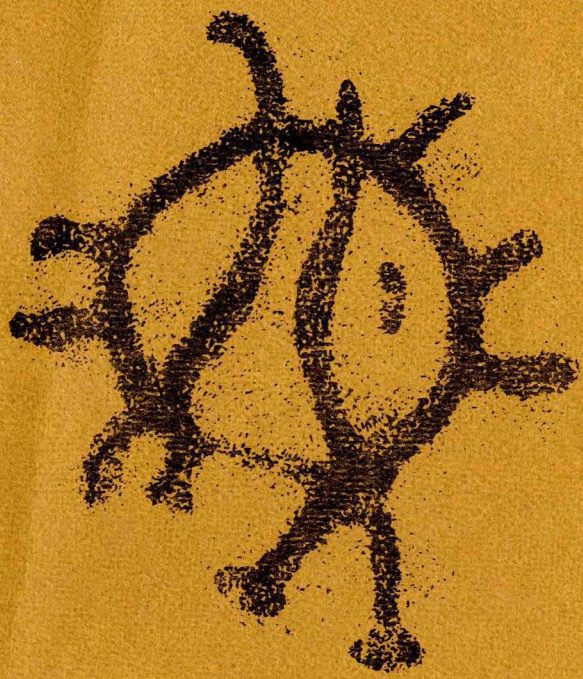
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Archaeology in Southern Idaho

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by
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Preface

Archaeology in Southern Idaho was written in response to many of the questions commonly asked of archaeologists concerning Idaho's cultural heritage. These questions are numerous and come from a public which includes ranchers and farmers who have come in contact with archaeological remains; teachers who discuss the history of Indians in Idaho with their students; and many other interested parties.

The text is divided into two major sections. The first three chapters discuss what archaeology is and the methods and tools the archaeologist uses to understand the past. The remainder of the text is devoted to a summary of Southern Idaho archaeology.

This discussion is by necessity general. Technical terms are limited to those necessary for a basic understanding of the text. Included at the end of the text is a specific bibliography which is divided into Works Cited and General References for those interested in further reading.

It is hoped that *Archaeology in Southern Idaho* will answer some of the basic questions about Idaho's past. It is further hoped that the text will generate a greater awareness and concern over the destruction of archaeological resources and the need to preserve the vestiges of the past.

I would also like to acknowledge and thank those who provided assistance in the preparation of this paper: Dr. Max Pavesic, Boise State University, Dr. Don Crabtree, University of Idaho, Dr. Thomas Green, Michael Ostrogorsky, and William Statham, Idaho State Historical Society, reviewed the manuscript. Linda Baird typed the original manuscript, and William Studebaker, College of Southern Idaho, edited and saw the paper through the press. Bill Carder and Jim Woods provided illustrations to accompany the text.

Funds for this publication were provided by the College of Southern Idaho and by the Association for the Humanities in Idaho, through a museum grant award to the Norman Herrett Museum. Their support is gratefully acknowledged. I would like to extend a special thanks to Jim Woods, Director of the Norman Herrett Museum, for his assistance in making this paper possible.

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I. An Introduction to Archaeology

Archaeology is the study of man's past. It is concerned with his origins, his development through time, and his adaptations to varied physical environments. Archaeology must be defined as a part of anthropology, which in its simplest form is the study of man. This means that anthropologists study all aspects of man's existence, including his physical origins and modern variations as well as his cultural and social habits. Archaeologists study these things but in the context of the past.

Archaeologists reconstruct the past through the excavation of material remains or material culture. By material culture we mean all of the physical objects preserved in archaeological sites. These materials may include exotic items such as the gold sculpture and jewelry of the tombs of Egypt. Material culture also includes basketry fragments, pottery sherds, wooden and bone objects, stone tools, bits of preserved textile material, cordage, and food remains. Because many items of material culture change through time, the archaeologist is able, by studying these changes, to understand the history of man's development. By studying material or archaeological cultures at different times and in various places around the world, we are able to understand something of man's history. Archaeology, however, is not only concerned with man's long term history. It is also interested in the history of local peoples in different areas of the world.

All archaeologists do not study the same kinds of cultures (and there is much variation). The most common form of archaeology in the New World and Idaho is what is called *prehistoric* archaeology.

Prehistory is the study of man prior to the development of written records. Writing began as early as 3500 B.C. in the Near East, but was not present in North America when the first Europeans arrived in the late fifteenth and early sixteenth centuries. Another type of archaeology common to much of the Old World (Africa, Europe, Asia) is what is called *classical* archaeology. Classical archaeology is concerned with the early history of man in areas where writing developed. This type of archaeology is characterized by studies of ancient Egypt, Rome, and Greece. Still another type of archaeology is the relatively new discipline called *historic* archaeology. It studies the recent past. Historic archaeologists may study sites such as Colonial Williamsburg or early frontier homesteads or mining towns like those found in parts of Southern Idaho. A principle goal of historic archaeology is the corroboration of historic records with the material remains from archaeological sites.

Because written records cover a small portion of man's 2-3 million year history, prehistoric archaeologists rely on other evidence. Prehistorians frequently make use of the special knowledge of geologists, botanists, and paleontologists to provide clues to past environments and thereby the kinds of physical conditions, including temperature, vegetation, and animal life that may have lived or prevailed at a specific time. Through material culture and the knowledge of other specialists, prehistoric archaeologists are able to gain a picture of how man lived in the past and how he changed through time in different areas of the world.

We have introduced the idea of material culture but have not defined the term *culture*. Traditionally, culture referred to man's ability to use tools and to communicate his ideas verbally and abstractly. This definition is no longer useful because the study of various primates, such as chimpanzees and gorillas, has shown these higher animal forms to be capable of simple tool use and has demonstrated their ability to solve simple cognitive problems. While the term *culture* has many meanings, we are concerned with its meaning to anthropologists. In anthropology the term culture is an accumulation of all things attributable to man. In addition to "pots and pans," or his material culture, his political, social, religious, and economic systems are part of his culture.

Anthropologists speak of "culture" and "cultures." Cultures may refer to individual groups such as the Shoshoni Indians of the North American Great Basin or the Ibo of West Africa. These groups have different material cultures and lifestyles, but in a general sense of each is part of the broad concept simply called *culture*.

We have defined the physical aspects of culture. But can we say

more about culture? The answer is yes. Anthropologists understand culture to be more than just "pots and pans" or political and religious systems. They also define culture in terms of certain basic observations that can be made concerning culture. These are unique in the animal world and may be stated in the form of certain generalizations. Culture is learned behavior. By this we mean all the things one learns from his or her parents, family, friends, and others. We learn how to speak a language and how to drive a car. These things and many others are learned. They are not genetically or biologically determined. A person born of African parentage possesses physical characteristics like those of his or her parents but would learn the language and customs of the average American were they reared in the United States. Culture is unique because it is acquired or learned.

Through culture man is able to adapt more quickly to environments than other animals. It is man's ability to invent and modify his culture through time that has allowed him to live in such diverse environments as the African Sahara and the Canadian Arctic. Without culture man's ability to adapt to various environmental and social situations would be nearly impossible. For example, our use of electricity is dependent upon a complex cultural system that allows for the transfer of a knowledge of electricity from generation to generation. Consider what would happen if the knowledge of its use were lost.

Another observation that can be made concerning culture is culture may be viewed as patterned behavior. That is, culture consists of a number of independent parts or components. Culture is made up of various elements, including such things as politics, religion, economics and language, which work or function together for the production of a whole system. (A system is any structure made up of several elements which work in conjunction with one another.)

We have not yet referred to society. While society means a number of things, it too has a special meaning for anthropologists. Society is the means by which culture is acquired and maintained by a group of people. Culture is then a set of customs and practices learned by man through the vehicle of society, and this permits him to adapt to his environment.

Because our discussion focuses on archaeology, it is necessary to provide an additional definition. We have referred to political, religious, and economic systems as components of culture. Does the archaeologist dig up ancient political or religious systems? The answer is no. We earlier referred to the idea of material culture. It is important that we again refer to this idea if we are to understand culture in an archaeological sense. The objects or artifacts, as they are called, found in an archaeological site, which designates an area of human activity,

do not in themselves constitute culture. They are simply remnants of past human activities that reflect cultures. The archaeologist does not excavate whole cultures or even complete parts of them. What the archaeologist is able to learn about culture, he learns from making inferences based on types of information, which we will discuss in a later chapter.

II. Archaeological Methods

Unlike historians most archaeologists do not enjoy the luxury of learning about the past through early documents. Typically, archaeologists must reconstruct the past by using information from various sources, such as geology and botany, and by making inferences based upon archaeological data. By inferences we mean assumptions suggested and supported by studying artifacts in the contexts in which they were found. Let us consider a simple example. An archaeologist records a site at which there are numerous whole and fragmentary grinding stones. The site is located at an elevation of 5,700 feet and is associated with a Camas meadow. The only artifacts to be observed are grinding implements. The archaeologist might infer that the site was used solely as a processing station where plants such as Camas were collected. An underlying assumption made by the archaeologist is based upon what is called the ethnographic analogy. In many areas of the world modern cultures mirror prehistoric culture. The culture of Australian Aborigines is, for example, virtually identical to that of their prehistoric predecessors. In other areas early historic records provide a picture of the lifestyles and material culture of groups as they appeared at first European contact. These ethnographic accounts or cultural descriptions sometimes provide insight to a region's prehistoric remains. Because we have records describing the historic Indians of Southern Idaho, we know that Indians made extensive use of Camas and other wild foods and that mortars and pestles or grinding tools were used to process these foods. Based upon the recovered remains in context with Camas and an ethnnographic analogy, the archaeologist in our example is able to infer that his recorded

site is a processing site.

