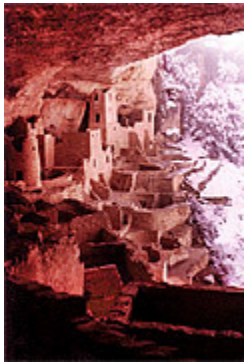


Archaeology & You

By George E. Stuart & Francis P. McManamon

This booklet is about archaeology and you. It is designed to provide you with basic information about the science of archaeology, along with advice on how you can learn more and, if you wish, actually take part in it. A selection of specialized books, magazines, and films appears in the appendix, which also identifies sites and museums you can visit. In addition, there are suggestions for those who might like to volunteer for excavation or other archaeological work.

Finally, this booklet suggests some steps and guidelines for those of you interested in dedicating yourselves to any of many different professional careers in archaeology or to an avocation in this uniquely rewarding field.



Cliff Palace, Mesa Verde National Park.



A lab worker works to clean and catalogue artifacts from an excavation at Fort Vancouver.



Pecos National Historical Park.

Letter from the National Geographic Society

Gilbert M. Grosvenor
President and Chairman

By pure coincidence, scientific archaeology began at about the same time as the founding of the National Geographic Society, just over a century ago. Since that time, the two have been closely related. The Society's Committee for Research and Exploration has funded more than 1,000 archaeological field projects all over the world, and National Geographic, along with other magazines, books, filmstrips, and television programs, continues to keep our large membership informed about the latest findings from the field.

The reason for the Society's ongoing commitment to archaeology is twofold: First, the worldwide remains of the human past form a precious and irreplaceable resource within the context of a fragile environment too often threatened by destruction for short-term gain. Second, those sites and other remains that have somehow survived constitute our sole source of knowledge about the vast majority of past cultures whose sagas of change and interrelationship, of invention and adaptation, and of failure or success helped shape the world as we know it today. Thus, we see archaeology as a necessary and important endeavor that can reveal information essential to self-knowledge and also provide lessons for our future successes in managing ourselves and our uses of the planet we inhabit.

This booklet is designed to serve as a single reference about all aspects of the science of the past. Its topics range from basic definitions of archaeology, anthropology, and related disciplines to detailed glimpses at what archaeologists do and why they do it. The information provided should not only help satisfy casual curiosity about archaeology but also tell how you may participate in fieldwork or even make it a rewarding and productive career.

As President of the National Geographic Society, I am proud that we have had the opportunity to be part of this work.

1145 17th Street N.W
Washington, D.C. 20036-4688
Tel: (202) 857-7000

Letter from the Society for American Archaeology

Archaeology is above all a cooperative undertaking involving a variety of scientific disciplines to illumine the unwritten history-the record-of past peoples. At almost any site, an archaeologist must work with biologists and geologists to complete research. And archaeologists not only study settlements in concert with others, they also seek to preserve these sites from vandalism and looting, working closely with law enforcement authorities, state and federal government officials, and most important, members of Native American groups whose very legacy might be lost without close vigilance.

This booklet, too, is a cooperative undertaking, and the Society for American Archaeology (SAA) is pleased to have joined with National Geographic and the Department of the Interior in this booklet's initial creation and this new edition. I am proud to acknowledge here the contributions of SAA members to this effort.

Some 5,000 professional and avocational archaeologists belong to the Society for American Archaeology, and for more than 50 years we have promoted scholarly communication and greater public understanding of the importance of preserving the unwritten histories of the Americas. SAA's annual meeting each year attracts more than 2,000 archaeologists. The organization publishes two journals, a directory, and other publications to keep members and others on top of developments in the field. The SAA also works with Congress and federal agencies to improve protection of archaeological sites. In addition, members are active in making archaeology one of the subjects taught in our nation's schools.

Between the covers of this booklet are clear and straightforward descriptions of how archaeologists look for ancient settlements, how they excavate them, and how the materials recovered are analyzed. You will also learn about the destruction of archaeological sites around the world-how looting and the sale of antiquities are erasing the record of past cultures-and what is being done to try to stop this destruction. Archaeology & You sets the record straight on what archaeology is. It also will help you decide the role you can play in this cooperative venture, as all of us-professional and nonprofessional alike-work to preserve those sites so important to our uniquely American histories.

Bruce D. Smith
President
Society for American Archaeology

Message from Secretary of the Interior Bruce Babbitt

The development, publication, and distribution of *Archaeology & You* has been a joint project by the Department of the Interior, the National Geographic Society, and the Society for American Archaeology. Each of these organizations has a special interest in the interpretation and preservation of America's archaeological heritage. As Secretary of the Interior, I am responsible for the care of archaeological remains on federal lands administered by bureaus within the Department of the Interior. I also have the job of providing leadership, guidance, and oversight for archaeological programs in federal agencies or sponsored by federal agencies throughout the government.

In addressing this second, broader national responsibility, we have developed a National Strategy for Federal Archaeology that identifies several areas in which federal and other public agencies should try to enhance their archaeological efforts. One of these important areas is the improvement of public education and outreach efforts. *Archaeology & You*, therefore, is designed to provide access to archaeological information and activities for the general public.

Many Americans are interested in the historic and prehistoric archaeology of this country and want to learn more about it. The increasing popularity of State Archaeology Week celebrations, archaeological open houses and tours, volunteer programs, and even the Indiana Jones films all demonstrate that archaeology is a topic of interest to millions of Americans.

We need more and better public education and opportunities for the public to participate in appropriate archaeological projects. Participation in public programs and events helps protect and preserve archaeological sites by ensuring, for example, the careful recording and detailed attention to context that is necessary in the scientific archaeological field and laboratory work and by educating volunteers who can help meet interpretive and management goals.

I hope that readers enjoy *Archaeology & You* and find it useful in learning more about the fascinating world of archaeology and America's archaeological resources.

Chapter 1: Adventure in the Depths of Time

Archaeology. The very mention of the word evokes images of buried treasure, ancient curses, or the sexist stereotype of the pith-helmeted scholar poking around in the jungle with his handsome assistant and beautiful daughter.

Too often the most sensational aspects of the profession, whether the fact of Pharaoh Tutankhamun's tomb or the fiction of the Indiana Jones movies, have become the sole elements of most people's concept of archaeology. That image simply isn't realistic. Spectacular discoveries are quite rare in the real-life pursuit—normally a mixture of demanding physical labor and careful scholarship. And it would be as difficult to pick an archaeologist out of a crowd as to distinguish a disc jockey from a real estate agent passing on a busy street.

Archaeology is perhaps best thought of as the study of past ways of life. To pursue this study, archaeologists focus on the relationship between the material objects made by past peoples, on the one hand, and the makers' behavior, on the other. Sometimes written records help; often no such records exist.

In previous centuries archaeologists were content simply to find objects. Today, armed with computers, laboratory analysis, theories about society and culture, and a wide range of questions about human behavior, they may try to reach into the minds of those who made and used the artifacts. Thus their analysis acts as a bridge between the two sets of things: one an invisible realm that includes human ways of survival, religious beliefs, family structure, and social organization; the other a visible, tangible accumulation of material remains such as trash, tools, ornaments, and buildings. The latter group provides the raw material for understanding the former through logical reasoning. In making this all-important link, archaeologists have at least three main goals:

To obtain a chronology of the past, a sequence of events and dates that, in a sense, is a backward extension of history. For example, an archaeologist may wish to determine when agriculture developed in a particular society or when a certain kind of pottery was made. Such basic information not only contributes to charting the individual sequences of culture change but also allows comparisons among culture histories in different parts of the world.

