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THE McKEAN POINT

L. O. Steege

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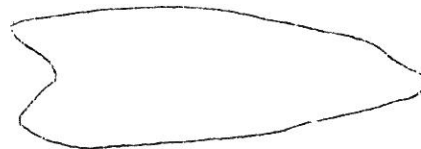
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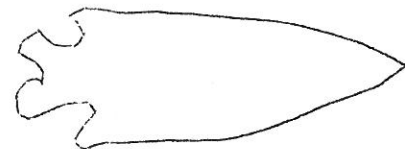
LANCEOLATE



FIRST VARIANT



SECOND VARIANT



NON-McKean

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Before I give the description of the McKean point, it might be best to explain first the sequence in the Northern Plains, so that anyone who is not familiar with the time spans may know just where the McKean point fits into the picture.

The northwest Plains sequence is divided into four major periods of time, which have been named, Early, Middle, and Late Prehistoric, and Historic Periods.

Prior to 6,000 years ago, this area was occupied by small nomadic groups of bison hunters among whom Folsom and various complexes called Yuma were important. (Since the term Yuma is broad and does not describe any one of the many types of projectile points which are included in that classification, it is suggested that this term be abandoned. Projectile point classifications should be named by types, such as Scottsbluff, Eden, Angostura, Agate Basin, etc.) These Early Period people were specialists in hunting a specie of bison which is now extinct. We know these people only by the highly stylized projectile points which they left behind. This period of time is known as the Early Prehistoric Period.

For the following 1,500 to 2,000 years, or from 4,000 B.C. to 2,000 B.C., evidence of occupation in the northern Plains is lacking. Either the people were not here or we have never found their habitation sites.

Sometime prior to 3,500 years ago, small groups of peoples appeared on the Plains who were strongly oriented in their economy towards plant gathering. These people also hunted small animals with little or no emphasis on bison or other large game animals. At this time two similar and widespread complexes appear to have developed in succession on the northern Plains. This is the early and late Middle Prehistoric Period. The two superimposed levels at the McKean site are manifestations of these periods.

Subsequently, about 500 A.D., different peoples are represented who are again adapting themselves towards a trend of nomadic bison hunting. This is the Late Prehistoric Period when the specie known as "bison bison" was returning to the Plains in great numbers. It was during this time that the bow was invented and ceramic industries were started.

As white men gradually ventured into this country, about 1800 A.D., we reach the Historic Period, and we find different tribes living in the Plains region.

The McKean point derives its name from the McKean family who owned the land in the Keyhole reservoir area where the stratified sites were located.

These points appear to vary around a single type of lanceolate point. There is some variation in form, but an examination of projectile points from sites where McKean points are found will usually show that these

variants are closely connected by intergrades which can be regarded as variants of a single form.

The simplest form is a lanceolate blade. The edges are incurved toward the tip and tapered toward the base about midway between the tip and the base. Generally, the edges of the prosimal blade-half are parallel. Usually the base has a deep notch, although sometimes the concavity is slight. (See cover illustration.)

The first variation from a strictly lanceolate type, is a blade with a slight shoulder which causes a slight constriction of the basal edges and forms a scarcely perceptible stem. The basal edges are usually parallel and the basal notch may vary from deep to absent.

The second variation is a specimen with pronounced shoulders and stem constriction. Sometimes this constriction takes the form of a slight lateral notch. This leaves the proximal end of the base with a slightly expanded appearance. Invariably the basal edges remain parallel and the basal notch will vary from deep to absent.

The lanceolate type and the variants have lenticular cross sections. Frequently a plano-convex type appears with one side revealing the original flake surface. The blade edges are thin, sharp, slightly sinuous and somewhat uneven. Bases and basal edges are sharp. There is no grinding or intentional dulling. The faces show moderately well-controlled pressure flaking.

The basal notch was apparently produced by the removal of one or more flakes from each face in the direction of the tip. The lateral projections or "ears" are usually thinned bifacially. They may be rounded, pointed, or irregular in outline. Rarely are they of the same length and width.

Sizes vary from 1.3 inches to 2.5 inches in length; .5 inch to .8 inch in width, and .15 inch to .3 inch in thickness. The notches vary from 0 to .3 inches in depth and from .2 inch to .4 inch in width.