Like all scientists the archaeologist studies archaeological data through a series of steps of ever increasing complexity. These steps include observation, description, and explanation. Observation in archaeology refers to data collection. Description refers to analysis of archaeological materials and explanation to an understanding of past events based upon inferences acquired from analysis and possibly supported by ethnographic analogy.

We are now ready to ask how the archaeologist acquires data or archaeological information. There are two major types of archaeological discovery. These are survey and excavation. While excavation is most commonly associated with what the archaeologist does, survey constitutes the most common archaeological investigation. There are two major reasons for this. Before the archaeologist can excavate a site, he must know where it is located. While all archaeological sites are important, some sites may provide the archaeologist with more information than others. Therefore, only a small number of the recorded sites are excavated. Also, survey may be undertaken with limited funding and in most instances limited funds prohibit excavation.

As we have seen survey is the common method by which the archaeologist records and investigates sites. But how is the survey conducted? The most common method is for the archaeologist and an assistant to walk systematically over a selected area. With them they carry the equipment necessary to conduct the survey. The equipment includes, notebooks, pencils, pens, a protractor or ruler, and compass for making sketches and maps, site forms on which to record specific site information,such as size, intensity of materials, kinds of artifacts, etc., topographic maps to record site locations, tape measures, a camera, and knapsack to carry the equipment. The archaeologist maintains a careful record of his work and observations. He will not collect artifacts unless he is authorized to do so by a permit issued to his university or museum and sanctioned by the federal or state agencies charged with responsibility for the lands. Uncontrolled collection of archaeological remains can destroy forever the information present at the site.

Once a site has been recorded it is given a site number. The most common numbering system is that devised by the Smithsonian Institution. This system has assigned numbers to the 50 states alphabetically. Within each state a series of letter (county) designations have been assigned. These are followed by numbers indicating the sequential order in which sites were recorded in each county. Idaho is the tenth state in this system. An example of an Idaho site number might be 10-TF-1949 indicating that the site is the 1,949th site recorded

in Twin Falls County, Idaho. Information describing each site is then placed on permanent file with museums, universities, or state agencies responsible for such data.

While survey is primarily concerned with the location of sites, it may also answer certain kinds of questions about the past. Discovering where prehistoric peoples lived and conducted their everyday lives provides the archaeologist with clues to how people utilized their environments and whether different people may have alternately used the same area at different times in the past. A major focus for many American archaeologists is the study of settlement pattern archaeology. By settlement patterns we mean the ways in which people located their camps or villages relative to various aspects of the landscape. Understanding such relationships may allow the archaeologist to understand what kinds of resources were important in the past and how they were exploited.

Survey also provides information about the kind of occupation at a site. The occupation or use of a site is sometimes called a site component. A single component site refers to a site used only once whether for a short or extended period of time. A site exhibiting many different occupations is termed a multicomponent site. Multicomponent sites may reflect the use of a site by one or more groups of people who differ in material culture.

In summary, archaeological surveys locate, describe, and record sites and provide information concerning types of sites and their distribution.

Excavation refers to the methods and techniques used to recover material remains from an archaeological site. Because, as we have noted, only a few of the sites recorded are excavated, it is extremely important that these sites are carefully chosen to provide maximum information relative to specific archaeological problems and questions. It is also important that excavations be conducted as carefully and systematically as possible. We must remember that excavation destroys a site, no matter how scientifically it is conducted. When an excavation is completed, all that remains are artifacts and the contextual information collected by the archaeologist. Context is the most important aspect of excavation. It is context that allows the archaeologist to understand how a site was constructed and used by prehistoric peoples. While context is the interrelatedness of artifacts and features, it also includes information which may be learned from the natural structure of the site. Artifactual remains are but elements of a very complex set of facts, which can only be understood when a site is considered as a unit having important non-artifactual features. It is for this reason that individuals untrained in archaeological methods

should not attempt unsupervised excavation.

When the archaeologist has selected a site for excavation, it is necessary to undertake certain preliminary procedures. The first task is to locate or determine a point on or near the site, which will be termed a datum point. This point is commonly aligned to magnetic north and serves as a stationary point from which all measurements are made and is usually marked by an immovable object. This object may be a metal rod hammered into the ground or placed in concrete. Occasionally, a natural object such as a large rock may be designated as the datum point. The purpose of the datum point is to insure the uniformity of measurements made on the site and to provide a permanent marker, which can be relocated by future archaeologists wishing to investigate the site.

Having established the datum point the archaeologist will lay out a grid system over the area to be excavated. Using an engineer's transit or sighting level and stadia rod, the archaeologist will lay out two transects north-south and east-west from the datum point. Additional transects are laid out parallel to the major axis in unit intervals of one or two meters. Wooden stakes are placed at the corners of each intersection creating a series of one or two meter squares. The squares are designated by numbers and east-west, north-south coordinates so that an individual square might be referred to as S2W1, meaning the second square south and the first square west of the datum. This number is placed on the corner stake of each unit. Because most sites do not have above ground features or structures, the grid system provides spacial or horizontal control over the area to be excavated.

Upon completion of the grid system, the archaeologist prepares a map of the area to be excavated. This is a relief map showing the variation in elevation of the site and showing the relationship of the datum and grid system to the surrounding natural features and vegetation.

Imposing the grid system allows the archaeologist to maintain horizontal control of the site. Vertical controls are introduced through the use of well defined units excavated separately. These may be either arbitrary or natural levels. Natural levels, which are called strata, show how the site was formed, that is, whether the materials or soils, rocks and gravels, were water deposited, wind blown, or the result of human use. Natural strata are visible as differences in soil color and consistency, as well as type of material. One level might be a sand while another level a silt. When natural strata are visible and well defined, the archaeologist will choose to excavate by these natural units, since they may provide a more precise picture of man's relationship to the environment in which he lived. Natural strata

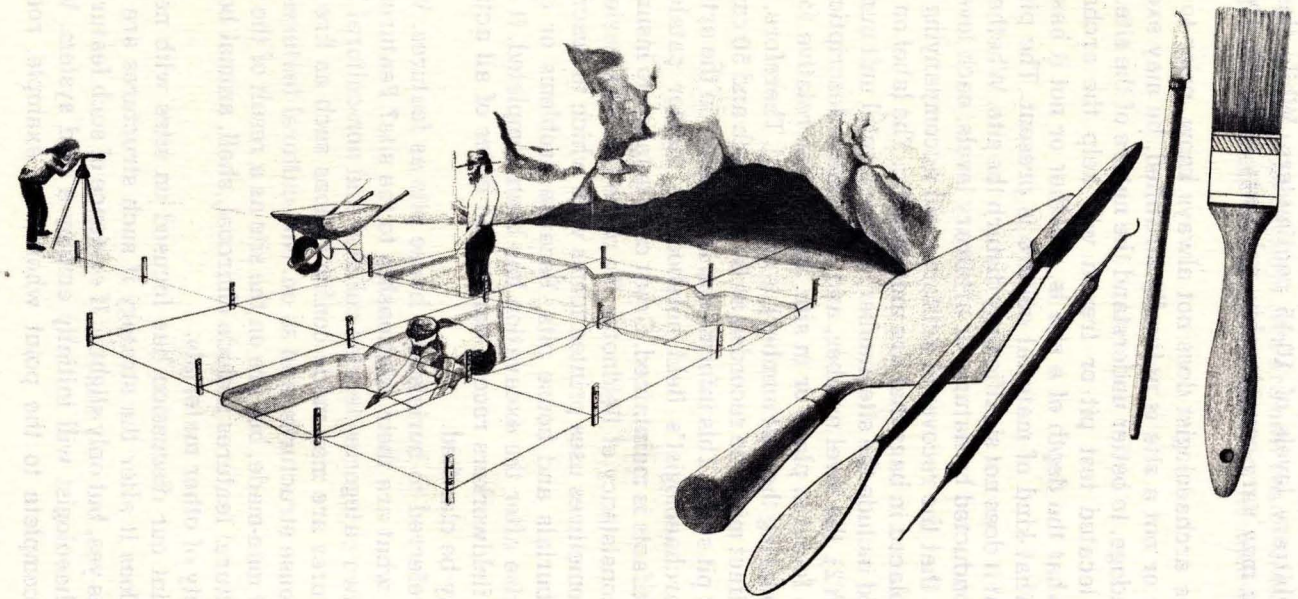


Figure 1. Archaeologists at Work. To the right are some of the more commonly used tools.

may indicate important natural occurrences such as droughts, floods, and other events which affected man in the past.

If natural levels are not present at a site, the archaeologist will excavate by arbitrary levels of 10-15 centimeters. While the size of natural strata may vary considerably, arbitrary units are always the same.

Because the archaeologist does not always know, prior to excavation, whether or not a site is naturally stratified, he may excavate a test pit or *sondage*, to better understand the nature of the site. A small peripherally located test pit or trench will help the archaeologist understand what the depth of a site is, whether or not it has natural strata, and what kind of material culture is present. The pit will be located so that it does not significantly disturb the site. Whether the excavation is conducted by natural or arbitrary levels, each level will be numbered so that the recovered artifacts and accompanying descriptions can be placed in bags that are unit specific. The label on a collection bag would include the site number, the horizontal unit number (for example, S1W2), the level number, and an artifact description. When an artifact is found in place or *in situ*, its location relative to the unit stake (stake bearing the unit number), is measured. Therefore, the location of an artifact might be recorded as 60 cm. south and 50 cm. west of the northeast pit stake. This information is included on the artifact bag and in the archaeologist's field notebook. A master catalog of all recovered artifacts is maintained. Great care is taken to insure the accuracy and consistency of fieldnotes. To make this task easier the archaeologist sometimes uses printed forms with which to describe such features as burials and house pits. Because problems or questions sometimes arise after the excavation has been completed, it is important that all fieldworkers record names and dates of all activities so questions may be clarified.