To begin at least to reconstruct the many ways of life that no longer exist. For example, excavations at the huge Cahokia site in western Illinois give us an intriguing glimpse of the area as it was around A.D. 1200 by providing numerous clues to the nature of everyday life, the richness of ceremonial activity, and the workings of economic systems in the Mississippi Valley at that time.

To give us some understanding of why human culture has changed through time. Given the delicate and complicated interplay between environment and people—either different segments of past societies or peoples of different cultures—archaeologists can often isolate the occurrence of small changes in the past, such as shifts in gathering methods, changes in art motifs, or new sets of social relationships. These, in turn, may allow investigators to track changes through time and to

understand the reasons for them.

The quest for cause-and-effect explanations of human behavior over the centuries is perhaps the most important ingredient of the discipline, for it has the potential to help us understand the present. This is but one of many reasons why archaeology plays such a vital part in the overall study of humanity.

In striving to accomplish each of these three aims, archaeologists make a contribution to our understanding of all peoples by opening up to our investigations hundreds and thousands of years of human activity that are otherwise unrecorded or poorly recorded. Thus, archaeology, in conjunction with other social and natural sciences, enables us to better understand ourselves and how we got to be the way we are. In short, archaeology is not merely the recovery and description of arrowheads or even the reconstruction of the lifeways of prehistoric peoples; it is, ultimately, a problem-solving science that recovers and analyzes data that reflect the vast diversity of human societies and human beings—data that also allow all of us an appreciation for how we are different, how we are alike, and the reasons for cultural change, stability, and transformation.

The science of archaeology has both the purpose and the capacity to satisfy our curiosity about the past, and its methods—akin to those of a detective seeking clues—possess a fascination all their own. As a result, more and more people are interested in learning about the past through archaeology and in participating in archaeological investigations. The appendix at the end of this publication includes information about how to become more involved in scientific archaeology.

Scientific archaeological research includes much more than the excavation of ancient sites. Modern archaeology, in fact, frequently requires no excavation but depends upon the study of existing collections and information reported in scientific publications. Instead of digging, archaeologists bring new technologies and methods to bear upon materials excavated earlier in order to reinterpret them.

Excavation, when required, is only an early step in a long, difficult, and expensive process leading to the publication of reports describing and interpreting the excavated site and materials recovered from it. Excavation irrevocably disturbs, even destroys, the original context—the way artifacts and other material lay in relation to one another. Thus, for the archaeologists involved, the very act of digging carries with it a built-in ethical and professional obligation to scientifically document that which was disturbed. This guarantees that the sites themselves and the recovered objects continue to be available for study by future scholars.

This booklet is about archaeology and you. It is designed to provide you with basic information about the science of archaeology, along with advice on how you can learn more and, if you wish, actually take part in it. A selection of specialized books, magazines, and films appears in the appendix, which also identifies sites and museums you can visit. In addition, there are suggestions for those who might like to volunteer for excavation or other archaeological work. Finally, this booklet suggests some steps and guidelines for those of you interested in dedicating yourselves to any of many different professional careers in archaeology or to an avocation in this uniquely rewarding field.

To learn more about topics covered in Chapter 1 visit these National Park Service Features:

[Public Archeology in the U.S. A Timeline](#): Take a journey through time and see the development of public archeology in the United States. See how public archeology developed and changed through the years and discover key events that shaped the discipline.

[Federal Archeology Program](#): Based on a National Strategy for Federal Archeology, the program includes a wide range of efforts to interpret the past for the public, care for collections, conduct scientific investigations, and protect archeological sites. The Secretary of the Interior reports to Congress each year on these activities through this program.



Archaeologists excavate a former Chinese community in Paradise Valley, Nevada.



Monks Mound as it appeared in the late 1930's to early 1940's.



Monks Mound as it appeared in the mid 1970's.



Monks Mound, located in Cahokia Mounds State Historic Site as it appeared in the early 1990's.



Underwater archaeologists employ techniques to record data underwater



Archaeologists look over artifacts in the lab.



Archaeologist Michael Wilkens shows some artifacts to visitors on the Petersburg National Battlefield.



Not all archaeology involves digging.

Chapter 2: The Science of Archaeology

Because archaeology is basically concerned with people, it forms an important subdivision of the social science of anthropology. Anthropology, the study of human culture, also includes three related specialties—linguistics, the study of human speech and language; physical anthropology, the study of the origins and biological evolution of humans as well as the patterns of human physical variation; and cultural anthropology, the study of living peoples and the great variety of their customs, adaptations, and achievements.

In practice, archaeologists utilize theories and methods of their colleagues in the other anthropological specialties and of experts in other fields of scientific study as well. Linguists, for example, can furnish useful checks on purely archaeological information. One of their techniques measures the change that has taken place between two related languages. Such change, say many linguists, is apparent when one compares lists of commonplace words, like "sky" or "mother," that nearly all peoples have in their vocabularies. By finding the degree of change in such word lists, the approximate time at which the two languages split from a common ancestral tongue may be indicated. Such data reinforce archaeological findings if they suggest a cultural divergence during the same span.

Physical anthropologists provide special knowledge about biological variation among modern humans and their ancestors. This includes not only the study of ancient human fossil remains in Africa, Asia, and other parts of the Old World but also skeletal remains in the Americas, where no forms of humans earlier than modern *Homo sapiens* are known. The study of such remains provides information ranging from ancient diet and disease to indications of intermarriage or the replacement of one population by another. New breakthroughs in the realms of genetics, blood chemistry, and dentition continue to open more and more paths to our knowledge of the past.

Cultural anthropology furnishes a wealth of knowledge on how living peoples use their environment, divide up labor, keep track of time, and organize themselves in households or social groups. If carefully applied, such information can provide useful analogies to help interpret the meanings of the material objects found in the ground.

Like modern settlements, the remains of past settlements—that is, archaeological sites—are all around us. Archaeologists are interested in knowing precisely where these sites are so they can be preserved and protected for study and for the benefit of future generations. The geographical relationships among archaeological sites, regardless of whether they were occupied at the same time or at different times, can themselves provide clues to how their inhabitants obtained food and other resources of the area. Relationships among sites occupied at the same time can indicate social, religious, and political links or conflicts that may have characterized the region.

One such regional investigation, by archaeologist Donna Roper, then of the University of Missouri at Columbia, concentrated on the Sangamon River Valley in central Illinois. Her thorough survey and sampling of the area brought two important

periods of occupation to light: one between about 150 B.C. and A.D. 400, the other from around A.D. 400 to 700—periods that archaeologists, for convenient reference, have agreed to label respectively Middle Woodland and Late Woodland. From her work in the Sangamon Valley, Donna Roper found that during the earlier period people tended to locate their settlements away from the river, at the base of bluffs at the valley edge. These bluff-base settlements were located near water sources and other frequently used resources. During this early period, however, additional temporary camps were set up in the valley bottomlands to exploit aquatic resources and in locations farther afield to hunt deer. Settlements of the later time span were built in the bottomlands.

