April 1976: Interim Committee establishes and maintains Register.

December 1975: Nominating Committee presents nominations for Committee on Professional Standards.

April 1976: Registered Archeologists elect Committee on Professional Standards.

May 1976: Committee on Professional Standards takes over responsibility for Registry from Interim Committee.

May-July 1976: Committee on Professional Standards completes definition of procedures for administering the Register.

The Committee recognizes that the proposed schedule is a very tight one. Nevertheless, it recommends that the schedule be followed as closely as possible because of the urgency of the need for NRPA.

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# Glossary

**Adverse unavoidable effects** Detrimental effects of an action that cannot be avoided by project alternatives. Any action that affects cultural resources must be considered in environmental impact statements (National Environmental Policy Act of 1969). Adverse effects defined in the Council on Environmental Quality Guidelines "include those that degrade the quality of the environment, curtail the range of beneficial uses of the environment, and serve short-term, to the disadvantage of long-term, environmental goals. . . . Significant adverse effects on the quality of the human environment include both those that directly affect human beings and those that indirectly affect human beings through adverse effects on the environment." Mitigative measures must be considered when adverse impacts are identified.

**Alternatives** A federal agency or party responsible for an action involving federal participation, permit, or license must "study, develop, and describe appropriate alternatives to recommended courses of action in any proposal which involves unresolved conflicts concerning alternative uses of available resources" (NEPA, Section 102, D). The Council on Environmental Quality Guidelines specify that "a rigorous exploration and objective evaluation of alternative actions that might avoid some or all of the adverse environmental effects is essential. Sufficient analysis of such alternatives and their costs and impact on the environment should accompany the proposed action through the agency review process in order not to foreclose prematurely options which might have less detrimental effects." (See also *Design alternatives, Project alternatives, Research alternatives.*)

**Ancillary studies** Investigations necessary to supplement primary research. Such studies are important for providing supportive data for the development and realization of primary goals and

for justifying management recommendations. Such studies might include vegetation transects, soil analysis, dendrochronological investigations, and reconstruction of past environments through pollen and faunal analyses.

**Archeological activities** All tasks performed by qualified archeologists in carrying out their work. Many of these activities involve field and laboratory work, analysis and report writing; teaching and field training, administration, and other related jobs may be considered as archeological activities.

**Archeological report** Any document that describes archeological activities and presents conclusions and interpretations drawn from these activities. Archeological reports often describe fieldwork and the results of this work and must be prepared by or under the supervision of qualified archeologists. There are various kinds of archeological reports, including cultural resource management studies.

**Archeological resources** All evidences of past human occupations which can be used to reconstruct the lifeways of past peoples. These include sites, artifacts, environmental and all other relevant information and the contexts in which they occur. Archeological resources are found in prehistoric and aboriginal sites, as well as historic Indian and European areas of occupation and activity.

**Archeology/archaeology** The scientific discipline responsible for recovering, analyzing, interpreting, and explaining the unwritten portion of the historic and prehistoric past.

**Avoidance** Active attempts to avoid threatened resources by partial or complete project redesign or relocation.

**Conservation** An approach to archeology based on a philosophy stressing the protection, preservation and/or managed use of the cultural resource base for future generations. Protection of

representative sites and preservation of data through scientific study are major aspects of this approach. It differs from salvage archeology which stressed the immediate recovery of material from threatened sites.

**Consultants** Persons specially trained, often in nonarcheological disciplines, who can provide professional or technical advice on research or management related problems. Consultants are often employed by archeologists to conduct ancillary studies for research or management programs. Consultants would include hydrologists, aerial photography interpreters, ethnologists, palynologists, civil engineers, etc.

**Contract** A formal agreement, usually written, and enforceable in the courts, between two or more parties for the execution of a particular action. In cultural resource management studies contracts are usually prepared for investigations that will provide for the identification and mitigation of cultural resources threatened by a land modification action.

**Contract specifications** The terms and conditions to which the parties agree to abide during the life of the contract.

**Cultural affiliation** The known, projected, or hypothesized cultural, ethnic, or tribal group (e.g., Hopewellian, Mississippian, Puebloan, Eskimo, Apache, historic Anglo, etc.) with which archeological remains may be identified on the basis of careful scientific study.

**Cultural resource management** The development and maintenance of programs designed to protect, preserve and scientifically study and manage cultural resources (including evidences of prehistoric, protohistoric, historic, and recent remains) and the natural resources that figured significantly in cultural systems. Developers of such programs may include governing bodies or agencies of government, academic and research institutions, and private corporations. The goal of such programs should be the conservation of cultural values and the maximum effective conservation and utilization of these resources for the public good.

**Cultural resources** Districts, sites, structures, and objects and evidence of some importance to a culture, a subculture, or a community for scientific, traditional, religious, and other reasons. These resources and relevant environmental data are important for describing and reconstructing past lifeways, for interpreting human behavior, and for predicting future courses of cultural development.

**Culture history** The chronological and spatial framework for describing the development of human societies and cultures, and the documented processes of change involved in this development. Studies in culture history are primarily concerned with defining the geographic extent, relative age, and course of development of cultures.

**Culture process** The general factors and mechanisms responsible for cultural change and variability. In cultural resource management studies, investigations of culture process involve providing and testing explanations, expressed in terms of explicit formulations, for cultural events which occurred in the study area.

**Data description** The presentation of facts, information, and statistics in a meaningful manner.

**Data recovery techniques** The archeological and supportive techniques (fossil pollen collection, Carbon 14 dating, stratigraphic studies, vegetation transects, excavation) utilized in the intensive and extensive collection of cultural materials, relevant environmental facts, and pertinent contextual information.

**Design alternatives** Alternatives to be considered at the engineering or design level but prior to development of the final design of a project. These involve variations in project design and project alternatives (e.g., variations in the design and construction of transmission lines, aqueducts, highways, or selection of alternative corridors).

**Effective environmental data** Information related to the total environmental system, past and present, which is known or is interpreted to have influenced or been modified by groups present in the study area.