We have referred to burials and house pits as features. What are features and what are their relationship to the site? Features may be divided into two categories termed cultural and non-cultural features. Cultural features are man-made configurations such as fire hearths, cache pits, house structures, and so on. Non-cultural features refer to materials not man-made, but are on the site as a result of the action of man. Non-cultural features include charcoal, shell, animal bones, and a great variety of other materials.

To this point our discussion has focused on sites with no surface structures. Does it alter the strategy if such structures are present? The answer is yes, but only slightly. If evidence of such features is present the archaeologist will initially employ a grid system. When excavation is complete to the point where, for example, rooms are

discernable, these features will be numbered and used as units. In place of unit S1W2, the unit might be room or house pit 1 or 2.

In this chapter we have briefly considered what the archaeologist does and the methods he employs. We are now ready to ask how the archaeologist understands the past from the data he recovers.

III. Dating the Past

Perhaps the most common questions asked of the archaeologist are "How old are these artifacts?" and "How long ago did people live here?" Because archaeologists are concerned with the events of the past, it is important to understand how old objects are and the relative ages of different groups or assemblages of artifacts and their relationships through time.

Archaeological dating may be divided into two types—absolute and relative. Absolute dates are the easiest to understand because they refer to dates given in years; 20,000 B.C. and A.D. 1200 are examples of absolute dates. Absolute dates are not "absolute" in the sense that they represent exact ages. They represent cases in which enough information is present to establish a general age for a group of artifacts or period of time. While man has lived on the earth for 2-3 million years, his socio-economic development and material culture has changed very slowly. Because archaeological cultures are understood through material remains, 50, 100, or even several thousand years in some instances are unimportant in understanding long term culture change. To some extent archaeologists will always understand man's history in a relative sense.

The next most common type of dating is called relative dating. Relative dating was the earliest form of dating in archaeology. It describes artifacts or groups of artifacts as younger or older than other groups or assemblages. In a case of relative dating we might say group C is younger than group B, and group A is younger than both C and B. Relative dates allow the archaeologist to recognize discrete units of time and associated material culture. They do not allow these units to be placed in the temporal order in which they occurred.

Relative dates when used in conjunction with absolute dates permit the archaeologist to recognize different cultural variations and order them chronologically.

Having defined relative and absolute dating techniques, it is now necessary to discuss how such dates are obtained. Primarily, there are two techniqes or methods used in arriving at relative dates. These are referred to as stratigraphy and seriation and are very closely related. In order to understand stratigraphy it is necessary to reintroduce the idea of stratification. As the reader will remember stratification refers to natural layers or levels of earth that have built up or been deposited over a period of years. Geologists know that such natural levels were deposited successively, one upon another, so that the uppermost levels or strata of a deposit are younger than those on the bottom. Because groups of people have lived on these different strata as they accumulated, their artifacts and garbage have become part of the different levels. These artifact assemblages may be relatively dated by their placement in specific levels. The process of stratigraphy is ordering the natural strata and associated cultural materials in an archaeological site.

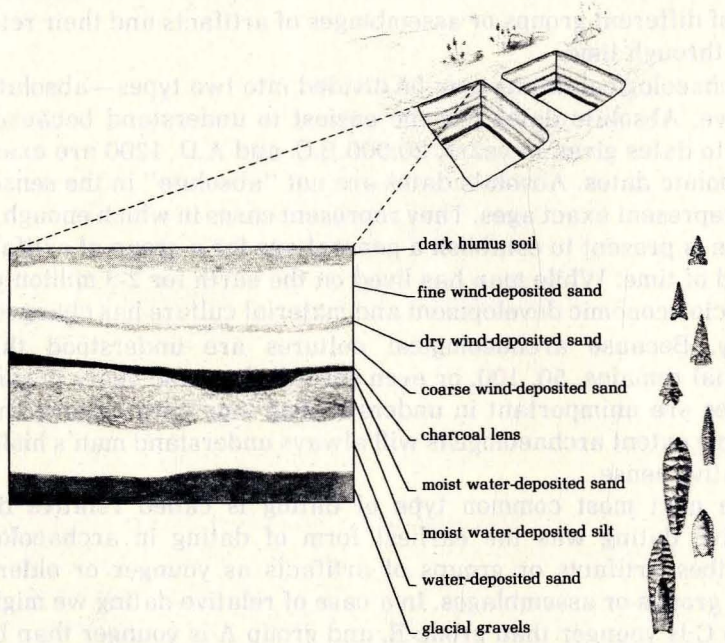


Figure 2. Stratigraphic Sequence. This model shows natural strata and associated artifacts. The oldest deposits are found at the bottom, the youngest deposits are at the top.

Let us consider an example. An archaeological site is located along a river. Sometime after the abandonment of the site, the river floods and covers the site with a layer of heavy silt. When the flood waters have receded, the site is once again occupied. Following a brief occupation the site is once again abandoned. Because the area is rather arid a substantial wind blown deposit accumulates on the most recent occupation. This pattern of occupation and accumulation of flood and wind deposited materials continues over a long period of time until ten such levels have accumulated. When the archaeologist excavates the site, he observes the natural strata as they have built up and the human occupations on these deposits. Because the units are visibly discrete, he is able to say that those at the top of the deposit are more recent than those on the bottom. An examination of the cultural material remains indicates that each occupational unit or level can be distinguished from all others in the basis of its assemblage. Because these different assemblages occur in a temporal sequence, sites within a larger area may be recognized as belonging, for example, to specific occupational levels and as being older or younger than other sites in the area. The dating of one site on the basis of artifact similarities to another site that has been either absolutely or relatively dated is called cross-dating.

Now let us consider the idea of seriation. Seriation refers to the growth and decline in popularity of items of material culture through time. Modern examples might include changes or modifications in styles of dress or automobile models. Such fluctuations in the popularity of certain items is also found in the past. An archaeologist excavates a site with 12 stratigraphic levels. The first four levels contain a plain brown pottery. The presence of this pottery is most common in levels 11-10 and declines in level 9. Beginning in level 8 the pottery consists of brown bowls with red designs around the rims. This pottery becomes the most common type in levels 7-6 and declines in popularity in level 5. Level 4 is marked by the introduction of brown ware vessels with red and white design elements found in similar numbers in all levels. If the archaeologist calculates the percentage of each type by level, he can graphically represent the popularity of the pottery in what is sometimes called a "Battleship curve." Such graphs show how artifacts have grown and declined in popularity through time. In our example we see a noticeable growth and decline in the plain brown pottery in levels 12-9 and in the red on brown pottery in levels 8-5. The red and white on brown was still popular when the site was finally abandoned. Seriation allows the archaeologist to assign relative dates to different assemblages when found in stratigraphic sequences and to cross-date sites on the percentage occurrence of certain kinds of artifacts. This process is sometimes called sequence dating.

Having discussed seriation and stratigraphy it is important to discuss how the archaeologist defines the differences between groups or assemblages of artifacts. Typology is a process by which collections of facts or objects, as in the case of archaeology, are categorized on the basis of definable traits or attributes. When a group of objects or artifacts share a number of attributes, they are said to belong to a specific type. Generating a typology involves making careful measurements and observations about artifacts.

It is common for archaeologists to speak of pottery types or projectile point types. By this they mean a group of pottery sherds similar in color, form, and decoration, or projectile points similar in outline and chipping patterns. Typology allows the archaeologist to order types of material culture into recognizable units such as chipped stone, bone or wood implements, and pottery and to define variations within these categories. When several assemblages are grouped together, they are referred to as a complex. Typology is also important because it assists the archaeologist in determining the function of an artifact. When types have been defined and occur in stratigraphic sequences, archaeologists can understand which are older or younger and how material culture and life styles have changed through time.

This understanding is facilitated by the use of space and time concepts. The distribution of archaeological cultures through time is one of the major concerns of archaeology. Two concepts that help to explain these relationships are the concepts of horizon and tradition, and they refer to a spatial distribution of culture within a period of time. Horizons refer to groups of artifacts or cultures distributed over a broad area during a short period of time. Traditions, in contrast to horizons, are of long temporal duration within a relatively restricted area.

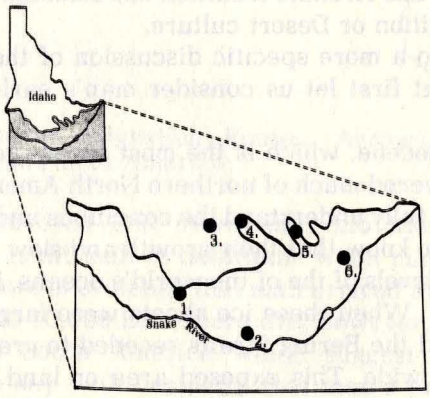
Modern science has developed many absolute dating techniques applicable to archaeology. Because many of these are very complex and others only regionally applicable (for example, dendrochronology and potassium-argon dating techniques), we will consider only radiocarbon dating. In 1948 Willard Libbey developed a technique that revolutionized archaeology. The radiocarbon or carbon14 technique, as it is commonly called, permits archaeologists to date in chronometric terms sites of great antiquity. Prior to Libbey's discovery all dating was relative except in instances where written records existed. Radiocarbon or C^{14} is a radioactive isotope generated by cosmic bombardment of nitrogen in the upper layers of the earth's atmosphere. Although the rate of C^{14} exhibits minor fluctuations in intensity, it has remained fairly constant through time. All living organisms acquire and retain carbon14 through the respiratory process. Upon the death of the

organism the stored amount of C^{14} declines and reverts to C^{12}, which is non-radioactive carbon. The ratio of reversion of C^{14} to C^{12} occurs at a measurable rate. This rate is measured in terms of the number of years required for C^{14} to reduce to one-half of its level at the time of death of the organism. This rate is 5,730 years and has sometimes been called the "half-life." By measuring the amount of C^{14} remaining in organic material, it is possible to determine a date for the material and the site from which it was obtained. Materials that can be dated include wood, bone, charcoal, and shell. This technique, which involves a rather complex analytical procedure, provides accurate dates to approximately 70,000 years ago. Other absolute dating techniques extend this range to millions of years.