As Roper noted in her published report, these patterns were apparently the result of seasonal food procurement in the region—the reflection of a way of life similar to that of the Kickapoo Indians, who occupied the area in early historical times. According to eyewitness accounts in the historical documents, the Kickapoo shifted settlements with the seasons, practicing horticulture in one place during the summer, then moving into the bottomlands during the colder months to hunt.

Archaeologists often focus their investigations on a specific site—any area of ground once used, and thus modified, by human beings. There is no typical archaeological site. One may be a 10,000-year-old campsite such as that found at Debert, Nova Scotia, virtually indistinguishable on the surface from surrounding meadows and forest. Others might hold the crumbling buildings and refuse mounds of a great city like Chan Chan, Peru, or Baalbek, Lebanon. Whether cave or field, cliff dwelling or mound, or the stone foundations of a colonial house, each site is a unique and fragile remnant of the past. It holds not only artifacts but, more important, the sum total of existing clues on the relationship of these objects to one another. A site is a complicated package that, if carefully opened and meticulously recorded, can lead to interpretations of what happened at the place and provide information for determining when, how, and why it happened.

The decision to excavate can be based on many factors. Usually a particular problem—for example, when and why settled life began in an area—determines the choice. For the historical archaeologist, the reason for excavation may be to supplement or verify the written record, which is often plagued by omissions, biases, or vagueness. Excavations of settlements like Jamestown, Virginia, or the recovery of the cargo of a Civil War-period steamer provide glimpses of the past or, in the latter case, a past instant. And while historical records are of immense help in such cases, they may not address the specific archaeological problem involved.

In other cases, reservoir flooding or disturbance of the ground by highway construction, home building, or agriculture may threaten sites with destruction. Such circumstances dictate a program of conservation archaeology designed to protect as many sites as possible and to recover information that would otherwise be lost forever from sites that cannot be saved.

A good example of this is a site that once lay in an open pine grove at the tip of Rose Island in eastern Tennessee, near where the Tellico and Little Tennessee Rivers join. Knowing that Rose Island would soon be drowned by the new Tellico Reservoir, the Tennessee Valley Authority, in cooperation with the National Park Service, arranged for archaeologist Jefferson Chapman of the University of Tennessee at Knoxville to investigate Rose Island. His preliminary exploration showed that there was far more to Rose Island than first met the eye. Telltale bands of dark soil indicating successive human occupation appeared about six feet below the surface. The kinds of stone tools

and the absence of pottery in these deep layers suggested that the site was quite old, occupied perhaps by wandering bands of hunter-gatherers.

Like all archaeologists, Jeff Chapman knew that in excavating he would necessarily destroy part of the site. Artifacts, of course, could easily be taken back to the laboratory for further study, but the all-important context of these remains could not be removed. Here is where Chapman's professional training came into play.

Because the location of everything found would have to be recorded in detail, he and his crew of students carefully laid a reference grid of numbered wooden stakes through the pine grove before removing the overburden of surface soil. For three months they carefully troweled in selected grid squares, peeling away the ancient deposits. As they progressed, layer by layer, they were careful to leave all artifacts within a layer—stone tools, chips, hearths, or whatever—in place until all could be carefully inspected, drawn, and photographed. Then they removed the artifacts to numbered bags before proceeding to the layer below. Dirt from each layer, meanwhile, was carefully screened to recover any artifacts or fragments that may have been missed. In addition, samples of soil were washed in a process known as flotation to separate out any seeds or plant remains.

As the pits deepened, the buried layers they had carefully removed could all be seen in cross section on the smooth walls of the pit. These were plotted to precise scale on graph paper.

By summer's end Chapman and his crew had recovered more than 40,000 items—including almost 30,000 tiny chips of stone, the residue of tool manufacture and use. These, however, were far less important than the thorough records the excavators compiled, for the records could now serve as a substitute for the excavated part of the site, telling people precisely where each piece had been found.

Back in the laboratory, analysis of the material began. Whereas it took Chapman only two summers to collect, record, and measure the archaeological data, it took years to accomplish the laboratory analysis, to formulate his conclusions, and to prepare the results for publication.

By using computers and special software developed for the purpose, thousands of stone lance points, other tools, and fragments were sorted according to diagnostic characteristics, or attributes. With the resulting classification, Chapman and his team were able to compare their findings with those from other sites and to estimate the time when Rose Island was first occupied.

The stone chips and their locations suggested not only how the tools were made but also where in the ancient camp the manufacturing went on. And burned acorns and hickory nuts gave valuable clues to the diet of the ancient Rose Islanders.

In the course of his analysis Chapman received useful aid from colleagues in other sciences. For example, technicians in physics subjected his charred wood remains to radiocarbon tests. Their dates—between 6100 and 7400 B.C., or early within the span that archaeologists call the Archaic—reinforced his preliminary dating of the main occupation of the site. This was refined even more by other specialists who, by observing the lineup of magnetic molecules in the Rose Island hearths, could estimate fairly closely how much time had elapsed between the use of successive fireplaces. A geologist well acquainted with the mineralogy of the area showed that the people of Rose Island had found flint nearby for their tools—one reason, perhaps, for using the

site—while a specialist in botany used wood charcoal to identify oak, hickory, and other vegetation, all crucial clues to the ancient environment.

Had the excavation yielded other kinds of remains, the aid of still more specialists might have been sought: Malacologists, who study ancient and modern snail and other mollusk shells, and palynologists, who identify pollen, can help detect environmental changes through time; ichthyologists and zoologists identify fish and animal remains.

Just as was the case with Roper's work in the Sangamon Valley, the crucially important step of publishing the results of Chapman's work at Rose Island, now covered by the reservoir waters, was undertaken to ensure that the information would be available to everyone concerned with the human past. Equally important, following the recording and analysis, all the excavated artifacts, samples, field notes, maps, and other records were preserved so they will be available for future scientists to reanalyze with the greater knowledge and improved techniques and equipment of the future.

Jeff Chapman would be the first to acknowledge that Rose Island was no Tut's tomb, but he didn't care. In the vast sweep of the human past, the small Tennessee site is quite as essential a chapter as that provided us by the golden trappings of Egypt's pharaohs—and this is indeed what archaeology is all about.

Increasingly, archaeologists are turning not to sites but to the analysis of existing collections of artifacts or records of past surveys or excavations in order to gain information. With the growing recognition that it is often best to keep ancient sites intact for future generations, the study of collections, both institutional and private, is likely to become more common.

During the late 1960s, James Judge, then of the University of New Mexico, became interested in learning more about the life of the Paleo-indians, the earliest recognizable culture of the Americas—the Ice Age hunter-gatherers who lived in North America before about 8000 B.C. Judge was specifically interested in the Paleo-indians of the Central Rio Grande Valley, New Mexico. His first step was a survey of the area, much like that done by Donna Roper in Illinois. After recording the locations of sites that could be detected by surface evidence, Judge turned to existing collections from the area. The use of such material ultimately saved him an immense amount of time and effort in his analysis.