**Empirical investigations** Studies based on or derived from explicit experience, experiment, or observation.

**Ethnographic resources** All evidences of identifiable ethnic lifeways dating in historic or protohistoric periods which may be used for describing, reconstructing, and interpreting cultural systems. These include sites, artifacts, ethnographic records, documentary records, informants, environmental data, and all other relevant information. Ethnographic resources are cultural resources and may be considered archeological resources when they provide needed information relative to the scientific study of archeological resources.

**Ethnohistorical resources** Data on historic and contemporary societies. These include documentary sources and the study of material culture from these groups which are relevant to the study area.

**Excavation** The scientifically controlled recovery of subsurface materials and information from an archeological site. Recovery techniques are designed to produce maximum knowledge about the utilization of the site, its relation to other sites and the natural environment, and its significance in the maintenance of the cultural system. Recovery techniques may include the use of heavy equipment (e.g., backhoe, etc.) and specialized instruments (pollen coring tools, etc.). If excavation is the mitigative measure selected it is usually undertaken following the final design stage of a project.

**General management programs** Programs designed by federal, state, local, and private agencies and institutions for the effective and efficient control and administration of resources. These may include human, natural, and cultural resources. Anthropological information can contribute to the development of better cultural resource management practices within general management programs.

**Historic resources** All evidences of human occupations that date from historic (i.e., recorded history) periods. These resources include documentary data (i.e., written records, archival material, photographs, maps, etc.) sites, artifacts, environmental data and all other relevant information. Historic resources are cultural resources and may be considered archeological resources when archeological work is involved in their identification and interpretation.

**Hypothesis formulation** The development and statement of one or more specific hypotheses (hypotheses are tentative explanations or laws set forth to be tested). This activity usually includes an intuitive pretesting phase, wherein some hypotheses are abandoned because of poor fit to the data at hand or lack of testability. Though fruitful hypotheses can come from a variety of sources, those chosen for testing relate to specifiable investigative needs.

**Impact, direct** The effects an action will have on environmental resources as a direct and immediate result of construction or development. This includes destruction of archeological sites and their environment by earth-moving, plowing, flooding, or building construction. These effects are not limited to the localities modified by the project but also include features such as access roads, construction crew camps, etc., which are ancillary to the project. Direct impact may be considered in overviews and assessments and should be considered in preliminary field studies and all subsequent reports.

**Impact, indirect** The effects on the environment which are not an immediate and direct result of an action, but which would probably not occur without it. Indirect impact is the extent to which a project or action exposes resources, either within or adjacent to the development, to such adverse effects as accelerated erosion, intensified agriculture, construction of private homes or commercial buildings, road-building, increased vandalism, modification of ecological relationships, and other disturbances attendant to the project. Indirect impact may be considered in overviews and assessments and should be considered in preliminary field studies and all subsequent reports.

**Impact, potential** Impact which is not related to a specific project and, therefore is not direct or indirect, but which may be predicted on the basis of urban growth, technical development, energy requirements, recreational planning needs, etc.

Consideration of potential impact is often most appropriate to regional overviews and general management programs.

**Informants** Knowledgeable persons capable of providing information (usually local) on various aspects of cultural resource studies (e.g., location of sites, local history, regional use of natural materials, etc.) Informants differ from consultants in that they are seldom trained in a specific professional discipline or technical skill and usually have personal familiarity or experience with the resources under study.

**Intrasite relationships** The spatial relationships of artifacts and their contexts that are used for developing greater understanding concerning past human behavior within a single site.

**Land managers** Persons or agencies responsible for the control, maintenance, and care of land and all resources located thereon. Federal landholding agencies (e.g., BLM, BIA, NPS, FS, etc.), state agencies, municipalities, etc., are charged with this responsibility.

**Land modifications** Alterations of any magnitude to the surface of the terrain including changes in adjacent water bodies (reservoirs, lakes, streams) and land previously altered.

**Literature search** An examination and review of all written reports (including published, unpublished, reproduced, and manuscript forms), books, articles, etc., pertinent to the investigations carried out for a cultural resource management study. Literature searches differ from records checks in that the latter usually are limited to formalized recorded information which are maintained as reference files.

**Mitigation** The alleviation of adverse impact by avoidance through project redesign or project relocation, by protection or by adequate scientific study of cultural resources.

**Preservation** All realistic efforts to conserve and maintain the cultural resource base. This may include the protection of archeological and historical remains and their preservation through stabilization, reconstruction and care of artifacts, and the establishment of federal, state and municipal archeological preserves. When such measures are not feasible, preservation of information, though a less desirable measure, should be accomplished through scientific excavation and study.

**Project** Specific programs and related administrative activities carried out by sponsors and contracting agencies. "Major actions" cited in the National Environmental Policy Act may include one or more projects. Cultural resource management studies concerning archeological and historical resources, should be conducted when projects involve any land modification.

**Project alternatives** The alternate project locations or major revisions in project plans under consideration during the planning process (e.g.,

multiple routes for a channel or powerline, reducing the size and scope of the project, utilizing slurry lines as opposed to rail lines, etc.).

**Project sponsor** The federal, state or local agency, corporation, business, institution, or other individual or group responsible for the development, planning, and financing of a project. Project sponsors assume the responsibility for compliance with pertinent legislation, including NEPA.

**Protection** Active long-term efforts to prevent disturbance of the cultural resource base. Protective measures include fencing, barrier construction, patrolling and monitoring, public education, etc.

**Public interpretation** The illustration and explanation of cultural resources (prehistoric and historic sites, artifacts, buildings, etc.) in terms understandable by the general public. Explanations may be at *in situ* exhibits, in books, magazines, articles, brochures, illustrated lectures, etc.

**Qualitative and quantitative manipulation of data** The use of various techniques to reduce, summarize or otherwise use raw data on the nature and distribution of archeological and historical resources. Such techniques include graphic comparisons, chi square, factor analysis, and analysis of variance. The specific manipulative techniques used in a study depend upon the purpose(s) for which the analysis is being undertaken.

**Reconnaissance** A relatively superficial and brief examination of representative portions of a project area, conducted for the purpose of defining the general categories of cultural and related environmental resources contained in the area. Test excavations may or may not be appropriate in a reconnaissance. A reconnaissance should be so designed as to be adequate to estimate the time and cost of an intensive field study.