The purpose of the discussion to this point has been to provide the reader with an idea of what archaeology is and what archaeologists do. We have seen that archaeology is a complex set of methods and techniques, which assist the archaeologist in understanding the past. We have seen that he understands the past by studying the remnants of material culture preserved in archaeological sites where man formerly lived. We have also seen that recovery of this information is a tedious job only to be undertaken by trained archaeologists or persons working under the guidance of a professional archaeologist. The recovery of items of material culture is not an end in itself. It is the relationship of artifacts to other artifacts, and cultural and non-cultural features and their dating, which allows an understanding of the past.

IV. The Archaeology of Southern Idaho: A Summary

Southern Idaho is marked by the occurrence of large numbers of archaeological sites representing various uses at different times in the



Major Archaeological Sites in Southern Idaho

1. Simons Site
2. Wilson Butte Cave
3. Redfish Overhang
4. Challis Bison Jump
5. Bison and Veratic Rockshelters
6. Wasden Site

Figure 3. Archaeological Sites. These are currently the major archaeological sites in Southern Idaho.

past. These sometimes consist of a few isolated artifacts, or they may contain large enough quantities of material to identify them as campsites or villages. Other sites include burials, quarry and manufacturing sites, and processing sites. All of these together provide us with a tremendous amount of information with which to understand and interpret the past.

By Southern Idaho we are referring to the area south of the mountain ranges north of the Snake River Plain. This is of course an arbitrary boundary since peoples on the Snake River Plain and in the Northern Mountain area did have contact. The same is true of Southern Idaho relative to other areas in the Plains of Wyoming and the deserts of the Northern Great Basin. Prehistoric peoples and lifestyles were not restricted to modern geographic boundaries.

Two major cultural traditions, the Paleo-Indian and Archaic traditions, can be recognized in Southern Idaho and in much of the western United States. The Paleo-Indian period (12,000-7,000 years ago) dates from the late Pleistocene and is associated with lanceolate fluted points and extinct fauna. The Paleo-Indian or Big Game Hunting tradition, as it is sometimes called because of its emphasis upon the use of large animals, is followed by an Archaic tradition, associated with changing environments and an unspecialized use of multiple resources. In the Desert West this Archaic tradition has sometimes been referred to as a Desert tradition or Desert culture.

We will return to a more specific discussion of these traditions in Southern Idaho, but first let us consider man's earliest presence in North America.

During the Pleistocene, which is the most recent geological period, great ice sheets covered much of northern North America and Europe. Although we do not fully understand the conditions under which the ice fields formed, we do know that their growth and slow advance greatly lowered the water levels of the of the world's oceans, in some cases as much as 1,000 feet. When these ice sheets were largest, the shallow water levels around the Bering Straits receded to create a land mass nearly 1,000 miles wide. This exposed area or land bridge between Siberia and Alaska is sometimes called "Beringia."

While the land bridge existed the first ancestors of modern American Indians migrated to the New World. These peoples of Euro-Asian origins brought with them material culture developed in the Old World. Along with man and his material culture a number of animal species also migrated into the New World. Among these were the elephant, deer, elk, and moose. The horse and camel, which had developed in the Americas, moved across the bridge into Eurasia. In-

deed, some of the earliest North Americans may have been hunters who followed the migration of animal herds across the Bering land bridge. As the ice sheets receded people migrated through the north-south corridors, which had opened along the Canadian Rockies into

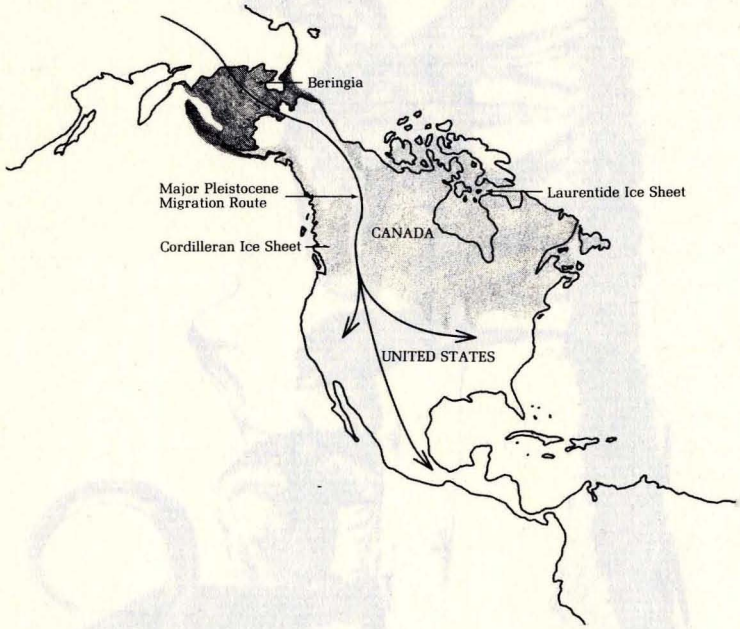


Figure 4. Pleistocene Migration Routes. Arrows indicate major migration routes into North America.

Western North America and eventually into Mexico and South America. While it is difficult to determine when man first arrived in the New World, there is evidence that man arrived at intervals during the period of 20,000-10,000 B.C. There are, however, additional dates from Mexico and South America which suggest an even earlier presence. We can say with certainty that man's presence in North America was well established by 12,000 years ago.

We are now ready to discuss the earliest occupations in western North America and Southern Idaho.

The Paleo-Indian or Big Game Hunting tradition is divided into three major cultural periods characterized by the presence of specific types of lanceolate or leaf-shaped points, and their association with now-extinct fauna and markedly different environmental conditions. These cultural periods are called Clovis, Folsom, and Plano.

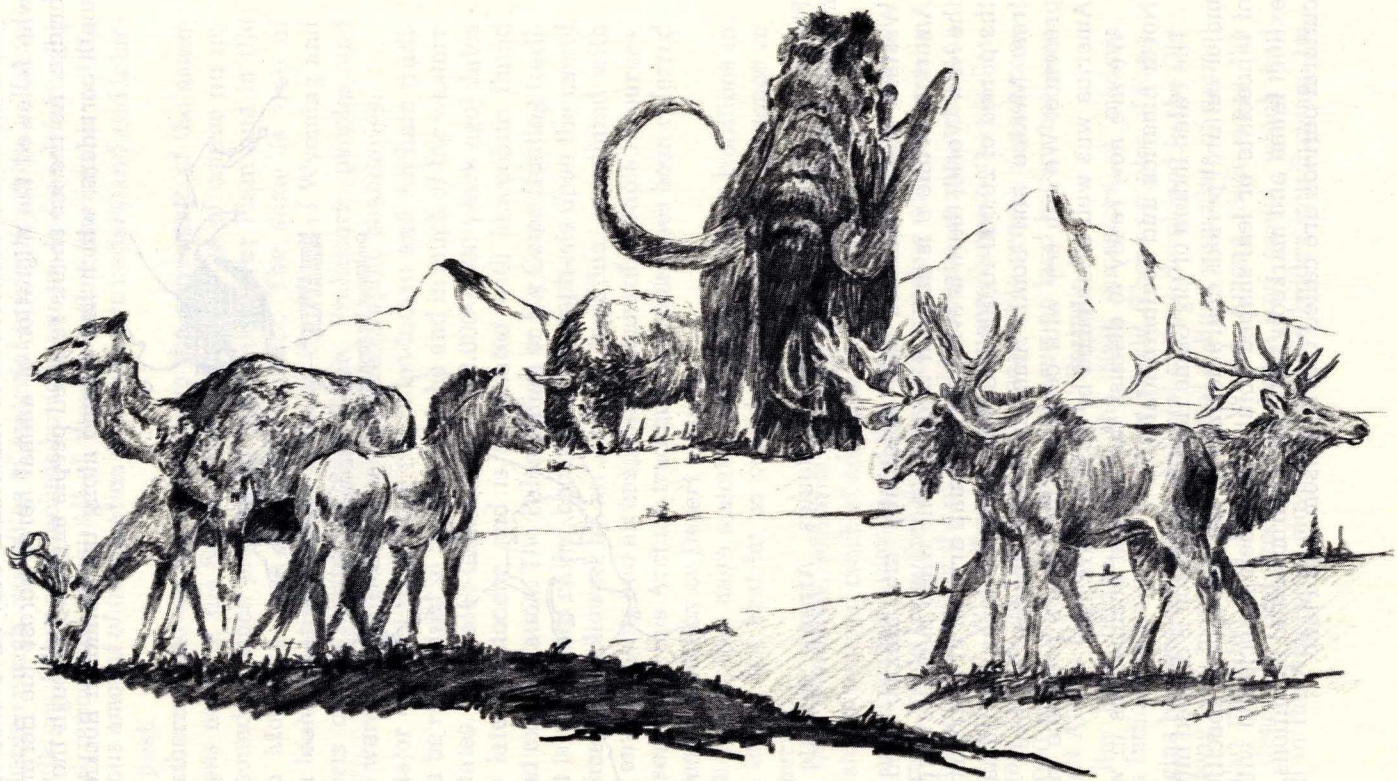


Figure 5. Principal Pleistocene Fauna. The more common big game species included the Deer, Camel, Horse, Bison, Mammoth, Moose, and Elk.