Using all these data, plus new information from sites he investigated himself, Judge sought the relationships between changes in Paleo-indian artifact forms, settlement location, and the environment over time. The analysis revealed that the then accepted view of Paleo-indian life in New Mexico as an unchanging span devoted to the hunting of big game was wrong. In its place emerged a picture of a long period in which patterns of animal watering places and human settlement, as well as the inventory of available animals, were in continuous change as the climate fluctuated and gradually became drier and as humans developed ways to organize themselves, to find and utilize resources, and to make a place for themselves in their world.

Archaeologists often deal with periods of time much greater than that embraced by Judge's work in New Mexico, for human or human-like beings have lived on earth for some five million years. However, far more than 99 percent of that enormous span lies totally out of reach of the earliest written records. When Columbus first set foot on what came to be called the Americas, people had inhabited those two vast

continents for more than 13,000 years, yet virtually no decipherable written records were left. For any knowledge of our collective heritage, then, archaeology is the sole source of information.

For those who choose it as a career, archaeology can be even more intriguing than its popular image, and its personal rewards can far outweigh what are often challenging working and thinking conditions. There are many reasons that professional archaeologists enjoy what they do. Perhaps the best is the excitement of discovering some knowledge about ourselves that would otherwise remain out of reach. Likewise, nonprofessional avocational archaeologists can experience much the same challenge and thrill in knowing that they too can contribute to our knowledge of the human past. Neither can deny that there is much yet to learn.

To learn more about topics covered in Chapter 2 visit these National Park Service Features:

[Ancient Architects of the Mississippi](#): Eight hundred years ago, the lower Mississippi Delta was home to some of the most highly organized civilizations in the world. This feature tells you about life along the Mississippi at that time, builders of great mounds, and the activities of travelers and traders. It also provides you with a myriad of voices about the Delta's past.

[Submerged Archeology](#): Learn about the underwater projects of the Submerged Cultural Resources Unit, often in partnership with other organizations, including the U.S.S. Arizona and U.S.S. Utah at Pearl Harbor, ships and planes in Palau and Guam, and numerous historic shipwrecks in Dry Tortugas National Park and off Isle Royale National Park.

[Archeological Research in the Parks](#): Many national parks have active archeological programs. Learn about the exciting results of archeological projects in some of your favorite parks by clicking on the state of your choice.

[Kennewick Man](#): The human skeletal remains that have come to be referred to as the "Kennewick Man," or the "Ancient One," were found in July 1996, in Kennewick, Washington. Almost immediately controversy developed regarding who was responsible for determining what would be done with the remains. Claims were made by Indian tribes, local officials, and some members of the scientific community. The documents here provide background information and detailed reports of aspects of the work being done on Kennewick Man by the Department of the Interior.



Native American Petroglyph at Columbia River Gorge.



Emerald Mound National Historic Landmark in Natchez Trace Parkway.



An archaeologist looks over the results of the excavation.



Archaeologists in Jamestown, Virginia worked to locate the site of James Fort.



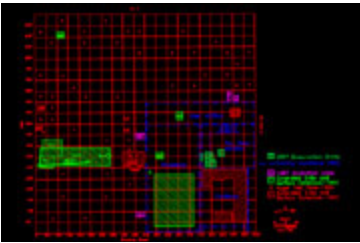
Workers from the Interagency archaeological salvage program race against time.



An archaeologist carefully screens dirt from excavation units to locate artifacts.



Archaeological storage at Anasazi Heritage Center.



Creating a map of the excavation site is essential due to the destructive nature of archaeology.



An archaeologist carefully unearths a prehistoric hearth in Alaska.



Detailed information about each artifact is recorded and preserved for future research or use in an exhibit.

Chapter 3: Archaeology as Career or Avocation

A lasting interest in archaeology can be stimulated in many ways—by reading a book, by visiting a museum, or by seeing an ancient site. Any of these can arouse that strong curiosity that is so fundamental to the archaeologist's makeup—and to the human mind in general—that it is often taken for granted. It is this curiosity, continually reinforced by academic studies and later by one's own research, that molds and sustains the true archaeologist.

Some high schools have incorporated basic programs in anthropology into their curricula, and a growing number of middle and elementary school teachers are using archaeological information and teaching materials in science, history, geography, mathematics, and other related subjects. Educational programs incorporating archaeology into the standard school curricula now exist in Arizona, Louisiana, South Carolina, Utah, and a number of other states. If a student develops more than a casual interest in the subject before going to college, there are ample opportunities for expanding that interest.

There is no substitute for continued reading about archaeology; most libraries have excellent and exciting books and magazines about the field. A scrap-book of newspaper and magazine clippings about new discoveries might be kept, for archaeologists' finds are constantly outracing the history books. More and more television programs on archaeological topics are appearing, and they appeal to viewers of all ages. Some of these, plus listings of selected books and magazines, appear at the end of this booklet.

In the United States, each state has at least one archaeological society. Though they vary in what they are able to offer their members, all afford chances to talk with others interested in the study of the past or to visit local archaeological sites. Often such societies and their branch chapters feature lectures by professional as well as avocational archaeologists or exhibits of archaeological materials related to the area. Also, a visit to a large university can be interesting. There one can see how archaeologists work in the laboratory, process and catalog artifacts, make site maps, and prepare reports on their excavations.

There are many chances to visit archaeological sites or excavations and even to participate in professionally supervised archaeological activities. About 400 archaeological sites or museums in the United States and Canada are listed in two excellent compendia: *America's Ancient Treasures* (fourth edition) by Franklin Folsom and Mary Eiting Folsom (University of New Mexico Press, 1993) and *Exploring Ancient Native America: An Archaeological Guide* by David Hurst Thomas (MacMillan, 1994). For those who would like to participate in properly supervised and organized archaeological studies, there are an increasing number of opportunities. Each year the magazine *Archaeology* publishes a guide to excavations in the Americas that can be visited or at which individuals can work. Recent guides list nearly 60 projects in over half the states with additional entries for Canada, Central and South America, and the Caribbean. A similar listing is published by the same magazine for excavations in Africa, Asia, Europe, and the Pacific.

A number of educational and scientific organizations enable individuals to participate in archaeological investigations. Some, such as the Crow Canyon Archaeological Center in Cortez, Colorado, or the Center for American Archeology in Kampsville, Illinois, sponsor research projects themselves. Some federal and state agencies provide similar opportunities, such as the U.S. Forest Service's "Passport in Time" program. Other organizations—for example, the University Research Expeditions Program and the Foundation for Field Research in California, or Earthwatch in Massachusetts—place people in research projects organized by archaeologists who work for museums, universities, or public agencies. Most of these organizations charge for their services, and the archaeological programs require at least a one-week commitment. Most participants are volunteers and pay for their own travel, room, and board. The appendix in this publication provides additional information about some of these programs.

It sometimes is possible for individuals to participate in archaeology without leaving their community. More and more state, county, and local governments have archaeology programs that use substantial numbers of dedicated volunteers. In the Washington, D.C., area, for instance, more than a dozen such programs exist. The cities of Alexandria, Virginia, and Annapolis and Baltimore, Maryland, have very active programs in volunteer archaeology, as do Fairfax County, Virginia, and Prince Georges County, Maryland. Several other public and private organizations offer similar programs.