**Records check** A review of all files containing information relevant to cultural resources. These files may include archeological site survey forms, historic site survey forms (including nomination forms to National and state registers controlled by the State Historic Preservation Officer) photographs, maps, etc. A records check differs from a literature search in that it is more restricted (see *Literature search*).

**Regional context** The background information on the study area in relation to its history, its past and present utilization by man, its demographic character, and its relationship to pertinent characteristics that differentiate it from adjacent areas.

**Register, state or local** Listings maintained by state or local boards or societies of archeological, historical and architectural sites selected for their local or state significance. Protection of sites listed on these registers varies by state. Not all states have such registers and review and nomination procedures for listing are often handled in the office of the State Historic Preservation Officer.

**Remains, prehistoric** The physical features, items, traces, or remnants of occupation sites, structures, work areas, burials, artifacts, mounds, agricultural plots, water control systems, etc., dating from prehistoric or aboriginal periods.

**Remains, historic** The physical features, items, traces, or remnants of structures, buildings, communication systems, agricultural plots, cemeteries, battlefields, artifacts, etc., dating from the historic period. Often, but not always, written records relating to the remains or past events are extant, but even when present are rarely fully adequate.

**Research alternatives** Presentation of alternative approaches to investigations developed to protect or preserve cultural information while providing sponsors with realistic options for complying with legislative mandates and resource management requirements.

**Research design** A plan for conducting an archeological investigation preparatory to undertaking a particular study. It includes a statement of the problem, basic assumptions, activities and techniques, including strategies and methods required for problem solution and hypothesis testing, and a specification of the relevant data and how they will be utilized for a full understanding of the resource. A research design is usually in sufficient detail to permit the evaluation of its methodological sophistication and feasibility.

**Research proposal** Written in response to a request from a sponsor as to whether a prospective contractor can perform needed service. A typical proposal will provide basic information about the contractor and key personnel, how the proposed investigation would be approached, a time schedule and a budget.

**Research recommendations** Suggestions for potential problems for investigation, goals, and strategies which should be provided at early stages of a project (assessment, preliminary reconnaissance) for the purpose of defining and programming for fully adequate study.

**Review agency (reviewers)** The agency (federal or other) responsible for determining whether, or the degree to which, studies prepared for environmental impact statements and related investigations conform to the appropriate standards and guidelines. Individuals, institutions, and other agencies may be requested to serve as reviewers when applicable.

**Sampling** The process or technique of selecting a part of an area of study and presenting it as representative of the whole for inspection or analysis. Representativeness should be appropriate to the problems under consideration. Sampling is utilized in archeological research both for recovering data from study areas and from sites. Sampling may be employed both to survey and excavation with the level of intensity depending upon the required precision of the investigative results.

Various sampling techniques are employed by archeologists, the three most common being random sampling, systematic sampling, and stratified random sampling.

**Sampling, random** A basic technique for selecting representative units of study. In this technique all sampling units are defined and identified (usually by number). Selection of representative units is usually accomplished by using a table of random numbers. This technique insures that every unit within a population has the same chance for selection as every other unit, though it often leads to uneven coverage in a spatial sense. The probability that the sample is representative of the whole increases with increased sample size.

**Sampling, systematic** Controlled selection of sampling units at equal intervals of space, as in alternate sections in a grid.

**Sampling, stratified** This method is utilized to insure some control over the spacing of samples (systematic sampling is another procedure used for this purpose). In this method two or more sampling strata within the population are established. These strata may be arbitrary or based on recognized differences in the area of study (e.g., topographic and ecological zones within a study area, depositional zones within an architectural feature, etc.). Once strata are established, the random sampling procedures may be used for selection of units within each stratum.

**Sample size** The proportion or fraction of the whole determined necessary to yield data adequate for treating the archeological problem, and for providing a sufficient degree of statistical reliability. Sample size requirements vary depending on the size of the study area, density and variety of materials collected, and other variables particular to the investigation.

**Site** Any area or location occupied as a residence or utilized by humans for a sufficient length of time to leave physical remains or traces of occupancy. Such localities are extremely variable in size, and may range from a single hunting camp to an extensive land surface with evidence of numerous settlements and activities. A site may consist of secondarily deposited archeological remains.

**Site density** The quantity or number of sites per designated unit (as in distinguishable zones within a study area). Site density may be a critical factor in developing research designs and cost estimates for study or mitigation and with establishing significance.

**Specialized studies** (see *Ancillary studies*)

**Sponsor (contracting agency)** In cultural resource management studies the agency, institution, corporation, business or other individual or group that contracts with an institution for investigations of and management recommendations on cultural resources.

**Study area** The zone or region selected for re-

search in cultural resource management studies. In cultural resource management investigations the study area limits should be that area which will lead to the most efficient and effective results with respect to the appropriate consideration of the cultural resources potentially affected. The study area should be specifically delineated in research proposals, research designs, contracts, and research agreements.

**Supportive studies** (see *Ancillary studies*)

**Survey** A comprehensive and extended physical examination of a study area conducted for the purpose of obtaining reliable data on all cultural resources and associated environmental variables. This should provide information on all of the resources affected by the action. All sites should be described, categorized, dated if possible, and their distribution should be noted. Test excavation may be necessary to identify the character, age, and significance of the resources. An intensive survey should result in recommendations and strategy (including time and cost estimates) for further investigative study.

**Testing (test excavation)** The preliminary, exploratory and limited excavation of portions of sites or specific features within sites carried out for the purpose of better defining site size (vertically and horizontally), site complexity, chronological span of components at sites, quantity of subsurface materials, state of preservation and other aspects critical to the determination of site significance, problems for investigation, proper research methods, and research time and costs for future studies.

**Theoretical base** The general concepts, principles, and assumptions which justify an investigator's approach to problem definition and solution.

**Values, scientific** The potential for using cultural resources to establish reliable generalizations about human behavior, particularly explanations of variability and change in societies and cultures. Generalizations and explanations require controlled comparison of relevant data concerning past human life. This includes such things as artifacts, settlements, food remains, and evidence for past environments. Scientific significance depends on the degree to which archeological resources in the project or program area contain data appropriate for answering various substantive technical, methodological or theoretical questions. The value of these data should be determined in the regional context of the project or program and in relation to general anthropological problems.