The large glacial ice masses had far reaching effects on the climates of North America. Areas near the ice masses were cold and moist with a limited growing season. These areas resembled modern arctic tundra conditions. Because of the cold adapted fauna found in these areas, hunting was a major activity. Farther from the ice sheets environments were more hospitable. In areas such as the Great Basin there was increased moisture as a result of precipitation and glacial melt waters which formed a number of so-called pluvial lakes such as Lake Bonneville. These conditions generated local environments richer than those at present. In some areas there were large coniferous forests where there is now desert steppe country.

Generally, however, these conditions became similar to those of the present some 12,000 years ago. The earliest and best known of Paleo-Indian cultures is the so-called Clovis culture named after the site of its first discovery at Clovis, New Mexico. The Clovis or Llano culture is characterized by lanceolate projectile points ground on their bases, for hafting on a shaft, and "fluted." Fluting refers to the removal of a large channel flake from both sides of the projectile and is generally believed to be a New World technique.

Because much of our discussion will center around types of stone tools, it is important that we briefly discuss how such tools were made. Stone tools, because they are preserved, are the most common artifacts found in archaeological sites. Because stone can easily be modified by simple fracture and the freshly broken edge used as a cutting tool, it is a highly desired raw material. Unmodified stones can also be used as hammers or grinding and pounding implements. A trained stone worker can reduce an unmodified lump of stone into a highly specialized tool. Let us consider how these tools are made. The stone worker begins with an unmodified lump of stone which may occur as a nodule, tabular slab, or a pebble. The material is normally chosen because of its workability, that is, how well it fractures. For this reason volcanic glass or obsidian is a preferred source material in Southern Idaho. The nodule is modified by striking it with direct blows with a hammer stone. This procedure removes flakes from the nodule and is called flaking or knapping.

When flakes have been removed from the nodule, it is referred to as a core. If this implement is used as a tool it is called a "core-tool." It is common for the flakes removed from the core to be further modified to form more specialized tools. These are referred to as flake tools and include such artifacts as drills and projectile points. In addition to hammerstones, bone and wood implements are used to remove flakes. When flakes are removed by striking, the procedure is called direct

percussion flaking. If a wooden punch is struck by another object to remove flakes, the technique is called indirect percussion flaking. Once an object has been worked into a general form, smaller flakes are removed along the edges to thin and provide a cutting, scraping, or sawing plane. If the stone worker wishes to produce a more refined edge, he employs a technique called pressure flaking. This involves the use of a bone or wood flaker placed to the edge of the object and pressed in-and-downward. This process results in the removal of very small flakes that shape and refine the edge. Pressure flaking is most commonly used in the making of projectile points. When a material was marginally workable, it was heat treated. By heat treatment we are referring to the heating of stone materials in fires or earth ovens to in-



Figure 6. Common Techniques of Stone-tool Manufacturing. 1. Pressure Flaking, 2. Direct Percussion Flaking, 3. Indirect Percussion Flaking.

crease their fracturability. Artifacts were "not" produced by heating the stone and dripping water along the edges to remove flakes.

Many of the techniques of stone tool manufacture were developed in the Old World and brought into the Americas during the late Pleistocene.

The Clovis occupation in western North America dates between 12,000 and 11,000 years ago and is largely associated with "kill sites." Kill sites represent bogs and canyon or arroya areas into which animals were herded and killed. Many of the Clovis projectiles have been found with mammoth remains. Archaeologists use the term "projectile point" to avoid having to distinguish between spear points, which tend to be larger, and those used on arrows. Because the bow and arrow was not introduced into the American Southwest until about A.D. 400, most of the early points were hafted or mounted on spears. Clovis, Folsom, and Plano points were presumably used in this fashion.

The Folsom culture dates between 10,000 and 11,000 years ago. It derives its name from the type site in Folsom, New Mexico, and is

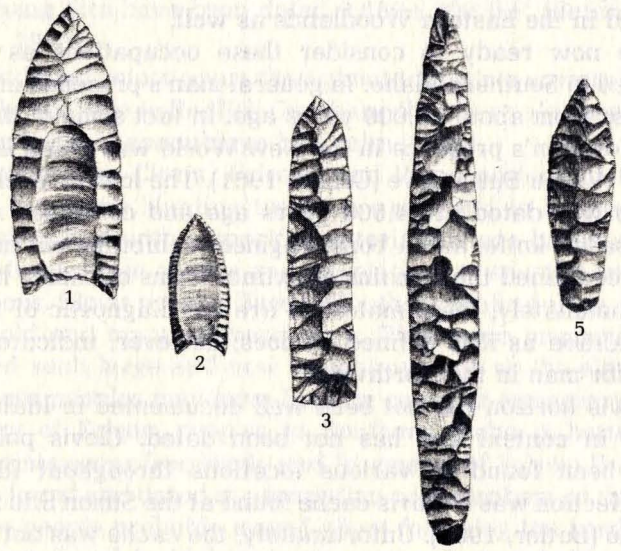


Figure 7. Paleo-Indian Points. These are representative points found in Southern Idaho. 1. Clovis, 2. Folsom Point, 3. Birch Creek Point, 4. Haskett Type 1 Point, 5. Haskett Type 2 Point.

characterized by the Folsom point. Folsom fluted points are smaller than Clovis points, better made, and more finely retouched on the edges, with the flute extending nearly the entire length of the projectile. Folsom points are, like Clovis points, most commonly associated with "kill sites;" although, campsites have been found. The Folsom oc-

cupation is also notably associated with extinct and modern bison forms.

The Plano occupation is much more widespread and lasts over a longer period of time than the preceding Clovis and Folsom horizons. Plano points consist of a variety of large lanceolate, unfluted projectiles found in context with bison "kills" in the Plains and Desert West. While some Plano points are as old as Folsom, most date to a period 7,000 years ago.

It is important to note that other tools, including blades and scrapers, have been found with Clovis, Folsom, and Plano, but the point types and associated fauna allow these cultures to be temporally separated. It is also noteworthy that these peoples almost certainly collected plant foods as they were available to supplement their diets. These occupations were not restricted to western North America and were found in the Eastern Woodlands as well.

We are now ready to consider these occupations as they are documented in Southern Idaho. In general man's presence in Southern Idaho dates from about 15,000 years ago. In fact some of the earliest evidence for man's presence in the New World was found in Idaho at the site of Wilson Butte Cave (Gruhn, 1961). The lowest level or strata of the site was dated at 14,500 years ago and contained retouched flakes, a basalt knife, and a bone fragment exhibiting cut marks. The level also contained the remains of extinct forms of camel, horse, and sloth. Unfortunately, these materials are not diagnostic of the Paleo-Indian tradition as it is defined. It does, however, indicate an early presence for man in the Northwest.

The Clovis horizon has not been well documented in Idaho. It does not occur in context and has not been dated. Clovis points have, however, been found at various locations throughout Idaho. The largest collection was a Clovis cache found at the Simon Site near Fairfield, Idaho (Butler, 1963). Unfortunately, the cache was not radiocarbon dated as a result of a lack of datable materials.

In contrast to the Clovis occupation the Folsom horizon is better documented and has been found and dated *in situ* at the Wasden Site. This site originally excavated by Butler (1971) produced elephant remains with undiagnostic cultural materials. Subsequent excavation by Miller (1978) recovered fragments of three Folsom points in association with elephant remains. Other extinct remains from the Wasden Site include the extinct form of bison, *Bison antiquus*, and camel. Butler (1978) suggests that the Wasden Site was used as a natural corral for bison who were killed and butchered there.

The Plano occupation in Southern Idaho is well represented in the archaeological record. Such points have been found through Southern Idaho and have been found in datable contexts. Many of these finds, in contrast to the Clovis and Folsom finds, appear to be habitation sites instead of kill or hunting sites. In addition to the typical Plano type points, other items of material culture found include scrapers, knives, and other stone tools. At Bison and Veratic Rockshelters in the Birch Creek Valley (Swanson, 1972), a lanceolate point called Birch Creek type A is a characteristic Plano type.

Another important Plano point found in Idaho is the so-called Haskett point. These points are generally lanceolate forms with ground or polished edges to allow for hafting. Some forms have thin and slightly rounded bases (Type 1), while others (Type 2) are larger, heavier, and widest at the mid-point of the projectile. The points from the Redfish Overhang Site have been dated 9,860 ± 300 B.P. (Before Present) (Sargeant, 1973).

As noted Plano points occur throughout Idaho in a variety of surface contexts. In addition to Redfish Overhang they have also been found in the Wilson Butte II assemblage by Gruhn (1961).

In summary, the Clovis, Folsom, and Plano periods of the Paleo-Indian or Big Game Hunting tradition are found in Southern Idaho. Each is associated with a specific material culture based upon point type variations, types of sites and adaptations to specific environmental conditions. Clovis peoples lived in Southern Idaho during a period of relative cold and marginal vegetation. They were primarily hunters and hunted such large and now extinct animals as the elephant and camel. These peoples may have lived in caves or temporary shelters. The history of Folsom peoples in Southern Idaho is better known. Isolated points occur frequently and fragments of Folsom fluted points have been found and dated in association with elephant at the Wasden Site. These people probably moved about following the herds of large animals then found in Idaho. Hunting was most probably done with spears after game was driven into compounds or canyons. Like Clovis peoples the Folsom inhabitants of the area probably lived in temporary shelters.