In some parts of the country, local units of federal agencies, such as the Bureau of Land Management, the Bureau of Reclamation, the Army Corps of Engineers, the Forest Service, and the National Park Service, offer chances to visit excavations or participate in investigations in some way. Some states also offer archaeological programs in museums, historic-preservation offices, historical societies, or state archaeologists' offices. In addition, universities and colleges are opening archaeological field schools to nonstudents in response to growing demands for continuing education programs.

Intensive academic training in archaeology begins in college. Anyone wishing to specialize in archaeology customarily earns an academic degree in anthropology. Most colleges have a separate department of anthropology, some a combined department—most often with sociology. Others have an office of social studies or social sciences. A few schools have a separate department of archaeology.

Archaeology also is used extensively to study ancient history, especially in places like Egypt, Greece, and Italy, so classics departments regularly include archaeological training among their offerings. More and more American studies programs also include historical archaeology in the curriculum.

Undergraduate catalogs available from each college or university give all the necessary requirements for the completion of a degree. Required courses often include introductory anthropology and broad general survey courses in physical anthropology and linguistics. Courses dealing with archaeology or cultural anthropology are usually oriented to specific areas of the world such as North America or Africa or to certain categories of human behavior such as social organization or religion. In addition, the study of closely related subjects such as history, geology, and statistics is essential to the program.

In the long run, a bachelor's degree alone is not enough for a career in archaeology. As is the case in most fields of science today, a complete program of graduate study is

necessary if one is to enjoy all the benefits of archaeology as a lifelong venture. In the United States and Canada more than 500 colleges and universities offer a master's degree in anthropology; about 100 of these offer programs that lead to a doctor's degree.

Choice of the "right" school depends on many factors. Some are entirely personal; others are dictated by the special areas of interest of the prospective student or by matters of tuition cost and ease of admission. Some students may prefer the relatively relaxed informality of a small department, others the opportunities and demands of a large faculty and numerous graduate students. Each situation has special advantages and disadvantages. At any rate, you should choose a school that emphasizes those particular subjects or areas within archaeology that generally match your own interests. Although retirements and faculty replacements might change the emphasis of a particular department, such changes are most often gradual rather than sudden. Whatever you decide, it is helpful to remember that, in general, the school is not as important as the student. If you are interested and enthusiastic about your chosen career and possess a normal degree of intelligence and scientific bent, your chances of success are excellent in either a small or a large school.

For graduate studies it is not essential to have an undergraduate degree, or major, in anthropology. The student who does not have such a degree often must take extra courses to attain a general background knowledge of the subject, but because of the great scope of archaeology, a background in almost any discipline will turn out to be useful.

Requirements concerning courses and credits vary from school to school, and so does the nature of courses offered. In small departments it is often impossible to find a full range of courses that are offered to either graduates or undergraduates exclusively. In mixed classes, graduates are usually required to do some extra project—a term paper or oral presentation. Larger departments, naturally, have many advanced, specialized courses, such as Maya hieroglyphic writing, dating methods, or the entry of the first people into the Americas, for graduate students alone. These courses are usually organized as seminars in which a very limited number of students freely discuss the subject and exchange ideas on matters that arise during the professor's presentation.

Because of the complexity of the scientific study of ancient cultures, archaeologists will sooner or later find a need for many courses outside archaeology itself. These include geology, paleontology, botany, zoology, and statistics and may indeed range from sciences such as physics or chemistry to humanities such as general history or art history. Courses in basic writing, word processing, computer graphics, and desktop publishing also will help in producing research papers and field reports.

Most master's programs require at least a reading knowledge of one language other than the student's own. The choice of languages, like choice of curriculum, depends largely on one's future research plans. For those specializing in the archaeology of eastern Canada, for example, French would seem a logical choice since many primary sources relating to the history and culture of that area, as well as many archaeological reports, appear in that language. Someone planning future research in Guatemala or Peru would choose Spanish for corresponding reasons.

Whatever the choices to be made and followed through graduate school, the end comes, usually after an average of seven and a half years, in the form of examinations and a doctoral dissertation. Examinations, which may be oral or written, test the student's general knowledge of both anthropology and archaeology, and his or her

areas of specialty in particular. The dissertation is normally a book-length document based on original research. It is designed to demonstrate the student's ability to pursue scientific inquiry by taking a certain problem, chosen by the student with help from faculty advisers, and solving it logically. In archaeology this often involves field research or analysis of archaeological materials.

Academic study is only part of the essential training of archaeologists. They also must study in the field. Because site conditions vary so greatly, students in the field confront an exciting and often unpredictable world of surprises. For this reason, fieldwork can be discussed only in the most general terms. Actual excavation during any one school session can never provide an accurate picture of what the scientific excavation of any other ancient site will be like. What should be learned are the general principles of field research—matters of sampling and recording and the practical aspects of the character and the direction of excavation.

Many large universities operate their own field projects at a single place where excavation is continued over many seasons—usually in summer in the United States and Canada, in the fall-winter dry season in Mexico and Central America, in the December-to-March summer south of the Equator. Projects of this kind are customarily open only to undergraduate and graduate students of the university involved. Many institutions, though, provide training for large numbers of graduates, undergraduates, and occasionally high school students, who are accepted from all over the United States. Such field schools usually provide academic credit. Other field schools are operated almost like business enterprises, where interested persons pay a fee in return for firsthand excavation experience. Still others—less field schools than actual research projects—may be run by a particular faculty member who hires and pays a select crew of student laborers or local people for the work.

The variety among field schools is enormous, as the numerous notices that appear each year on the bulletin boards of anthropology departments attest. Together they cover not only virtually every area of the Americas but often Europe and the Middle East as well. The Archaeological Institute of America in Boston, Massachusetts, annually publishes a listing of field schools and excavation programs that need volunteer help.

Many archaeological societies also conduct field sessions involving excavation, as well as workshops and other events on various aspects of archaeology. They are generally run by or involve professionals and trained avocational archaeologists and are open to society members or to the public.

There is no substitute for the supervised introduction to actual excavation that training at a field school, however large or small, provides. Here the participant learns not only how to record accurately all data uncovered in the process of digging but also things such as how to recognize subtle changes in soil cross sections and stains that may be important in the final interpretation of what happened at the site. Training may range from exhausting spells with pick, shovel, and wheelbarrow to delicate, methodical trowel work; and from chemical preservation of perishable artifacts of wood or cloth to the systematic cataloging of these objects—sometimes hundreds of thousands of them.

In a field school, students get some hint of the everyday demands of practical archaeology, learning that excavations in remote areas often demand unusual skills. Professional archaeologists may need the patience and psychological insight of a good submarine commander; they must at times perform as an imaginative innovator in

auto mechanics, photography, art, surveying, engineering, and first aid. Archaeologists must also be well versed in public relations and the solving of personnel and personal problems.

With time and training there comes a sort of attitude or outlook that sets archaeologists apart. They are continuously aware of the importance of the structured interplay between observation and explanation—and of the fundamental aim of archaeology to interpret the relationship of material culture to human behavior. Because of this, archaeologists are able to profitably study subjects like art motifs on colonial New England gravestones or present-day trash heaps in a small Guatemalan town. At first glance these might appear far from the realm of "true" archaeology, but not so, since each in its way permits scientists to probe more deeply the relations between material things and human ways of the past and to relate these meaningfully to the present.