**Values, social** Those values consisting of the direct and indirect ways in which society at large benefits from study and preservation of cultural resources. Benefits which should be described and included are: (1) the acquisition of knowledge concerning man's past and its potential use,

(2) the acquisition and preservation of objects, sites, structures, etc. for public education and enjoyment, (3) educational and economic bene-

fits from archeological exhibits, and (5) practical applications of scientific findings acquired through archeological investigations.

# Appendix A

## CULTURAL RESOURCE MANAGEMENT DOCUMENTS

### REVIEWED BY THE ARCHEOLOGICAL REPORTS SEMINAR

#### Anonymous

1974 Handbook of Historic Preservation Guidelines and Procedures. *Office of Archeology and Historic Preservation, National Park Service, USDI*. Washington, DC.

#### Anonymous

1974 Guidelines for Cultural Resources: Their Place in the Planning Process and their Discussion in Environmental Statements of the National Park Service. *National Park Service, USDI*. Washington, DC.

#### Anonymous

1973 Preparation of Environmental Statements: Guidelines for Discussion of Cultural (Historic, Archeological, Architectural) Resources. *U.S. Department of Interior*. Washington, DC.

#### Anonymous

n.d. Archeological Survey Contract Specifications. *Unpublished MS., Arizona Archeological Center, National Park Service, USDI*. Tucson.

#### Anonymous

n.d. Requirements for a Research Proposal. *Unpublished Ms., Arizona Archeological Center, National Park Service, USDI*. Tucson.

#### Anonymous

n.d. Elements of an Archeological Overview. *Unpublished Ms., Arizona Archeological Center, National Park Service, USDI*. Tucson.

#### Anderson, Keith M.

1974 Contract Standards for Archeological Studies. Paper presented at *Denver Cultural Resource Management Conference*, April 11, 12, 1974.

#### King, T. F., M. J. Moratto, and N. O. Leonard

1973 Recommended Procedures for Archeological Impact Evaluation. *Society for California Archeology, Department of Anthropology*. Fullerton.

#### McGimsey, Charles R., III

1971 Conservation Archeology Reports. *Unpublished MS., Arkansas Archeological Survey*. Fayetteville.

1974 Peer Reviews. *Unpublished MS., Arkansas Archeological Survey*. Fayetteville.

#### Miller, Donald S.

1974 Archeological Research on Federal Land: Research or Rip-Off. Paper presented at the annual meeting of the *Society of California Archeology*, Riverside, April 5, 1974.

#### Scovill, Douglas H., Garland J. Gordon, and Keith M. Anderson

1972 Guidelines for the Preparation of Statements of Environmental Impact on Archeological Resources. *Unpublished MS., Arizona Archeological Center, National Park Service, USDI*. Tucson.

#### Stephenson, Robert L.

1974 Environmental Impact Statements. *Unpublished MS., Institute of Archeology and Anthropology, University of South Carolina*. Columbia.

#### The Committee on Ethics and Standards

1961 Four Statements for Archeology. *American Antiquity*, Vol. 27, No. 2.

# Appendix B

## INVESTIGATIVE REPORTS

### REVIEWED BY THE ARCHEOLOGICAL REPORTS SEMINAR

- Anderson, Keith M., Kathleen Gilmore, Olin F. McCormick II, and E. Pierre Morenon  
1974 Archaeological Investigations at Lake Palestine, Texas. *Southern Methodist University, Contributions in Anthropology* 11.
- Asreen, Robert C., Jr.  
1974 An Archeological Reconnaissance of the Proposed Cooper River Rediversion Project, Berkeley County, South Carolina. *University of South Carolina, Institute of Archeology and Anthropology, Research Manuscript Series* 61.
- Aten, Lawrence E.  
1972 Evaluation of the Cultural Resources of the Northgate Site, El Paso County, Texas. *Texas Archeological Salvage Project, Research Report* 5.
- Bareis, Charles J.  
1967 Interim Report on Preliminary Site Examination Undertaken in Archeological Section A of FA1255 South of Business 40 in the Interstate Portion of Area S-34-4 of the Cahokia Site, St. Clair County, Illinois. *University of Illinois, Department of Anthropology, Research Reports* 1.
- Bianchi, Travis L.  
1974 Archeological Investigation of South Carolina Highway Department's Proposed Connection from Port Royal to Ladies Island. *University of South Carolina, Institute of Archeology and Anthropology, Research Manuscript Series* 59.
- Bousman, C. Britt  
n.d. An Archaeological Assessment of Carlsbad Caverns National Park. *Southern Methodist University, Archaeological Research Program*.  
1974 An Archaeological Assessment of Alibates National Monument. *Southern Methodist University, Archaeological Research Program*.
- Bousman, C. Britt, Paul Larson, and Frances Levine  
1974 Archaeological Assessment of Bandelier National Monument. *Southern Methodist University, Archaeology Research Program*.
- Broyles, Bettye J.  
1971 Second Preliminary Report: The St. Albans Site, Kanawha County, West Virginia. *West Virginia Geological and Economic Survey, Report of Archeological Investigations* 3.
- Canouts, Veletta (assembler)  
1972 An Archaeological Survey of the Santa Rosa Wash Project. *Arizona State Museum, The University of Arizona*.
- Cheek, Annetta L., Charles D. Cheek, Steven Hackenberger, Timothy Jones, William M. Jones, and Kevin Leehan  
1974 An Archeological Survey of the Upper Middle Boggy Watershed, Pontotoc, Coal, and Hughes Counties, Oklahoma. *Department of Sociology and Anthropology, University of Tulsa*.
- Davis, Hester A.  
1972 An Inventory and Assessment of the Archeological and Historical Resources of the Lower Mississippi Alluvial Valley to January 1971. *Arkansas Archeological Survey, Fayetteville*.
- Davis, Hester A. (Editor)  
1970 Archeological and Historical Resources of the Red River Basin. *Arkansas Archeological Survey, Research Series* 1.
- Dawson, Gerald L., and Timothy L. Sullivan  
1973 Excavations at Lake Lavon: 1969. *Southern Methodist University, Archaeological Research Program*.
- Department of the Army  
1973 Survey Report: Point Hope Beach Erosion, Point Hope, Alaska. *Corps of Engineers, Anchorage, Alaska*.
- Dibble, David S., and Dessamae Lorrain  
1968 Bonfire Shelter: A Stratified Bison Kill Site, Val Verde County, Texas. *Texas Memorial Museum, Miscellaneous Papers* 1.
- Doyel, David E. (preparator and assembler)  
1974 Excavation in the Escalante River Group,