McKean type points have been found in numerous sites throughout Montana, South Dakota, Nebraska and Wyoming. A field party, sponsored jointly by the National Park Service and the University of Wyoming, under the direction of Dr. William Mulloy, spent the seasons of 1951 and 1952 in the Keyhole reservoir area. The previously described three types of points were found by this party in the lowest level of the site.

R. P. Wheeler of the Missouri Basin Projects, Smithsonian Institution, recognizes the lanceolate type only as the McKean point. Wheeler names the first variant "Duncan Point" and the second variant "Hanna Point." If there is a definite discrepancy between the lanceolate point and the variants, I would assume that they should be of the same antiquity. Since they do not occur in the same levels, I am in agreement with Mulloy that the types are variants of a single norm.

McKean points should not be confused with another type of projectile point which is also found in the northern Plains (see cover). This is a corner-notched, expanded base type. Although it has not been dated, it probably is a later type.

The white agate, plano-convex point, described in number 9 of the "Smoke Signal" is a typical example of the plano-convex McKean point.

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GLOSSARY OF ARCHAEOLOGICAL TERMINOLOGY

In keeping with practices of the past, we will from time to time, give some archaeological terms and their definitions. This month's items are not in alphabetical order, but rather constitute a sort of "organizational chart" of certain related terms in archaeology.

Complex-- A group of related traits or characteristics that combine to form a complete activity, process or cultural unit. Lithic complexes are identified by the presence of several key implements or tool types in association. In some cases the elements that form a complex might be called the elements of a phase or focus, but the term complex is usually used where there is insufficient information to give the more specific name of focus or phase.

Trait-- Any single element of culture.

Focus-- Synonymous with phase in much of the literature. Either term usually refers to a grouping of similar traits. In different sites, various traits may be present which are in large part similar to those of other sites. This cultural similarity need not be identical, but merely possess a preponderance of traits in common.

Component-- A site or level within a site which shows a group of traits that represent a single focus or cultural pattern.

Aspect-- A more general unit than the focus, and represents a group of foci which share a preponderance of traits. The traits involved in defining the aspect are usually those of some importance to the cultural units involved, and not just a few minor traits.

Phase-- Usually synonymous with focus. This term is used by some authors to indicate an aggregate of aspects. In this form, of course, it refers to a group of aspects having some important traits in common.

Tradition--A major large-scale space-time cultural continuity, defined in reference to persistent configurations in single technologies or total archaeological culture, occupying a relatively long interval of time and a quantitatively variable but environmentally significant space. The tradition is thus a more general cultural unit than either aspect or phase. Technically defined traditions might be based on such things as pottery, while culturally oriented traditions would be based on such things as overall social and political configurations of a society.

Horizon--In a site, a level or stratum revealed during excavation. In a culture, the term horizon is often used in reference to a particular level of development.

Site-- Any geographical location that provides evidence of human occupation.

COMMENTS ON THE AIMS AND OBLIGATIONS OF THE FIELD ARCHAEOLOGIST

The archaeologist digs in order to learn about the life and peoples of the past. If his sole object were the collection of artifacts, he would not be an archaeologist, but a "pot hunter." Certainly pot hunting and surface search for artifacts should not be confused. Pot hunting is the greedy search for items to put in a collection, which involves digging, and therefore the destruction of archaeological evidence, with no written records made to replace that which is destroyed.

In archaeology, it is not "what is found" but "how it is found" that determines its value, and it is quite clear that "how it is found" can only be told from records and not from looking at the artifact itself. The work of the archaeologist might be compared to that of a researcher who uses a certain library with a peculiar rule that once a book is read, it is permanently destroyed. Under these conditions, the researcher would undoubtedly make a complete copy of the book, even if he was not at the moment interested in the entire contents.

The archaeologist, in removing specimens from their matrix, is completely destroying the original record that gives them meaning. Once removed, the specimens can never again be seen in the only context that gives them value. Unless the digger makes a complete record, in words and pictures, of the complete excavation, nature's library is being destroyed forever, without hope of replacement. Memory does not and can not serve the purpose of a record. Memory is unreliable, impermanent, and perishable. Written records of an excavation are of greater importance than any other work of the archaeologist. Even the complete loss of all recovered items would be of less importance than loss of part of the record of excavation.