Prior to the 1970s most of the available jobs in archaeology were in universities, some were in junior colleges, and a few were in museums and other research institutions. A 1994 survey of members of the Society for American Archaeology suggests a more diversely employed profession at the present time. Among the 1,673 members sampled, about 38 percent were employed in colleges and universities, about 10 percent in museums, 18 percent in government agencies, and another 24 percent in private firms.

Most archaeologists in academic jobs teach and usually also devote time to research, including fieldwork. The questions of advancement, fringe benefits, and salary are, of course, in the control of institutions, and these vary greatly. There are several status levels, each with a salary range tied to experience, productivity, and length of time in a position. Starting salaries currently range, for one just having completed the doctorate, upward from around \$35,000 a year. Salary depends upon the individual's previous experience and the needs and ability of the hiring institution. Normally at a college or university one starts out as an assistant professor or, very rarely, as an associate professor. Advancement to full professor comes with time—paced by quality of work and frequency of publication.

Employment by a museum as a curator entails responsibility for maintaining, exhibiting, and doing research on the museum's archaeological collections. Frequently archaeologists become involved in other aspects of museum administration.

In addition, federal and state agencies increasingly employ archaeologists to assist them in managing the archaeological resources under their jurisdiction or affected by their programs. Indeed, this concept of the intelligent and effective management of archaeological resources, both before and after discovery and excavation, has become a concern of all archaeologists.

Archaeological investigations required for public projects or on public lands often are carried out by archaeologists employed in private sector consulting firms. These private sector archaeologists work closely with those employed by public agencies to insure that investigations are appropriate and that the care of records and archaeological collections is adequate.

Many prospective archaeologists worry about their potential contribution to the field of knowledge. They need not, for the options are many, and in the course of time most people tend to follow their own interests and inclinations wherever they lead. Some

archaeologists are inclined toward the complex intellectual manipulation of theoretical approaches to problems that may include artifact typology, studies of symbolism, subsistence, economics, or population dynamics. Others find their preferences in comparatively new approaches such as computer analysis and the application of systems theory to archaeological problems. Many find their greatest satisfaction in fieldwork or in special studies that include everything from ceramic technology to ancient calendar systems. Most archaeologists end up specializing in a geographic area, such as Mesoamerica or Oceania; others may focus on a particular time period such as the era of the Paleo-indians and their ancestors.

Because all these interests are important, there are almost as many ways to be a productive archaeologist as there are individual archaeologists. Indeed, this is probably what gives the profession some of its great appeal, for archaeology remains above all a subject that allows anyone with the basic background and the scholarly discipline to make a valuable contribution to our knowledge of humanity.

To learn more about topics covered in Chapter 3, visit these National Park Service Features:

[Federal Archeology Program:](#) Based on a National Strategy for Federal Archeology, the program includes a wide range of efforts to interpret the past for the public, care for collections, conduct scientific investigations, and protect archeological sites. The Secretary of the Interior reports to Congress each year on these activities through this program.

[Southeast Archeological Center:](#) For over thirty years, the Southeast Archeological Center (SEAC) has carried out a tradition of archeological research, collections and information management, and technical support for national park units located in the southeastern U.S. and beyond.

[National Park Service Archeology Career Guide:](#) Interested in a career in archaeology? Here is some useful information to answer some questions you may have and guide you in the right direction.



Elementary school student participating in an archaeological education program.



Public archaeology at Salishan Mesa, a Washington State Centennial Celebration sponsored by the Bureau of Reclamation.



A typical archaeological site in the midst of an excavation.



Archaeologists excavating at the Samuel Lemon house.



An archaeologist uses a special camera for use underwater.



Students participating in James Madison University's Field School.



A student at the University of Maryland takes notes as she excavates.



As a unit is excavated a profile becomes visible.

Chapter 4: Preserving the Past for the Future

Item: In the summer of 1973 an organization of some 40 persons of American Indian descent living in the Louisville, Kentucky, metropolitan area vehemently protested the excavation of a nearby archaeological site, condemning the scientists involved as "desecrators and grave robbers."

Item: Over a period of several years, the elite tombs of the important site of Rio Azul, an ancient Maya city deep in the forest of northern Guatemala, were sacked by highly organized and heavily armed bands of clandestine looters who routinely roam the area in quest of salable artifacts.

Item: In 1987 a multistate group of relic collectors and dealers leased the Slack Farm site, at the confluence of the Wabash and Ohio Rivers in Kentucky, and proceeded to dig with abandon. Their efforts turned one of the more important archaeological sites in the East into a useless crater field littered with human bones and broken grave goods. Protests of Native Americans resulted in the reburial of the salvaged bones, while the process of prosecution was hindered by the ambiguity of state law.

It is easy to see from these incidents that archaeologists must be concerned with much more than the scientific investigation of past human culture. Indeed, archaeology today is a public profession that carries great responsibilities. Among the issues that must be faced, two in particular stand out. One, the opposition of some Native American groups to the excavation and care of skeletal material and burial goods is leading to a reconsideration of traditional approaches. The other, the accelerated destruction of sites by looting, most often motivated by greed, threatens the very continuation of archaeology in many areas.

Archaeology and Native Americans

Many factors come into play in the greater question of how the methods of studying the North American past can be reconciled with the interests of those whose ancestors are often the subjects of study. Concerns of Native Americans include the relationship of the site or culture being excavated to living groups or tribes and the fate of human remains and burial goods that have been removed from archaeological sites. In considering such things, there is no definable "Indian attitude" toward archaeology, for viewpoints range from cooperative approval to militant protest.

A program of excavation carried out at an important site in northwestern Washington shows that the interests of Native Americans and archaeologists are often compatible. The Ozette site lies on a steep forested slope that faces the rocky, island-studded tidal area fringing the westernmost shore of the continental United States. The land is part of the Ozette Indian Reservation, home of the Makah tribe. There, some 500 years ago, a slide of clay from the upper slope spilled over at least six wooden houses, sealing them and their contents in such a way as to preserve virtually everything, including objects of wood, basketry, and even cloth—materials rarely recovered from any archaeological site. The discovery of Ozette in 1966 excited not only archaeologists but also the Indians upon whose land the site lay. At the urging of the

late Senator Henry Jackson and others, and through a program of cooperation among the Bureau of Indian Affairs, the National Park Service, and Richard Daugherty of the Department of Anthropology at Washington State University, funds were provided for the long-term excavation of the site. By terms of the agreement between the Makah Indians and the archaeologists, all excavated objects remain on the reservation in a museum run by trained Makah. Meanwhile, people of the reservation helped with the digging and the running of the preservation laboratory at nearby Neah Bay. The situation at Ozette, so different from that at Louisville, demonstrates that carefully considered archaeological programs and cooperation beforehand can serve both the pride of Native Americans in their own past and the desires of science.

The cooperation between Native Americans and archaeologists that has been so productive at Ozette is paralleled by programs among the Zuni of New Mexico and others in the United States. In contrast, many Native Americans protesting the action of archaeologists consider the excavation of any site, no matter how ancient or unidentifiable in relation to modern people, an unnecessary violation of remains they consider sacred. This conflict of interests is difficult to reconcile neatly, for it involves deep-seated values and beliefs as well as the possible resentments of those long subjected to "study" by outsiders but deprived of knowledge of the results or the benefits of those studies.