- Southern Arizona. *Arizona State Museum, The University of Arizona.*
- Faulkner, Charles J., and J. B. Graham  
 1966a Highway Salvage in the Nickajack Reservoir. *Department of Anthropology, University of Tennessee.*  
 1966b Westmoreland-Barber Site (40Mi-11), Nickajack Reservoir, Season II. *Department of Anthropology, University of Tennessee.*
- Faulkner, Charles J., and Major C. R. McCollough  
 1973 Introductory Report of the Normandy Reservoir Salvage Project: Environmental Setting, Typology, and Survey. *University of Tennessee, Department of Anthropology, Report of Investigations 11, Normandy Archaeological Project 1.*
- Gardner, William M.  
 1974 The Flint Run Paleo-Indian Complex: A Preliminary Report, 1971-73 Seasons. *Catholic University, Department of Anthropology, Archaeology Laboratory, Occasional Paper 1.*
- Grady, Mark  
 1974 An Archaeological Survey of the Salt-Gila Aqueduct. *Arizona State Museum, The University of Arizona.*
- Hally, David J.  
 1970 Archaeological Investigation of the Potts' Tract Site (9-Mu-103), Carters Dam, Murray County, Georgia. *University of Georgia, Laboratory of Archaeology Series Report 6.*
- Henderson, Mark, and S. Alan Skinner  
 1973 Archaeological Survey of Nambe Falls Reservoir. *Southern Methodist University, Archaeology Research Program.*
- Human Systems Research, Inc.  
 n.d. Technical Manual: 1973 Survey of the Tularosa Basin.
- Hyatt, Robert D., Barbara H. Butler, and Herbert P. Mosca III  
 1974 Archaeological Research at Cooper Lake 1970-1972. *Southern Methodist University, Contributions in Anthropology 12.*
- Kemrer, Sandra, Sandra Schultz, and William Dodge  
 1972 An Archaeological Survey of the Granite Reef Aqueduct. *Arizona State Museum, The University of Arizona.*
- King, Thomas F., and Patricia P. Hickman  
 1973 The Southern Santa Clara Valley: A General Plan for Archaeology. *San Felipe Archaeology 1.*
- McGahey, Samuel O.  
 1971 Archaeological Survey in the Tombigbee River Drainage Area. *Mississippi Archaeological Survey, Preliminary Report 2.*
- McCormick, Olin F., III  
 1973 Archaeological Resources in the Lake Monticello Area of Titus County, Texas. *Southern Methodist University, Contributions in Anthropology 8.*
- McMichael, Edward V., and Oscar L. Mairs  
 1969 Excavation of the Murad Mound, Kanawha County, West Virginia. *West Virginia Geological and Economic Survey, Report of Archeological Investigations 1.*
- Moratto, Michael J.  
 1973 A Survey of Cultural Resources in and near Redwood National Park, California. *California State University, San Francisco.*
- Mosca, Herbert P. III  
 1974 Archaeological Survey of Texas Watersheds in Central Texas. *Southern Methodist University, Archaeology Research Program.*
- Mueller, James W.  
 1974 The Use of Sampling in Archaeological Survey. *Society for American Archaeology, Memoirs 28.*
- Neal, Larry  
 1972 An Archaeological Survey and Assessment of the Prehistoric Resources in the Albany and Parker Reservoirs, Oklahoma. *Oklahoma River Basin Survey, Norman.*  
 1974 A Resurvey of the Prehistoric Resources of Tenkiller Ferry Lake. *Oklahoma River Basin Survey Project, General Survey Report 13.*
- Perino, Gregory  
 1972a An Historical Cultural Assessment of the Proposed Birch Reservoir, Osage County, Oklahoma. Report submitted to U.S. Army Corps of Engineers, Tulsa District.  
 1972b An Historical Cultural Assessment of the Proposed Skiatook Reservoir, Osage County, Oklahoma. Report submitted to U.S. Army Corps of Engineers, Tulsa District.
- Peterson, Drexel A., Jr.  
 1973 The Spring Creek Site, Perry County, Tennessee: Report of the 1972-1973 Excavations. *Memphis State University, Anthropological Research Center, Occasional Papers 7.*
- Pilles, Peter J., Jr.  
 1973 Final Report for an Assessment and Evaluation of the Cultural Resources of Grand Canyon Village. *Museum of Northern Arizona, Department of Anthropology.*
- Rohrbaugh, Charles L.  
 1973a Hugo Reservoir 3. *Oklahoma River Basin Survey, Archaeological Site Report 24.*  
 1973b Kay Reservoir—The Southern Section. *Oklahoma River Basin Survey, Archaeological Site Report 25.*
- Schiffer, Michael B., and John H. House (assemblers)  
 1974 The Cache River Archeological Project: An Experiment in Contract Archeology. *Arkansas Archeological Survey, Research Reports 4.*
- Skinner, S. Alan, and Maynard B. Cliff  
 1973 Archaeological Survey of the Blue Hills Station, Newton County, Texas. *Southern Methodist University, Archaeology Research Program.*
- Skinner, S. Alan, Paul P. Steed, Jr., and Susan E. Bearden  
 1973 Prehistory at Milehigh. *Southern Methodist University, Archaeology Research Program.*

South, Stanley A.

1974a Historical Archeology Papers: Methods and Theory. *University of South Carolina, Institute of Archeology and Anthropology, Research Manuscript Series 64.*

1974b Palmetto Parapets: Exploratory Archeology at Fort Moultrie, South Carolina, 38CH50. *University of South Carolina, Institute of Archeology and Anthropology, Research Manuscript Series 63.*

Stephenson, Robert L. (Editor)

1972 *Notebook*, Vol. IV, No. 6. The Institute of Archeology and Anthropology, the University of South Carolina, Columbia.

Stewart, Yvonne G., and Lynn S. Teague

1974 An Ethnoarchaeological Study of the Vekol Copper Mining Project. *University of Arizona, Arizona State Museum, Cultural Resources Management Section.*

Weaver, Donald E., Jr.