The importance of recording and saving everything which is the product of man cannot be over-emphasized. Consider the amount of "worthless" charcoal that must have been thrown away during excavations in the days before carbon dating became a fact. Remember too, the little flakes and chips of stone removed from artifacts during manufacture. It was only through the

saving of these, and later fitting them into actual points found through the same excavation, that people learned how the fluted Folsom points were made. Absolutely everything manmade should be saved during a dig. Disposal of unwanted items can always be made later.

COLLECT THOSE BONES

Society members are urged to collect bones of all animals and large birds of this area. Animals of all sizes were food for the early men in this area, and the problem of identifying the bones found in campsites is a large one. This can best be done by direct comparison with bones of known identity. The Society now has skulls of bison, deer, and porcupine, as well as some of the skeletal bones of porcupine. However, representative bones of every part of the body for every type of animal and bird of edible size are needed. It is not necessary to collect leg bones from both right and left sides, for example, since these are mirror images of one another, but representative bones from every part of the body are needed. Of particular interest are the teeth, vertebrae, and leg bones. The toe bones seem to be present quite often in the case of the larger animals, and deserve special attention. Bones can often be cleaned by leaving them on an ant pile for a few days, and can be bleached clean and white by washing them in a solution of laundry bleach. The bones should then be sacked, and carefully labelled with the name of the animal to which they belong, whether the animal is full grown or not, and where they were found, and finally the date of finding.

RADIOACTIVITY AS A GUIDE TO STRATIGRAPHY

A recent technique in following stratigraphy through disturbed regions or in places where the soil is relatively undifferentiated, or of correlating horizons in different digs is that of radio activity. In some places, different soil layers contain different amounts of radio-activity due to mineral content or leaching of minerals by rain or other water. In such cases, it is sometimes possible to follow the strata by means of a radiation counter even when other means fail.

A possible technique of which we have not heard before, might be that of infra-red light. A battery-powered snooperscope instrument such as used by the armed forces might reveal a great deal about soil structure due to different degrees of reflectivity for infra-red light. Perhaps the society can give the method a try this summer.

SURFACE HUNTING AS AN ARCHAEOLOGICAL TOOL

One of the most important jobs of the archaeologist is to make a survey of an area preparatory to excavation work. The guide to sites to be excavated is the extent of surface evidence of occupation. Nearly all sites are shown by the appearance on the surface of artifacts, mounds, depressions, patterns of plant growth, or other unnatural indications of the presence of the forces of man. Very often, this sort of information

can be gotten from the artifact hunter who hunts the surface for items for his collection. Most archaeologists themselves hunt the surface of an area extensively before doing any digging. Surface surveying is a necessary prelude to the laborious and time-consuming work of excavation, and is an operation that can utilize a great many interested people. Societies of amateur archaeologists can perform one of their most useful functions in combing large surface areas for artifacts and other evidences of campsites to furnish a guide for the more exacting work to follow. The saving in time and labor to be had through a complete surface survey is obvious. Indeed, in the event that time and personnel are not available for complete excavation of all sites, the results of surface hunting combined with a few digs can often give a fairly complete picture of the archaeology of a region.

THE INDIANS KNEW THESE PLANTS - DO YOU?

Under this heading will be a series of discussions concerning plants that were used by the early Indian inhabitants of the New World. One or several species will be discussed each month.

* * * ** * *

The plant lore of primitive people has to a great extent been carried over into our present civilization. Even today there are those who patronize "herb doctors" or use old recipes that have been handed down to them. Modern pharmacology is discovering that many of the old folk remedies are efficacious. The plants or their potions are not directly used, but a study of them has revealed their effective fractions. These compounds are recovered and chemically refined or synthesized in the laboratory.

A study of how primitive people used plants has yielded valuable results to archeologists, botanist, and other scientists. Research is concerned with a number of questions: What were the primitive peoples' idea of plant life? What effect did the various plants have on their customs, religion and everyday affairs? What uses were made of these plants? What was the extent of their knowledge of plants? From studies made it is known that conceptions of plant life varied widely among different peoples. A particular plant was utilized in different ways by the various groups. As environments changed so did the use of plants. The Indians of our warm Southwestern valleys became settled farmers and as such made a much wider use of plants than did the hunters of the plains. It was among the Indians of the Southwest, Central and South America that corn, one of the world's great cereal crop, came into prominence.

Since evidence shows that the greatest utilization of plant varieties was made among our Southwestern Indians I will begin this series of discussions with a plant that was and is still widely used among the Pueblos, namely the Yucca.