Clearly this problem is a challenging one; it is hoped it can be approached with compromise and compassion and solved. Few would disagree with the Native American contention that the display or illustration of burials and skeletons by museums and publications reduces them to sensational objects of curiosity and thus violates the fundamental respect due one people by another. As a consequence of protests calling attention to these things, archaeologists and museums have reevaluated attitudes and revised policies regarding the exhibition of human remains.

Destruction of the Archaeological Record

Surely the most staggering problem facing archaeologists is the increasing rate of destruction of sites. This destruction of the past can come about in many ways.

The looting of Rio Azul, Guatemala, is only one of numerous incidents that have occurred in the homeland of the ancient Maya and their descendants. Many have involved the loss of hieroglyphic texts carved on stone monuments—writings that could have revealed information about individual rulers, conquests, places, and dates vital to our knowledge of ancient Maya history. Thus, the Maya area has become the setting for a desperate race between scholarship and thievery. Looters customarily use a chainsaw to cut up monuments for easier transport of the heavy limestone. Those relief carvings that are not shattered in the process—tiny fragments of many of the finest works of Maya art litter the jungle floor—end up in art galleries, museums, and private collections all over the world, forever torn from their original contexts. The most obvious loss is to the nation where such theft takes place, for the looting and export of these objects denies its citizens access to the remains and the symbols of their own cultural heritage.

The loss is by no means confined to the Maya area. Indeed, looting takes place at a staggering rate all over the world, from the Etruscan tombs of central Italy to the ancient cemeteries of the Philippines; from Southwestern pueblos to Civil War battlefields and 19th-century shipwrecks.

In Peru treasure-hunting huaqueros—the local term for illegal diggers of burials—

have stripped hundreds of sites once occupied by the Inca and their predecessors in the central Andes in their persistent search for buried gold artifacts or any other object in demand on the world art market. Among thousands of relatively unspectacular—but no less important—sites around the world, the situation is equally grim.

Looting is just one of the forces that are destroying our archaeological record. Modern development and natural forces such as erosion and rising sea level also take a toll each day. If the present rate of archaeological destruction continues, there may be no more sites to preserve in much of the world in 50 to 100 years. Because archaeological sites form an irreplaceable resource, we who are alive today are responsible for saving this valuable record, and archaeologists must sound the warning. If we do not meet this obligation, the incomplete knowledge gained up to now and in the very near future must suffice for the rest of time.

To learn more about topics covered in Chapter 4, visit these National Park Service Features:

[America's Hidden Battlefields](#): Protecting the Archeological Story: America's battlefields teach us about some of the most important events in our history—and there is much more to a battlefield than immediately meets the eye! An important piece of this irreplaceable landscape is the reality of that long-ago battle that lies hidden underground. Through the protection, study, and interpretation of archeological evidence, we can enhance our understanding of those events, and ensure that the battle, itself, is remembered.

[Native American Graves Protection Repatriation Act \(NAGPRA\)](#): The National Park Service has leadership responsibilities for this Act, including a grants program, providing guidance on law, publishing notices of inventory completion and notices of intent to repatriate, and working with the review committee.

[Vanishing Treasures](#): This grass-roots initiative tackles the loss of irreplaceable historic and prehistoric structures and the skills to maintain these structures in over 40 southwestern national parks. The program ensures long-term preservation of these sites through training a new generation of craftspeople, many with cultural and other close ties to these sites. Visit the VT web site and the affected parks to learn more about the efforts to repair and maintain these significant resources.

[Curation](#): When archeological sites are excavated or archeological surveys are conducted to locate sites, artifacts are usually collected. These must be properly cared for and documented for their long-term use by the public and scholars alike. Curation of archeological collections involves a number of important responsibilities.

[Submerged Archeology](#): Learn about the underwater projects of the Submerged Cultural Resources Unit, often in partnership with other organizations, including the U.S.S. Arizona and U.S.S. Utah at Pearl Harbor, ships and planes in Palau and Guam, and numerous historic shipwrecks in Dry Tortugas National Park and off Isle Royale National Park.

[Strategies for Protecting Archeological Sites on Private Lands](#): Strategies serves as a guide to the wide variety of tools available for protecting archeological sites on private lands. It contains information on strategies that are currently being used throughout the country, contact information, and other sources of useful information.



Containers hold confiscated artifacts which were looted from various parks.



A looted archaeological site in the Bering Land Bridge National Preserve



Native American beadwork pieces.



Acoma Pueblo, New Mexico



Buckskin Jacket in a humidification chamber during the conservation process.



Damage left by looters in Vicksburg National Military Park.



An archaeologist excavates a pottery cache in Leon County, Florida.

Chapter 5: Archaeology and the Law

Most countries have laws designed to protect their archaeological heritage, and the United States is no exception. The federal government's concern for the preservation of archaeological sites began in response to the destruction and looting of Indian ruins in the West.

The Antiquities Act, enacted in 1906, made federal officials responsible for protecting archaeological sites as public resources and for combating looting and vandalism. With its passage, archaeological sites on approximately one-third of the country's land were afforded protection—at least on paper. The 1906 act also gave the President the power to establish national monuments in areas of outstanding scientific and historical value. The scope of federal involvement in archaeology and the effects of federal activities outside public lands increased substantially during the massive public-works programs of the 1950s. Further public concern for archaeological preservation exerted itself in the archaeological rescue program associated with federal reservoir construction in the 1940s to 1960s and the inclusion of archaeological sites among those protected by the 1966 National Historic Preservation Act.

In 1979, in response to the failure of the Antiquities Act to effectively protect archaeological sites, preservationists successfully lobbied for enactment of the Archaeological Resources Protection Act (ARPA). This statute expanded the provisions of the 1906 act by establishing major criminal and civil penalties for violators. In 1988 ARPA was amended to simplify prosecutions and to make the intent to loot also a felony. In addition, the amendments required federal agencies to undertake surveys of archaeological resources and develop or expand public-education programs. Many state governments also have adopted statutes protecting archaeological resources and regulating archaeological investigations on their lands.

The National Historic Preservation Act and the National Environmental Policy Act also require federal agencies to evaluate their actions in light of the impact they will have on significant archaeological resources. The reviews and investigations undertaken to comply with these statutes have resulted in the preservation of substantial numbers of archaeological sites and important data.

In 1990 the Native American Graves Protection and Repatriation Act was passed by Congress and signed into law by President Bush. It requires federal agencies and most museums in the United States to inventory the Native American human remains, burial artifacts, sacred objects, and objects formerly owned communally by tribes and to offer to return these to Indian tribes that are clearly affiliated with them. As the law is implemented during the next decade, more consultation and cooperation among archaeologists, museums, and American Indians is likely to develop, to the benefit of all.

