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## ANNUAL PLAINS CONFERENCE

The 17th annual Plains Conference for Archaeology opened at Lincoln, Nebraska on November 26, 27, and 28, 1959. The first day consisted of exhibits of materials recovered during the summer and a show of slides. There was a short business meeting and the conference adjourned for lunch. The afternoon session was devoted to field reports by the various groups represented at the conference. A dinner at the Cornhusker Hotel capped this Thanksgiving Day's activities.

The second day opened with a panel conference on the sequence of cultural sequences in the plains areas during the Late Period and protohistoric times. The afternoon session was devoted to relationships between the Great Plains groups and dates and those of the Southwest. An after-dinner session on ethnobotany highlighted some of the facets of agricultural development in the Americas.

The third day of the sessions opened with a very interesting program on the ethnohistory of the Great Plains area. Particular emphasis was placed on the Spanish expeditions from Cabeza de Vaca, in 1527, through Coronado, Oñate, Valverde and others, and upon the expeditions of LaVerendrye in 1738 and 1742. These latter trips may have penetrated into the northern Wyoming area.

The afternoon of the third day began with a short business meeting in which it was decided to hold the next conference at Norman, Oklahoma, with Joe Ben Wheat of Colorado as chairman. The afternoon session on the legal and financial problems of salvage problems in archaeology developing from highway construction closed the official part of the conference.

Several side trips to the University of Nebraska museum, the Smithsonian Institution River Basin Surveys offices, and the Nebraska

State Historical Museum, added color and interest to the spare time, of which there was very little.

A trip to the conference is recommended to anyone interested in archaeology. While the expenses for the trip averaged about sixty dollars for the three members who attended from the Wyoming Archaeological Society, they all felt it was money well spent. Each member was responsible for his own expenses, of course, but it is hoped that some day the society may be able to help with the expenses to send an official representative to the conference each year.

#### WYOMING SOCIETY REPORTS AT LINCOLN

The two reports of the Wyoming Archaeological Society, copies of which are enclosed in this issue, were well received at Lincoln. The 48 JO 303 site received special attention because the bi-bevel points found in the lowest layer were identified as Meserve Points. These points, identified by the famous typologist Dr. Richard Wheeler, are known from type sites in the Missouri Basin area to be about 8,800 years old. It seems likely that the local occurrence would not vary greatly from this age. This is the earliest firmly established date thus far produced by the Wyoming Archaeological Society's operations. The single blade from Kaufmann Cave may be as old, but no date can be established for it.

The report from the 48 JO 301 site drew considerable attention because of the wide range of lithic industries represented at the site. Of particular interest were some points closely resembling those reported at the conference by Marvin Kivett from the Logan Creek Site in Nebraska. The Logan Creek complex has been carbon dated at 6633 years old. Also of



interest were the "jackass ears", which resemble some produced at the Signal Butte Site, but which have not yet been named. Further investigations in the area of this summer's operations may be very profitable and may shed a great deal of light on some of the questions raised by the work this summer.

Among the more interesting questions raised this summer were these: If, as seemed true from the 303 site, McKean points and Meserve points are partly contemporaneous, does this mean an earlier date for McKean than previously thought possible, or that the Meserve complex persisted for several thousand years? Either possibility is interesting, and an answer to the question is important. Charcoal from the upper portion of the bi-level layer at the 303 site may answer part of the question. Further indication of the age of the layer is afforded by the appearance of alanceolate point which somewhat resembles the Angostura point in outline if not in workmanship. The almost complete absence of bone in this layer may be due to its age, or to a lack of hunting activity by the Meserve people at this site. The apparent great age of the lower level leads one to wonder what climatic conditions might have led to the greatly different rates of soil accumulation in the upper and lower levels. The only evidence of a possible hiatus in the stratigraphy is an accumulation of small pebbles just above the Meserve layer. Whether this is the result of an erosional climatic influence which removed the lighter soil and left the pebbles behind, or stems from some other influence, is not known. Future carbon dates may help clarify the issue.

It can safely be said that future work at both sites is important, and next summer may be just the time to do it.

## MEMBERS SPEAK AT BILLINGS

President Glenn Sweem and Secretary Ray Bentzen spoke on December 5 at the Chamber of Commerce rooms in Billings to the comparatively new Billings Archaeological Society. They presented a program of talks and slides on the problems and methods of field archaeology as done by amateur groups. We hope that the Billings group will, in the future, come to enjoy the pleasures and successes that we have been fortunate enough to receive from our work.

## OLD CANOE FOUND

The December 5 issue of the Sheridan Press carried an item about two men from Illinois who found a dugout canoe in a marsh near Crivitz, Wisconsin. The dugout is believed to be about 200 years old.