1974 Archaeological Investigations at Westwing Site, AZ T:7:27 (ASU), Agua Fria River Valley, Arizona. *Arizona State University, Department of Anthropology, Research Paper 7.*

Wright, Henry T.

1973 An Archeological Sequence in the Middle Chesapeake Region, Maryland. *Maryland Geological Survey, Archeological Studies 1.*

# Appendix C

## CODE OF ETHICS, STANDARDS OF RESEARCH PERFORMANCE, INSTITUTIONAL STANDARDS, AND BASIC PROFESSIONAL CHARACTERISTICS AS PROMULGATED BY THE SOCIETY OF PROFESSIONAL ARCHEOLOGISTS IN 1976

### PREAMBLE

Archeology provides an approach to the study of man through the scientific investigation and interpretation of the archeological record. A finite, non-renewable, generally fragile resource, the archeological record is comprised of all the material evidence of past human behavior.

Society has a claim on the information about man's past which can be derived from the study of the archeological record. Society, therefore, must depend upon the profession of archeology to ensure that archeologists

- (a) conduct their studies scientifically so that accurate new information about the past will be acquired,
- (b) disseminate the results of their studies,
- (c) help to conserve the archeological record, and
- (d) use archeological resources economically in their research.

These objectives will be promoted by the promulgation of a code of professional ethics and codes of professional standards for the practice of archeology. The promulgation of such codes, and the identification and unification of those who subscribe to them, will

- (1) strengthen the identification of archeology as a profession and of qualified archeologists as professionals,
- (2) encourage high standards in the training of archeologists,
- (3) require high standards of performance from practicing professional archeologists,
- (4) communicate to the public the importance of proper practice of archeology, and
- (5) assist governmental and other organizations using archeologists in the course of their activities to identify those properly qualified for the purpose.

### CODE OF ETHICS

Archeology is a profession, and the privilege of professional practice requires professional morality and professional responsibility, as well as professional competence, on the part of each practitioner.

#### I. *The Archeologist's Responsibility to the Public*

##### 1.1 An archeologist shall:

- (a) Recognize a commitment to represent archeology and its research results to the public in a responsible manner;
- (b) Actively support conservation of the archeological resource base;
- (c) Be sensitive to, and respect the legitimate concerns of groups whose culture histories are the subjects of archeological investigations;
- (d) Avoid and discourage exaggerated, misleading, or unwarranted statements about archeological matters that might induce others to engage in unethical or illegal activity;
- (e) Support and comply with the terms of the UNESCO Convention on the means of prohibiting and preventing the illicit import, export, and transfer of ownership of cultural property, as adopted by the General Conference, 14 November 1970, Paris.

##### 1.2 An archeologist shall *not*:

- (a) Engage in any illegal or unethical conduct involving archeological matters or knowingly permit the use of her/his name in support of any illegal or unethical activity involving archeological matters;
- (b) Give a professional opinion, make a public report, or give legal testimony involving archeological matters without being as thoroughly informed as might reasonably be expected;
- (c) Engage in conduct involving dishonesty,

fraud, deceit or misrepresentation about archeological matters;

- (d) Undertake any research that affects the archeological resource base for which he/she is not qualified.

## II. *The Archeologist's Responsibility to Her/His Colleagues*

### 2.1 An archeologist shall:

- (a) Give appropriate credit for work done by others;
- (b) Stay informed and knowledgeable about developments in his/her field or fields of specialization;
- (c) Accurately, and without undue delay, prepare and properly disseminate a description of research done and its results;
- (d) Communicate and cooperate with colleagues having common professional interests;
- (e) Give due respect to colleagues' interests in, and rights to, information about, sites, areas, collections, or data where there is a mutual active or potentially active research concern;
- (f) Know and comply with all laws applicable to her/his archeological research, as well as with any relevant procedures promulgated by duly constituted professional organizations;
- (g) Report knowledge of violations of this Code to proper authorities.

### 2.2 An archeologist shall *not*:

- (a) Falsely or maliciously attempt to injure the reputation of another archeologist;
- (b) Commit plagiarism in oral or written communication;
- (c) Undertake research that affects the archeological resource base unless reasonably prompt, appropriate analysis and reporting can be expected;
- (d) Refuse a reasonable request from a qualified colleague for research data.

## III. *The Archeologist's Responsibility to Employers and Clients*

### 3.1 An archeologist shall:

- (a) Respect the interests of his/her employer or client, so far as is consistent with the public welfare and this Code and Standards;
- (b) Refuse to comply with any request or demand of an employer or client which conflicts with this Code or Standards;
- (c) Recommend to employers or clients the employment of other archeologists or other expert consultants upon encountering archeological problems beyond her/his own competence;
- (d) Exercise reasonable care to prevent his/her employees, colleagues, associates and others whose services are utilized by her/him from revealing or using confi-

dential information. Confidential information means information of a non-archeological nature gained in the course of employment which the employer or client has requested be held inviolate, or the disclosure of which would be embarrassing or would be likely to be detrimental to the employer or client. Information ceases to be confidential when the employer or client so indicates or when such information becomes publicly known.

### 3.2 An archeologist shall *not*:

- (a) Reveal confidential information, unless required by law;
- (b) Use confidential information to the disadvantage of the client or employer; or,
- (c) Use confidential information for the advantage of himself/herself or a third person, unless the client consents after full disclosure;
- (d) Accept compensation or anything of value for recommending the employment of another archeologist or other person, unless such compensation or thing of value is fully disclosed to the potential employer or client;
- (e) Recommend or participate in any research which does not comply with the requirements of the Standards of Research Performance.