The Plano period in Southern Idaho is the best documented and provides the most substantive information concerning how these early peoples lived. We know they used caves and rockshelters as places to live. We also know these people had a more diverse material culture than those who preceded them in the area. The fact Plano peoples were living in caves and shelters suggests greater permanency than in

earlier periods. The occurrence of more specialized tools and artistic ornaments also indicates these people may have been involved in more diverse economic pursuits than simple hunting. Of special interest is Gruhn's (1961) recovery of a mano from the Wilson Butte II assemblage, which includes Plano type points and bison and camel remains. The presence of a mano, a grinding stone used to process seeds and other wild plant foods, suggests that the so-called Big Game Hunters also made use of plant foods and probably other vegetal materials.

By the end of the Paleo-Indian period, some 7,000 years ago, the climatic and environmental conditions in Southern Idaho were much as they are today. With these climatic changes there also occurred changes in vegetation and in animal forms. Forms including the elephant, camel, and horse had disappeared. Archaeologists believe that there are a number of reasons for the decline of these forms. As the pluvial environments disappeared and conditions generally became warmer, the former vegetation changed. This change left many of the animal forms unable to adapt to the new environments. Animal herds became more scattered as the competition for new resources increased. Their numbers declined because breeding population concentrations were not as large. Another explanation involves what is called "overkill." By "overkill" we are referring to man's hunting and perhaps over-exploitation, which decreased the size of breeding populations. In either case overkill or natural competition decreased populations to a point where the species were unable to maintain reproduction levels great enough to curtail extinction.

Of the forms previously mentioned only the bison continues into later periods. An increase in the numbers of smaller dry-adapted mammals is also noticeable (Butler, 1978). In addition to changes in animal forms, warmer conditions witnessed the development of more diverse plant communities. These environmental changes required adaptations by man. With the herds of camel and horse gone and bison restricted to grassland areas, man was forced to take up a foraging or hunting and gathering pattern less dependent upon specific resources. This pattern, referred to as the Archaic tradition, emphasized an unspecialized use of a diverse resource base.

The Archaic tradition first defined for the Northeastern woodlands has become an important concept in the Desert West where Jennings (1957) has referred to it as Desert Culture. The Archaic is partially defined on the basis of specialized tool types not found in the preceding Paleo-Indian tradition. The material culture includes grinding or milling stones used to process seeds. These include manos and metates and

mortars and pestles. Metates are grinding slabs on which seeds are milled using a round or rectangular shaped stone or mano. Basin shaped mortars, particularly common in Southern Idaho, are used in conjunction with pestles, elongated cylindrical pounding stones, Many of the objects were pecked and shaped and are not the results of long term use. Other items include fur cloth, twisted into strips and sewn together, woven sandals, moccasins, twisted cordage, basketry, wooden and bone tools, including punches, drills, wrenches, and digging sticks. Also, there were grass mats, *Olivella* shells from California, and a wide variety of stone implements, including large side and corner-notched points. These points were probably used in conjunction with the atlatl and dart.

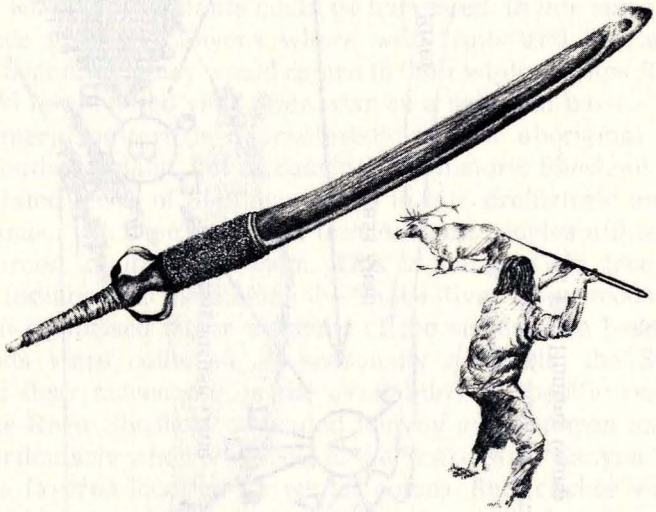


Figure 8. Altatl. The handle with the fingerhoops is at the left and the hook or spur which holds the end of the spear is at the right.

The atlatl was a spear throwing device widely used by Archaic peoples in the Americas. The atlatl was a small wooden shaft with a hook or spur on one end. The opposite end of the atlatl was fitted with fingerloops and weights used to increase balance and thrust. The end of the spear was placed against the spur and the atlatl thrust forward. The extension of the spur shaft and its added weight increased the

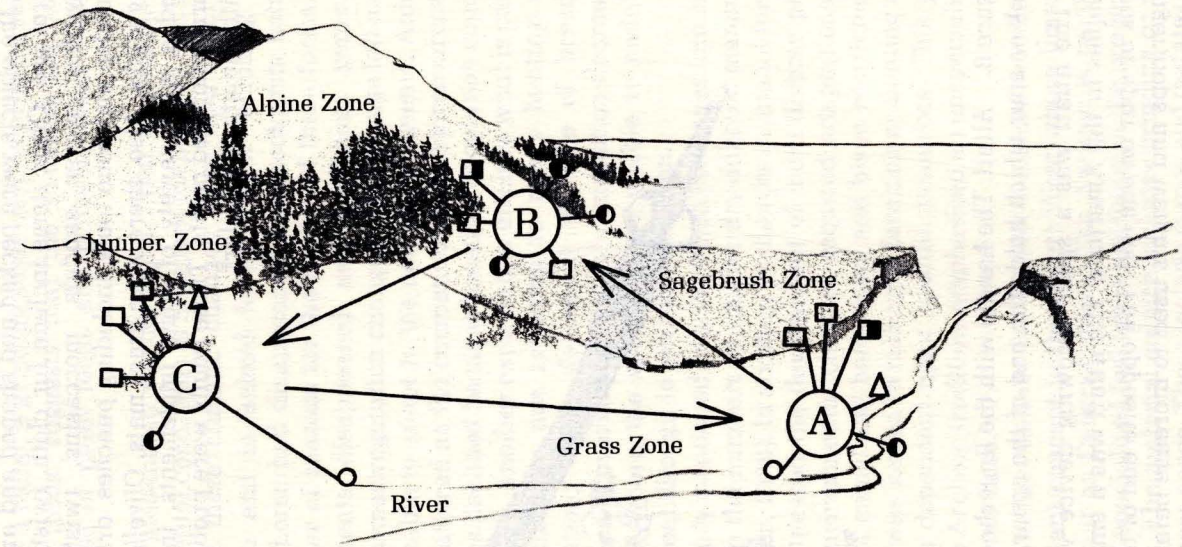


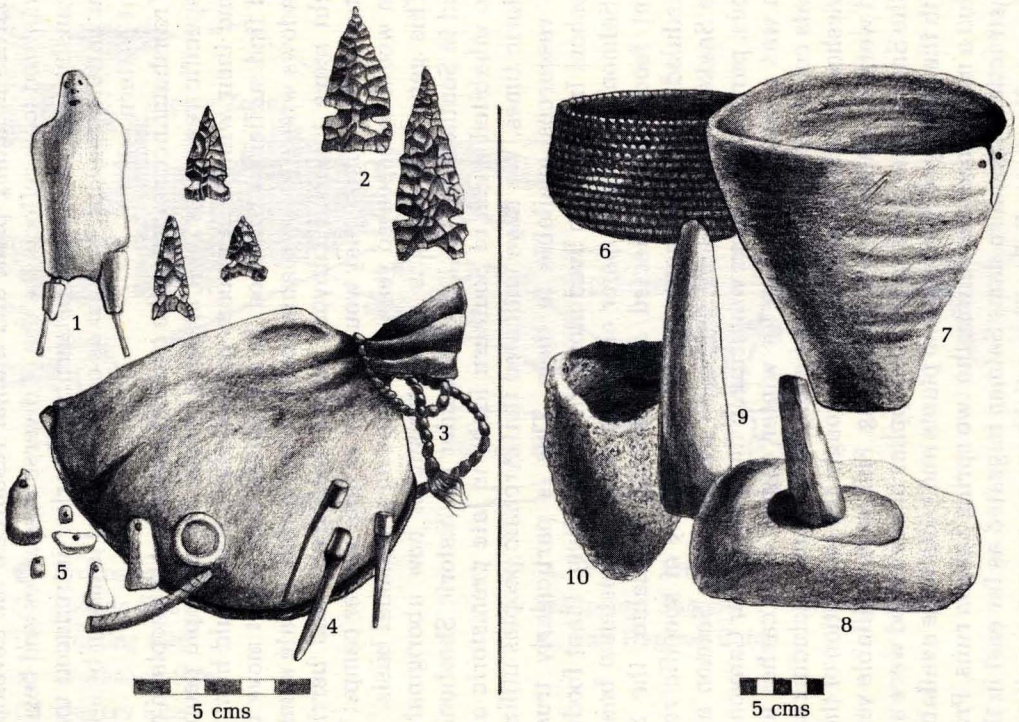
Figure 9. Transhumant Pattern. This model describes the location of camps near seasonal resources. Sites representing specialized activities occur around the major campsites.

throwing distance, force, and accuracy of the simple spear. This increased the ability of Archaic hunters to stalk non-herd animals such as antelope.