Liliaceae--Lily Family

Plant an evergreen shrub with sword-like leaves a foot or more long. Yucca glauca, Yucca; Spanish Bayonet; Soap Weed. Abundant on the plains and mesas, especially where the soil is poor. Flowering in early summer,

the plants bearing huge racemes of waxy, greenish or white flowers." ¹

The roots of soapweed or yucca plant (Spanish: datil, palmilla ancha, amole) provide an excellent lather. Until the introduction of commercial soap it was the only detergent used by the Indians of New Mexico and Arizona and the early Spanish. It is still widely used by the Indians of the Southwest for washing woolens and human hair. The narrow leafed variety (*Y. glauca*) is preferred as the Indians maintain that the wide leaved variety (*Y. bacatta*) makes the scalp itch. The roots are bruised and put into cold water to steep. After a few minutes they receive a brish stirring and are rubbed until a lather is produced. Fibrous parts are removed and the concoction is ready for use. The Tewa called the lather 'okho and gave the name of commercial soap.

The use of yucca as food among the Pueblos is known from Taos, Isleta, and Jemez along the Rio Grande and the western mesa settlements of Zumi and Hopi. Bandelier described the use of yucca at Cochiti in 1882, "Fruits of the Yucca baccata are still eaten. The women went together to gather the fruit in September and October, baking it until the skin can be taken off and the fiber removed, then thrown into caxetes and mixed it thoroughly, boiling it alternately, until it came down to a firm jelly or paste. It was then spread into large cakes about an inch thick, and left to dry on hanging scaffolds, changing it from time to time until it was dry. It was then cut into squares (or, at Acoma and Laguna, rolled into loaves) and preserved. In the spring it was eaten in various ways, as paste, or dissolved in water and drunk, or tortillas and guayabo (paper-bread) were dipped into the solution, thus making it like molasses or syrup".²

Pueblo Indians paint designs on t their pottery with brushes made of yucca fibers. Pigments are mixed with water to which is added a syrup of yucca fruit.

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1. Weber, Handbook of Plants of the Colorado Front Range, Univ. of Colo. Press
2. Hewett, Handbooks of Archaeological History, Univ. of New Mexico Press

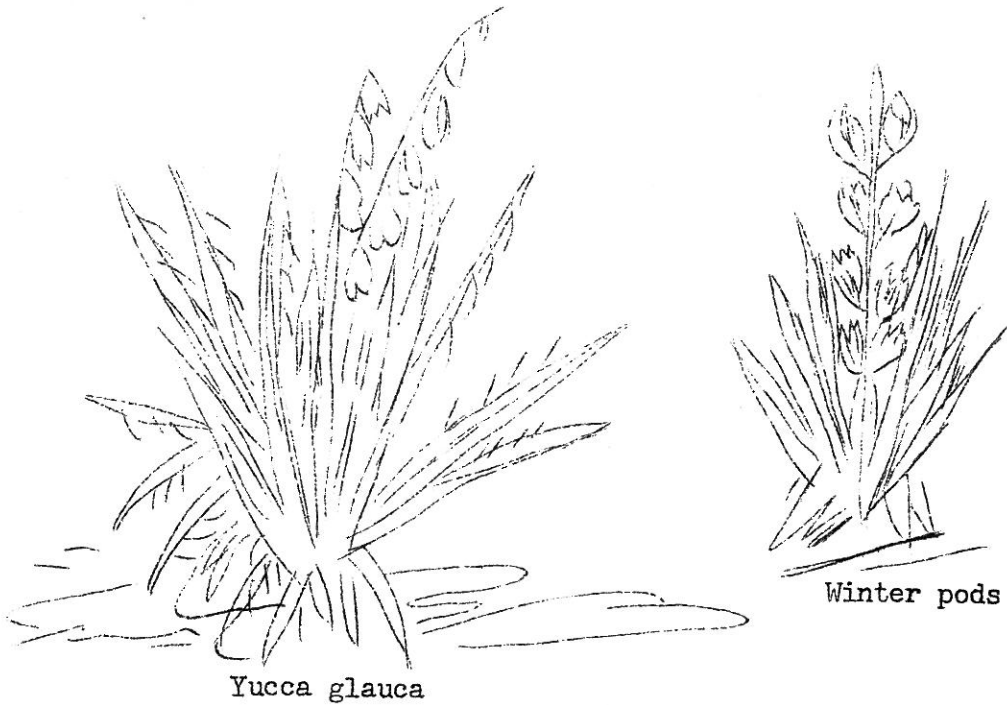
Cochiti Pueblo dwellers did their fishing with long nets made of yucca fibers prepared in the following manner. After the leaves were cut they were gathered into "hands". A large hole was dug into the ground and a fire kindled into it; after the ground was thoroughly heated embers and ashes were removed and leaves placed in carefully they were covered with brush and stones. A fire was built over this and left to burn over night so that the leaves were well baked. After removal they were chewed to extract the fiber. The fiber was then twisted into thread and strips of netting made from it.