## STANDARDS OF RESEARCH PERFORMANCE

The research archeologist has a responsibility to attempt to design and conduct projects that will add to our understanding of past cultures and/or that will develop better theories, methods, or techniques for interpreting the archeological record, while causing minimal attrition of the archeological resource base. In the conduct of a research project, the following minimum standards should be followed:

- I. The archeologist has a responsibility to prepare adequately for any research project whether or not in the field. The archeologist must:
  - 1.1 Assess the adequacy of her/his qualifications for the demands of the project, and minimize inadequacies by acquiring additional expertise, by bringing in associates with the needed qualifications, or by modifying the scope of the project;
  - 1.2 Inform himself/herself of relevant previous research;
  - 1.3 Develop a scientific plan of research which specifies the objectives of the project, takes into account previous relevant research, employs a suitable methodology, and provides for economical use of the resource base (whether such base consists of an excavation site or of specimens), consistent with the objectives of the project;

- 1.4 Ensure the availability of adequate staff and support facilities to carry the project to completion, and of adequate curatorial facilities for specimens and records;
  - 1.5 Comply with all legal requirements, including, without limitation, obtaining all necessary governmental permits and necessary permission from landowners or other persons;
  - 1.6 Determine whether the project is likely to interfere with the program or projects of other scholars and if there is such a likelihood, initiate negotiations to minimize such interference.
- II. In conducting research, the archeologist must follow her/his scientific plan of research, except to the extent that unforeseen circumstances warrant its modification.
- III. Procedures for field survey or excavation must meet the following minimal standards:
- 3.1 If specimens are collected, a system for identifying and recording their proveniences must be maintained.
  - 3.2 Uncollected entities such as environmental or cultural features, depositional strata, and the like, must be fully and accurately recorded by appropriate means and their location recorded.
  - 3.3 The methods employed in data collection must be fully and accurately described. Significant stratigraphic and/or associational relationships among artifacts, other specimens, and cultural and environmental features must also be fully and accurately recorded.
  - 3.4 All records should be intelligible to other archeologists. If terms lacking commonly held referents are used, they should be clearly defined.
  - 3.5 Insofar as possible, the interests of other researchers should be considered. For example, upper levels of a site should be scientifically excavated and recorded whenever feasible, even if the focus of the project is on underlying levels.
- IV. During accessioning, analysis, and storage of specimens and records in the laboratory, the archeologist must take precautions to ensure that correlations between the specimens and the field records are maintained, so that provenience, contextual relationships, and the like are not confused or obscured.
- V. Specimens and research records resulting from a project must be deposited at an institution with permanent curatorial facilities.
- VI. The archeologist has responsibility for appropriate dissemination of the results of his/her research to the appropriate constituencies with reasonable dispatch.
- 6.1 Results viewed as significant contributions to substantive knowledge of the past or to advancements in theory, method or technique should be disseminated to colleagues and other interested persons by appropriate means, such as publications, reports at professional meetings, or letters to colleagues.
  - 6.2 Requests from qualified colleagues for information on research results ordinarily should be honored, if consistent with the researcher's prior rights to publication and with her/his other professional responsibilities.
  - 6.3 Failure to complete a full scholarly report within 10 years after completion of a field project shall be construed as a waiver of an archeologist's right of primacy with respect to analysis and publication of the data. Upon expiration of such 10-year period, or at such earlier time as the archeologist shall determine not to publish the results, such data should be made fully accessible for analysis and publication to other archeologists.
  - 6.4 While contractual obligations in reporting must be respected, archeologists should not enter into a contract which prohibits the archeologist from including his or her own interpretations or conclusions in contractual reports, or from a continuing right to use the data after completion of the project.
  - 6.5 Archeologists have an obligation to accede to reasonable requests for information from the news media.
- VIII. Archeologists have a responsibility to prevent the publication of precise site locations whenever such publication might lead to vandalism of the sites.

## INSTITUTIONAL STANDARDS

Archeological research involving collection of original field data and/or acquisition of specimens requires institutional facilities and support services for its successful conduct, and for proper permanent maintenance of the resulting collections and records.

A full-scale archeological field project will require the following facilities and services, normally furnished by or through an institution:

- (1) Office space and furniture
- (2) Laboratory space, furniture, and equipment for analysis of specimens and data
- (3) Special facilities such as a dark room, drafting facilities, and conservation laboratory
- (4) Permanent allocation of space, facilities, and equipment for proper maintenance of collections and records, equivalent to that specified in the standards of the Association of Systematic Collections

- (5) Field equipment such as vehicles and surveying instruments
- (6) A research library
- (7) Administrative and fiscal control services
- (8) A security system
- (9) Technical specialists such as photographers, curators and conservationists
- (10) Publication services

All the foregoing facilities and services must be adequate for the scope of the project.

Not all archeological research will require all of the foregoing facilities and services, but a full-scale field project will. Likewise, all institutions engaging in archeological research will not necessarily require or be able to furnish all such facilities and services from their own resources. Institutions lacking certain facilities or services should arrange for them through cooperative agreements with other institutions.

## BASIC PROFESSIONAL CHARACTERISTICS

The minimal qualifications for eligibility for membership in the Society of Professional Archeologists are specified below. An individual must agree to section I, must qualify under section II.1 or II.2, and must qualify for at least one emphasis under section III.

- I. *Ethics*: By signing the application form, the applicant agrees to subscribe to the Code of Ethics, Standards of Research Performance, and Institutional Standards as adopted by the Society of Professional Archeologists.
- II. *Education and Training*: The applicant must qualify under either II.1 or II.2.
  - II.1. The applicant must:
    - (A) have been awarded a postgraduate degree in archeology, anthropology, history, classics, or other germane discipline (or combination of disciplines) with a specialization in archeology, except where an equivalency to such a degree can be documented.
    - (B) have supervised experience in basic archeological field research, consisting of 12 weeks of field training (including both survey and excavation) plus 4 weeks of laboratory analysis and/or curating. The field experience must be in blocks of at least 2 weeks duration.
    - (C) have designed and executed an archeological study, as evidenced by a MA or MS thesis or report equivalent in scope and quality. This report will ordinarily deal with archeological field research. Acceptable reports or substitutions for this requirement are detailed in sections III.3, III.5, III.6, and III.7.
  - II.2. The applicant must document that after 1 January 1962 and prior to 5 May 1976 s/he
    - (a) engaged in the active practice of ar-

cheology for a total of 3 years and (b) must state that s/he did not violate the Standards of the Society of American Archaeology as adopted 5 May 1961. (This option will not be available to applicants after 5 May 1978.)

- III. *Experience*: At least one year of experience in one or more of the following emphases (except Teaching, III.7) must be documented, or equivalent experience and training acquired prior to 5 May 1976. One year's experience must be gained in blocks of time of at least 4 weeks' duration.