In addition to utilitarian materials, gaming pieces, and ornaments, molded clay objects and figurines have been found in Archaic contexts in Southern Idaho. The Early Archaic, referring to that period prior to A.D. 1200, is characterized by an unspecialized use of all available resources including plant and animal resources; the development of specialized tools reflects the use of diverse resources and beginning of a transhumant settlement pattern. We earlier introduced the settlement pattern concept. Now let us consider what is meant by a transhumant pattern.

Transhumance refers to the cyclical movement of people to make use of specific resources on a seasonal basis. For example people might spend their winters in stream valleys where they could hunt and fish and find sufficient firewood. In the Spring they might move to higher meadows where green plants could be harvested. In late summer they might move to small canyons where wild fruits and berries were matured. Eventually, they would return to their winter camps. This pattern would be repeated year after year on a seasonal basis.

This general pattern is characteristic of how aboriginal peoples lived in Southern Idaho. Let us consider the historic Shoshoni Indians who inhabited much of Southern Idaho in late prehistoric and early historic times. We have indicated that Archaic peoples utilized all of the resources available to them. This is particularly true of the Shoshoni Indians who lived along the Snake River. Plant foods as well as Salmon comprised major elements of the subsistence base. While plant foods were collected as seasonally available, the Shoshoni scheduled their movements to the availability of specific resources. The Snake River Shoshoni depended heavily upon Salmon and other fishes, particularly when wintering in the Snake River Canyon. The canyon was a favored location for winter camps. Root caches and dried meats could be stored there and a variety of game, including sagehens, snowshoe rabbits, grouse, and deer sought the protection of the canyon and were available for winter hunting. Fish were available year round in the Snake River, and sufficient supplies of fireweood were available. With the coming of Spring green plants and roots were available. In addition a major food source was the two spring Salmon runs. Prior to the construction of modern dams Salmon migrated as far east in the Snake River as Shoshone Falls. These Salmon runs were a principal food source for the aboriginal inhabitants of the western Snake River Canyon. Fishing for Salmon was a cooperative undertaking generally



1. Clay Figure, 2. Side-Notched Points, 3. Leather Ochre Pouch, 4. Promontory Pegs, 5. Shell Ornaments.

6. Shoshoni Basket, 7. Clay Pot, 8. Mortar and Pestle, 9. Mano, 10. Stone Mortar.

Figure 10. Late Archaic Materials.

within family units and particularly where small villages were located in fishing streams near the canyon. The first Salmon runs came in March and April and the second in May and June. The fish were speared or taken with nets and hooks. Sometimes several families built a dam or weir and fished. They in turn distributed the catch among themselves, giving a share to a director who coordinated their efforts.

In July the Snake River Shoshoni traveled to Camas Prairie some 35-50 miles north of the canyon to collect camas and other root crops as well as to take small mammals like the gray ground squirrel. Many of these roots were dried and returned to the canyon where they were stored in cache pits for winter use. Many different groups made the trip to Camas Prairie. Here they could dance, gamble, and trade with each other. At the end of summer the Shoshoni returned to the Snake River to harvest fish from the fall Salmon run. Much of the catch was dried and smoked on wooden racks and stored for winter use. Sometimes the salmon was cooked and mixed with salmon oil and formed into a pemican and stored in salmon skin bags. In the fall some Indians traveled to the surrounding hills and small drainages to collect seeds and chokecherries. Chokecherries like a variety of other foods were ground or pounded on a metate or mortar, dried into small cakes, and stored in cache pits with other foods. Some seeds, such as sunflower seeds, were collected and parched to prevent germination during storage. The Shoshoni Indians, as well as other historic groups in Southern Idaho, did not grow maize or corn. Using the concept of ethnographic analogy, we can assume that this pattern of seasonal and cyclical movements to utilize specific resources characterizes the Archaic tradition in Southern Idaho.

Let us return now to a more specific consideration of the Archaic tradition as it is represented in the archaeology of Southern Idaho. Butler (1978) has defined a Late Archaic period dated from about A.D. 1200-1850. Recognition of a Late Archaic period is important because this period marks the introduction of new material culture elements and an elaboration of existing ones. We have seen that the Early Archaic was characterized by large side-notched points associated with the use of the atlatl and dart. Beginning around A.D. 1200 we see the wide spread acceptance of small triangular and side-notched points commonly called Desert-side-notched points. These small points mark the increased usage of the bow and arrow in place of the earlier spear and spearthrower. Another important addition to the material culture assemblage is the first appearance of pottery. This pottery consists of large, poorly made, flat bottomed, flower-pot looking vessels distributed throughout Southern Idaho by Shoshonean peoples moving out of the southern Great Basin.

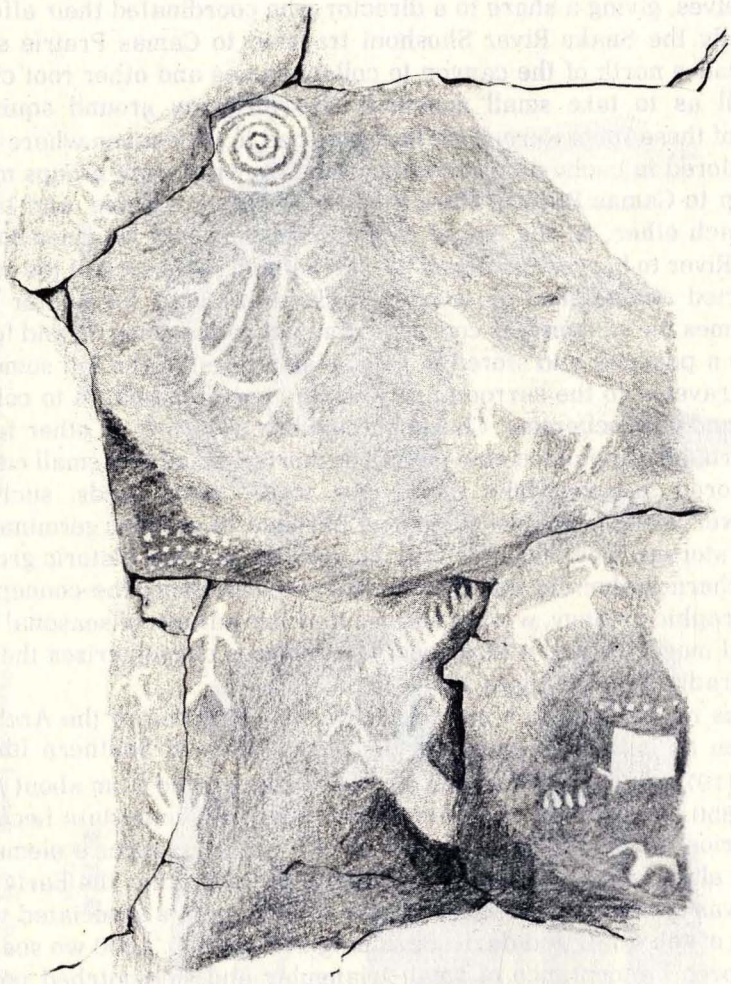


Figure 11. Petroglyphs. This illustration shows motifs in Southern Idaho Indian "Rock Art."

Petroglyphs, pictographs, and elaborate rock alignment or hunting complexes are also common. While these things were found earlier in the Archaic tradition, most appear to date from the period termed the Late Archaic. Petroglyphs and pictographs are referred to as rock art. Petroglyphs refer to those figures pecked or pounded into boulders or wall faces. Pictographs refer to painted figures produced by using a variety of natural pigments, including iron oxide or red ochre. These were painted using one's finger or a stick or reed. In Southern Idaho petroglyphs represent the most common form. Motifs include both geometric designs and human and animal configurations. Petroglyphs and pictographs are art forms and may have in isolated instances marked trails or hunting facilities. They do not constitute a writing



Figure 12. Hunting Blind. This illustration shows that hunters probably hid behind stone blinds to ambush animals such as antelope.

system by which Indians communicated.

Hunting facilities are very common throughout Southern Idaho. These consist of structures called rock alignments formed by stacking stones into configurations such as circles, sometimes called hunting blinds, crescents, walls, and rim enclosers. These structures are com-

mon in the Upper Snake and Salmon River country (Butler, 1978). They are also numerous in southwestern Idaho (Plew, 1978). The structures occur alone and in concentrations or complexes (Plew, 1979). In situations where they occur in numbers they appear to have been used as corrals for antelope. Another important hunting facility is the historic bison jump. The data collected at the Challis Bison Jump (Butler, 1971) demonstrates bison were an important resource, hunted into the late Archaic periods in Eastern Idaho.

By A.D. 1700 many of the Shoshoni groups in Southern Idaho had acquired the horse, which had been reintroduced by the Spanish in the Southwest and had spread northward. The presence of the horse greatly increased the mobility of the Indians; although, many groups never acquired them. The arrival of the horse had a tremendous effect upon the economic pattern. With greater mobility it was possible to travel greater distances in search of food stuffs. This made it more difficult for unmounted Indians to compete for the same resources. The acquisition of the horse and eventually fire arms aided the destruction of the bison herds, which were virtually extinct in Southern Idaho by 1840. As trappers and fur traders poured into Southern Idaho in the first half of the 19th century, the Indian became increasingly acculturated to a Euro-American material culture and life-style.

The Archaic tradition in Southern Idaho was a long term economic pattern. It centered around total exploitation of the environment and was based upon a seasonal cycle or round associated with the availability of resources.