Most museums have adopted policies against the buying of illegally obtained archaeological objects. In reality, however, most antiquities laws are difficult to enforce, or the status of imported objects is ambiguous. Solutions to the problems

begin with public awareness. Each individual must accept responsibility to help protect these resources. There is a vast difference between looters who dig for financial gain and avocational archaeologists who may not appreciate the public loss that results from disturbing a fragile archaeological site without adequate training, care, and recording. Thus, effective communication with the general public has become an increasingly important task for archaeologists.

An excellent example of how cooperation can work comes from Arkansas. There Charles R. McGimsey III and Hester A. Davis of the Arkansas Archaeological Survey have established an unusual certification program. Each summer the survey conducts an archaeological training program for amateurs. Individuals are certified by the survey when they complete the training, and they carry what they have learned to a local archaeological society to spread appreciation and respect for professional archaeology and its aims. This has served to reduce looting in Arkansas, a state now at the forefront in bringing archaeology to its people.

Meanwhile, the destruction of sites continues at an almost unbelievable pace as industrial plants, housing developments, and highway networks are built and as land is leveled for farming and other enterprises. Some hope for saving part of the past lies in the realm of law—legislation that balances the necessity for modern improvements and development with the preservation of archaeological remains. The achievement of this goal largely depends on the outlook of the federal, state, and local agencies that control such activities and on the attitude of private industry. Happily, individual contractors and other responsible persons in private industry are cooperating with archaeologists. As a result, instances of sites being excavated with funds from industry or public agencies have become more and more frequent in the past two decades.

In the end, archaeology depends on broad public understanding and support. For this reason, many of the tasks facing archaeologists today hinge on public relations—the communication of the relevance of archaeology to our lives.

Is the study of the past really essential? In terms of pure survival, of course not. Neither is music nor the appreciation of art—yet both enhance our lives in ways that are difficult to define. Archaeology has this capacity for enhancement as well, partly because it helps satisfy the basic human craving for self-knowledge, partly because that knowledge helps immensely in addressing the problems of the present. As we know all too well, these range from the threat of global environmental depletion to misunderstanding—or sheer intolerance—between vastly different cultures. What archaeology offers is at least a glimpse, and in some cases a fuller understanding, of how some who came before solved these problems—and how others failed in their effort. That is what archaeology is all about.

To learn more about topics covered in Chapter 5, visit these National Park Service Features:

[National Capital Region, Regional Archeology Program](#): Learn about the role played by the National Park Service in the excavation and preservation of the public's archeological resources, our nation's patrimony, in Maryland, Virginia, West Virginia, and the District of Columbia.

[Vanishing Treasures](#): This grass-roots initiative tackles the loss of irreplaceable historic and prehistoric structures and the skills to maintain these structures in over 40 southwestern national parks. The program ensures long-term preservation of

these sites through training a new generation of craftspeople, many with cultural and other close ties to these sites. Visit the VT web site and the affected parks to learn more about the efforts to repair and maintain these significant resources.

America's Landmarks at Risk: In PDF format, the report provides useful background information, then details those National Historic Landmarks that are currently threatened. It also includes a series of success stories of NHLs that were previously listed as endangered, yet were ultimately "saved" for future generations through the actions and resourcefulness of American citizens.



Puye Cliff Dwellings, New Mexico.



In order to help deter or apprehend looters in Joshua Tree National Park, surveillance cameras have been installed



Confiscated artifacts taken from looters.



This seedjar is an example of 'Red Mesa Black-on-White' pottery.



A Park Service Ranger and Investigator look over the destruction left by looters



Disasters such as the Exxon Valdez oil spill in Alaska have an impact on archaeological sites.

Learning More About Archaeology

Many people are fascinated by archaeology: It has a special ability to create wonder, delight, and surprise. There is a natural human curiosity about the past within many of us. We want to know more about it, to understand it, and sometimes to try to experience it. Archaeology is one way to do these things.

This appendix provides information about how you can get involved in archaeology. There are annotated lists of written introductions to archaeology, magazines and journals that contain articles about archaeology, and videotapes and television programs about archaeological topics. Should you prefer to visit museums, sites, or excavations, there is a list of references and public agencies you can contact for up-to-date information. For those who wish to experience archaeology firsthand, there is a list of public agencies and private organizations that provide opportunities for members of the general public to participate in archaeological investigations.

Collecting artifacts from the surface or digging on your own is not a constructive way to participate in archaeology. Unauthorized collecting or digging for artifacts is illegal on federal land and many other public lands, as well as on private land without permission. More important, doing archaeology without proper training and professional support destroys potentially important archaeological information about the context in which artifacts are found.

For more information about the ethics of archaeology, see www.saa.org/aboutSAA/ethics.html.

National Parks provide opportunities for teachers to learn and teach archaeology. These resources include teacher guides, curriculums, and educational packets. In general these educational materials are Park-specific and are used in conjunction with visits at the Park. Some resources may not be applicable or useful in other parks or parts of the country. Please contact the Park you are interested in for further information.

[Teacher Resources in Archeology \(NPS\).](#)

[Guide to Classroom Resources and Programs \(NPS\).](#)

Archaeology & You Credits

Archaeology & You is dedicated to Jerome Miller, CAE, the past Executive Director of the Society for American Archaeology, who played a central role in this booklet's preparation and publication.

The Internet version of Archaeology & You (2000) is the joint effort of the United States Department of the Interior, National Park Service and the Society for American Archaeology.

The print version of Archaeology & You (1996) was a joint effort of the United States Department of the Interior, in particular, the Bureau of Reclamation and the National Park Service; the National Geographic Society; and the Society for American Archaeology, in particular, the Public Education Committee.

Editorial Development

George E. Stuart (National Geographic Society)
Francis P. McManamon (Archeology & Ethnography Program, NPS)

Layout & Design

Lana Leon, Everett Lindsay (the Society for American Archaeology)
Francis P. McManamon, Barbara Little, Terry Childs, David Andrews, Joe Flanagan, Matt Burns, Cheryl Coursey. (Archeology & Ethnography Program, NPS)
Coordinator
Teresa Cabanilla (SAA)

Images

Deb Jensen (BLM)
Edward Friedman (Bureau of Reclamation)
Dr. Nina Versaggi (Public Archaeology Facility, SUNY-B)
Dr. William Kelso (APVA)
Bill Iseminger (Cahokia Mounds Museum Society)
Joan Morris (Florida Photographic Collection, Florida State Archives)
Lori A. Mellon (Art Conservation Center at the University of Denver)
Dr. Lu Ann De Cunzo (University of Delaware)
Dr. Clarence R. Geier (James Madison University)
US Army Corps of Engineers Digital Visual Library
Gail Brown (SAA)
Dr. Paul Shackel (University of Maryland, College Park)
State of Alaska Department of Natural Resources: Office of History and Archaeology

In addition, we would like to thank all the National Parks and Historic Sites which contributed images to this project.

Use of images from the following resources is prohibited without first obtaining

permission from the source:

- State of Alaska, Department of Natural Resources, Office of History and Archaeology
- Cahokia Mounds State Historic Site
- James Madison University, Dept. of Anthropology
- Art Conservation Center at the University of Delaware
- University of Delaware, Dept. of Anthropology
- Bureau of Land Management, Anasazi Heritage Center
- Public Archaeology Facility, SUNY-Binghamton
- Association for the Preservation of Virginia Antiquities
- University of Maryland, College Park, Dept. of Anthropology