Archaeological evidence in the pueblo area shows that yucca strips were used to make plaited sandals and baskets resembling the modern sifting baskets and for fiber or cord generally. Yucca fibers alone or in combination with cotton were used for weaving material. Fur of various animals was often incorporated with yucca fibers to make a warm fabric.

The leaves of both species of yucca are split and used without twisting for tying material. Watermelons are kept fresh for winter by hanging from rafters, encased in a network of yucca strips. Chile peppers and apples are hung on yucca strips to dry. The sifting baskets of the Jemez as well as the very tightly woven baskets of the Papagos are woven of yucca fiber. Bandoleers and neckties of yucca fibers are sometimes worn by clowns and other dancers.

The fruit of Y. bacata is more fleshy and palatable than that of the other species and the yellow banana-shaped fruit is of excellent quality. It has been reported at Santa Clara that fruit of one species causes diarrhea while that of another species is eaten by women to promote easy delivery. Yucca is reported to be used at San Ildefonso as a ritual emetic. The fruit of Y. glauca is eaten but is reported to be dry, slightly sweet, and of unpleasant taste. This is the species that is found growing in our locale.

A very interesting relationship between the pronuba moth and the yucca is evident in this area. The yucca cannot be fertilized without the aid of the moth and her young can live only on the developing seeds of the yucca. Did you ever notice that the seed have been eaten about half way down the pod and that the larvae emerged through holes in the side of the pod? Notice, too, that a few viable seeds are always left in each pod. This is a nice display of mutualism



or "you scratch my back and I'll scratch yours".

.....Al. Dumont

MORE ON TIPI RINGS AND MEDICINE WHEELS

Thomas Kehoe, director of the Museum of the Plains Indian at Browning, Montana, recently forwarded several items of interest on the subject of stone structures of various sorts. The material is very closely related to the subject of our local Medicine Wheel, and we will try our best to work up a good article for the next Smoke Signal which will bring together the best information available on the subject to date. We also have some material from the Glenbow Foundation in Canada.

MONEY-MAKING PROJECTS FOR THE SOCIETY

Margaret Powers has written a letter saying that she has an idea for a money-making project for the Society. Basically, the idea consists in selling artifacts to the tourists from whatever outlets we can manage to induce to operate the plan. As you know, our income from uranium samples last summer, while not a fortune, nevertheless added some welcome revenue to the coffers. Artifacts should sell even better. Margaret says she has located a source of supply in the person of Celeste Caldwell, whom, you remember, helped the Society as its Little Bald Mountain dig two years ago. Mrs. Caldwell has quite a number of artifacts she is willing have sold for the benefit of the Society. Some of us, I am sure could add a few of our duplicate and excess items to the kitty,, too.

CIGAR-BOX DIORAMAS

At the Plains Conference for Archaeology in Lincoln, there were several miniature dioramas made in cigar boxes, which attracted considerable attention. The Denver Museum of Natural History has recently published a small booklet on these dioramas and their construction. The booklet costs eighty cents postpaid, and should be of interest to those of you who would like to combine archaeology and model-making into a nice winter hobby. It would help fill the gap between field trips, and at the same time would be a good way of giving meaning to the archaeological data collected on digs.

OVER THE CAMPFIRE

S-O-S S-O-S Help us to get some items for this department will you? We would like to have human interest and personal items for the campfire department. The editorial staff doesn't always learn of the various doings of our members, and we would appreciate being informed of any activities that would be of interest to the group.

This will be the first issue circulated to a new branch in Casper, and we want to take this opportunity to extend a hearty welcome to all our new friends in that area. The Society is taking a big step forward, and we wish to thank all those everywhere who have made it possible.

EMBERS OUT