In summary, we have very briefly examined some of the major developments in man's early history in Southern Idaho. We have seen that man entered the New World, 10,000 to 20,000 years ago, via a land bridge. It formed as the ocean levels decreased, and the great ice sheets covered much of northern North America during the Pleistocene. Man then was distributed throughout the Americas by 10,000 years ago. Some of the earliest evidence for man's presence in the New World was found at Wilson Butte Cave in Central Idaho and dated at 14,500 years ago. Idaho's climate 12,000 years ago was much cooler and moister than it is today. Associated with these conditions were several extinct animal forms which included elephant, horse, camel, the sloth, and others. Man's presence in Southern Idaho during this period is referred to as the Paleo-Indian or Big Game Hunting tradition, and it ends sometime around 7,000 years ago. While we do not know a great deal about how man lived during this period, we do know that one of his major activities centered around Big Game hunting. Because his material culture changed through time, we are able to

distinguish three cultural periods based upon projectile point types and referred to from oldest to youngest as Clovis, Folsom, and Plano. These types include fluted and unfluted lanceolate point forms.

As temperatures grew warmer at the end of the Pleistocene, many of the large game animals became extinct as major vegetal changes occurred. These changes also increased the potential resources of the aboriginal peoples of Southern Idaho. Adaptations to these changing environments resulted in a less specialized, but more exploitive settlement-subsistence pattern, which archaeologists term the Archaic Tradition. This period began 7,000 years ago and lasted in Southern Idaho until about A.D. 1850. The Archaic Tradition in Southern Idaho can be divided into Early and Late Archaic periods. The Early Archaic period is marked by large side-notched projectile points and the use of the atlatl and dart. In this period hunting of large animals such as deer, elk, and mountain sheep was common. The Early Archaic is also marked by the occurrence of a much greater material culture inventory than the preceding Paleo-Indian tradition. Of special importance is the first appearance of ground stone tools, which are a hallmark of the Archaic in Southern Idaho and in North America. The emphasis on plant collection led to a system of seasonal rounds characteristic of this tradition. Whereas Paleo-Indian peoples seem to have used caves and open areas as temporary camps, the Archaic witnesses a more sedentary style. This is indicated by the numerous open camps and villages and long term or repeated use of rockshelters.

The Late Archaic period dates from about A.D. 1200 to 1850 and is characterized by the introduction of small side-notched projectile points (associated with the first use of the bow and arrow) and pottery. Petroglyphs, pictographs, and rock alignments also occur with greater frequency. It also is marked by a greater intensity of occupation and the arrival of the horse after A.D. 1700.

While man's presence and successful adaptation to environmental and cultural change can be documented over the last 12,000 years, there is much more to be learned about his past. In our final chapter we will discuss the importance of archaeological materials and sites and how and why they must be preserved.

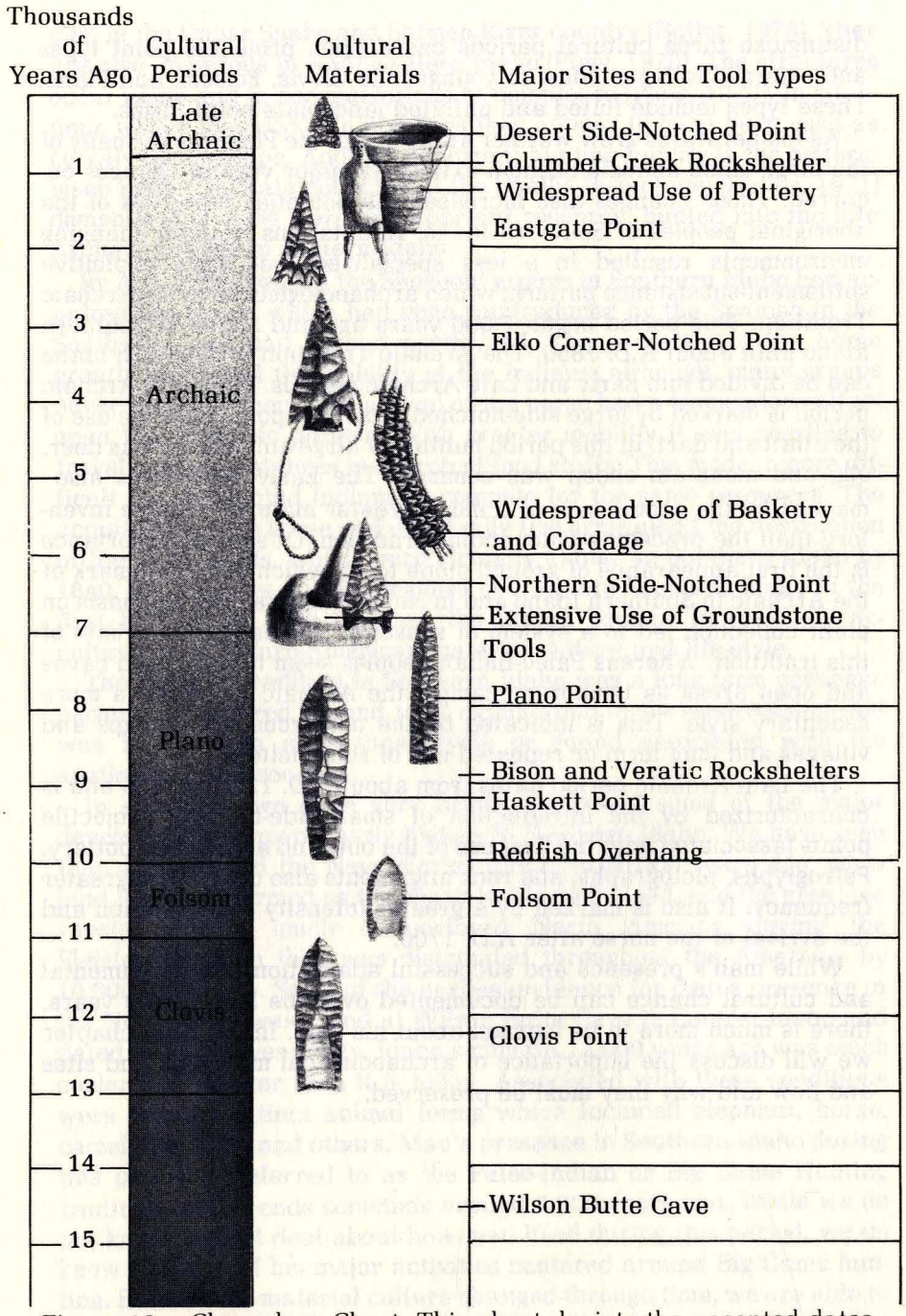


Figure 13. Chronology Chart. This chart depicts the accepted dates for artifact types and archaeological sites in Southern Idaho.

V. Preserving the Past

Our ability to understand the past is contingent upon preservation of the archaeological sites and cultural remains, which archaeologists study in order to reconstruct the past history and lifeways of peoples. There are natural and cultural factors that affect the destruction and eventual loss of archaeological remains or cultural resources, as they are commonly called.

Natural processes, which help to form sites, are constantly eroding away the vestiges of former human activities and occupations. These processes are to some extent controllable. In some areas, like the American Southwest, ancient ruins are continually repaired or stabilized to prevent their deterioration. In other areas, like Southern Idaho, sites are characterized by scatterings of surface materials. The effect of natural processes on Southern Idaho sites, unless severe as in the case of gully formations, are less noticeable and more difficult to stabilize.

The most significant effects upon cultural resources, however, are those that result from human collection and vandalism. Many people have picked up an arrowhead while hiking or hunting in the desert, without regard for the consequences of their act. One of the things stressed in this book is the idea of archaeological context. Artifacts are not a means to an end, except as their relationship to other artifacts and the site from which they were collected can be determined. When cultural materials are collected without purpose and the aid of a systematic design, contextual information is lost, and nothing can be learned from the site. Even more serious is the problem of unsystematic

digging. Unsupervised digging destroys the contextual and chronological potential of a site. As observed in a previous chapter, all excavation, no matter how systematic, is destructive. When digging is undertaken by untrained persons, the risk of informational loss is even greater.

To become an archaeologist requires years of study during which time the individual must study anthropology, archaeology, and other related fields. During his or her career, he or she will spend several summers working on archaeological projects under the direction of a professional archaeologist. Those interested in archaeology should not be discouraged by these comments. Professional archaeologists encourage the interest and participation of amateur archaeologists. In addition to being volunteer members of archeological survey and excavation teams, amateurs can assist the professional community by describing and recording archaeological sites. It is in this area that his contribution can be most significant.

These activities may be facilitated through membership in the Idaho Archaeological Society. Society membership is open to all persons interested in Idaho archaeology and includes professionals as well as amateur archaeologists. The society sponsors a number of activities including an annual fall archaeological conference, attended by the state's professional archaeologists who present papers on their current research. The society also publishes a quarterly journal entitled the *Idaho Archaeologist*, which contains articles and reports on local prehistory. The Idaho Archaeological Society is committed to understanding and perserving the past.

Preservation of the past is not a new concept. In 1906, the Congress of the United States enacted an Antiquities Act to preserve the cultural heritage of America. This act and others that have followed make it illegal and punishable by fines and imprisonment to collect, excavate, or in any other way alter or destroy archaeological sites or materials on properties of the United States without an antiquities permit. Most state governments, including Idaho, have enacted similar antiquities laws to protect cultural resources on state lands. These laws are not designed to violate the rights of individuals, but to protect the resources from those who willfully, and with full knowledge of their acts, destroy archaeological sites.

As our society continues to encroach on the remnants of the past, we must remember that cultural resources are non-renewable. They are not everlasting and cannot be preserved for future generations without the unselfish and conscientious concern of everyone.

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