III.1. *Field Research*: Field and laboratory experience under the supervision of a professional archeologist (to include 6 months of field and 3 months of laboratory experience), with a minimum of 6 months in a supervisory or other equally responsible role.

III.2. *Collections Research*: The analytic study of artifacts and/or other physical products and byproducts of human activities, in which the study focuses principally on the comparative treatment of the materials themselves rather than on their relationship to the general archeological context of a site or sites. Thus, the description and preliminary analysis of excavated collection(s) that is normally included in a site report is not "collections research" since it is a basic and necessary part of "field research". The report on collections research should have been published or otherwise be available to the scientific community, or be a thesis or dissertation on deposit in an institution's library. Examples of collections research: a study of rim sherds from late Woodland sites throughout the Northeast in an attempt to define social boundaries; microscopic analysis of edge-wear on utilized flakes; radiometric age determination. Applicants should indicate 6 months under a specialist, 6 months independent or supervisory work in collections research.

III.3. *Theoretical, Library, or Archival Research*: Archeological research on theoretical issues or on substantive problems using library or archival sources, resulting in a report equivalent in scope and quality to an MA or MS thesis. This report may also be used to satisfy the II.1(C) requirement.

III.4. *Archeological Administration*: The administration of an archeological research unit, governmental agency office, a museum, or some other entity whose operations, while multifaceted, are archeological in orientation. "Administration" of a field project or acting as a Principal Investigator does not normally qualify as an example of archeological administration because it is a basic and routine part of directing "field research". The same holds true for direction

of a field school. Service as the chairperson of an academic department does not ordinarily qualify as an example of archeological administration because it is not explicitly archeological. Examples of archeological administration are: service as chief of a university archeological research unit; service as a head of a state or regional office charged with archeological research; service as the primary administrative officer in such an office.

*III.5. Cultural Resource Management:* Understanding and use of the laws, policies, and programs that contribute to the preservation and management of cultural resources. The conduct of archeological surveys for environmental impact statements or similar documents, and the conduct of salvage or mitigation projects, do not ordinarily qualify as examples of cultural resource management activities, since they are normally in no way different from field research. An exception to this generalization would be a case in which a survey was integrated by the archeologist into the development of a regional plan for preservation, or some other program that required cognizance of preservation law and policy. Examples of cultural resource management: preparation of a plan for the protection of cultural sources on a local, regional, or state level; preparation of archeological overviews or evaluations that are directly linked to management needs; major responsibility in an agency or firm to fulfill such management responsibility. A report qualifying under this section, can also satisfy the II.1(C) requirement.

*III.6. Museology:* The application of professional museological methods and techniques to archeological material and data. Service as a museum administrator or curator qualifies as museology only if it requires that the applicant has gained an understanding and has applied museological methods and technics, otherwise such experience may qualify as archeological administration, collections research, or field research, depending upon the actual focus of the work accomplished. Examples of museology: preparation of displays; conservation of archeological specimens; organization or implementation of modern classification and cataloguing systems. Since the title of "curator" is variously used in museums, applicants should describe their duties and responsibilities if they served in this capacity. Preparation of a major archeological exhibit area in a museum open to the public may also be used to satisfy the section II.1(C) requirement, provided the scope

and quality of the research and execution are equivalent to those of an MA or MS thesis.

*III.7. Teaching:* One academic year of full-time teaching (teaching a total of 12 semester hours, at least 6 semester hours of which must be on archeologically oriented subjects). A person qualifying under this section may satisfy the section II.1(C) requirement by the production of a film on archeology, or publication of a report on archeology for use by students, colleagues, or the general public, provided the scope and quality of the film or publication are equivalent to those of an MA or MS thesis.

*III.8. Marine Survey Archeologist:* Background knowledge of coastal geomorphology and marine geology as this relates to cultural resources; training in the principles, proper set-up and operation of underwater remote sensing devices (including magnetometer, side-scanning sonar, sub-bottom profiler, and bathymetric sounder), and ability to interpret the output of these devices; training in navigation. The basic one year experience requirement under supervision of a professional marine survey archeologist or equivalent, must include two weeks offshore training or the equivalent, in the operation of the remote sensing devices; 6 months of the year should be in a supervisory or independent role.

*Other details and information:*

*Report equivalent to an MA or MS thesis:* Ordinarily, reports are indicators of the staying power of a researcher and of his or her ability and determination to fulfill professional commitments. It is recognized that in some cases an individual may have prepared many small and/or cursory reports rather than a single comprehensive volume. If the applicant feels that such reports cumulatively, are comparable to an MA or MS thesis, s/he can assert and document this belief when applying under the pertinent sections. It is also recognized that in some cases the applicant's name may not appear on a document that s/he actually authored; the applicant should then obtain a letter from the person, firm, or agency that issued the document verifying the actual authorship. In any case, the report(s) must indicate substantive analysis based on theoretical orientation and follow through. A long but purely descriptive report is not considered equivalent.

*Documentation:* Review procedures for membership and certification are designed to minimize the possibility of selection on the basis of individual bias. In order for the procedures to work smoothly, it is ordinarily necessary for applicants to submit documentation in addition to

standard resumes or curriculum vitae. Applicants should examine the Professional Qualifications carefully. In each case where a claim is made under paragraph 3 of the application form, if the claim is not fully explained on the form itself, the applicant should prepare a concise (usually no more than 1 page) statement supporting this claim. The statement should indicate how the applicant meets the relevant qualifications set forth in sections II and III of the Professional Qualifications. A resume or vitae should be attached as supporting data. Applicants claiming the teaching emphasis should list archeologically oriented courses taught. Applicants claiming the museology emphasis should

discuss the nature of their museum experience. If a list of publications or kinds of experience is provided, the applicant should indicate which publication, or which experience, applies to which emphasis claimed. If the applicant feels that submission of a publication or other report is necessary, only *one* copy of such a submission is needed. If particular types of experience are difficult to otherwise document, verification from supervisors or colleagues may be submitted. In general, however, a simple statement of why the applicant believes that he or she qualifies for a given status or emphasis, together with a resume or vitae, will be adequate documentation.