## THE SWEEM-TAYLOR SITE, 48 JO 301

The Middle Fork of the Powder River forms a deep, impassable canyon where it cuts through the sloping east flank of the Big Horn Mountains near their southern terminus in central Wyoming. This canyon runs nearly due east, and forms an impassable barrier for several miles, restricting travel to east-west directions in the area. The flank of the mountains here is of comparatively gentle slope, and ready access to the higher interior of the mountain area is to be had here, whereas the ascent is much more difficult at most other places. Many old trails lie in this area. One such route is indicated by a series of 98 cairns marking an old trail.

The carin-marked trail has been dendrochronologically assigned to prehistorical times, but its age is unknown. The cairns vary in size from two feet in diameter to 15 feet. The height varies from a few

inches to four feet. Spacing varies from 10 feet to about a hundred yards. Except that they follow an old trail, no cultural significance has been attached to the cairns.

One of the many rockshelters in this area was the Sweem-Taylor shelter. The shelter is about 40 feet long, with about a 12 foot overhang. The shelter faced southwest and was well-protected from prevailing winds. There were pictographs on the ceiling, which varied from 7 to about 3 feet from the floor. Fallrock from the ceiling had petroglyphs on the upper surface. About 300 feet from the shelter were two stone rings about 14 feet in diameter, and a large chipping ground lay on the rimrock table above the shelter.

The shelter is at about 6500 feet elevation, and lies on the area forming the boundary between conifer forest and sagebrush lands. At the present time there is an abundance of wild game, and there are many edible berries and plants. Water is available at the bottom of the canyon, but the nearest spring is about two miles away along the canyon rim. Potholes in the limestone floors of some of the gullies often hold small supplies of water for many days after a rain. All the shelters discovered thus far in that region occur in the Tensleep sandstone, a fine-grained, cross-bedded material of varied color, but predominantly light hued. Quartzite and chert outcrops occur nearby and furnish good material for artifacts. Yucca is plentiful.

Work was begun at the site by mapping the surrounding area and establishing reference points in the cave for further detailed mapping of the interior as work progressed. The fallrock in the floor was mapped and then removed with Jeep and winch. An exploratory trench 35 feet long was then dug perpendicular to the rear of the shelter. The

trench revealed at least five distinct layers in the shelter. Layers of cobbles indicated that floor debris had occasionally been thrown out on the current ground level. The floor depth in the shelter proved to be from two to five feet. The top habitation layer was numbered I and the lowest V.

Layers II and IV were very dark with large quantities of ash and charcoal. Layer II contained the most abundant cultural material, but there was little difference in the quantity yielded by the other layers. Excavation proceeded by squares. 19 squares were excavated to bedrock within the shelter. This is estimated to be about half the productive volume. All material was removed by trowel in the squares, and was screened.

Layer I. This layer was light colored, sandy, and contained one hearth. A number of bone fragments were found, mostly deer and bison. 18 stone artifacts were found. These were: 9 scrapers, 2 blades, and 7 points which were complete enough to be styled. These consisted of 5 triangular corner-notched points, and 2 triangular un-notched points.

Layer II. This layer was very dark, with much ash and charcoal. Many firepits were found but no constructed hearths. One fire had been built between fallen rocks, but no hearth construction was evident. Little bone occurred, except for a few small fragments of what appeared to be skull bones which were baked very hard, with a glossy black surface. 120 stone artifacts were found, consisting of: 20 scrapers, 17 blades, 1 mano, 2 stone awls, 12 bifaces, and 64 points. The points were typed as follows: 32 triangular corner-notched types, 12 triangular un-notched points, 1 broken lanceolate, and 19 unstyled fragments..

Layer II also produced a large structure of loosely piled rock about 13 feet long, 3 feet wide and about 18 inches high. The rock was blackened on all sides. The structure formed a sort of wall along the front edge of the shelter on the southeast end, although it was under the overhang. All of the rock fragments in the structure were derived from the ceiling or superstructure. None came from the floor. It is thought that the stones might have supported some sort of a brush wall across part of the mouth of the shelter, and that the burning of the brush might have accounted for the blackening of the stones. The structure lay on the then current floor, which was partly bedrock and partly accumulated soil.

One stone in the outer edge of the wall bore a simple line drawing of some kind, but the subject was not clear. It had been drawn with burned rock on unburned sandstone.

Layer III. This layer was light-colored with little ash or charcoal except in isolated firepits. There were no constructed hearths. The only bone fragments consisted of a horn core, probably of antelope. 31 stone artifacts were found, classed as follows: 2 scrapers, 24 blades, 1 awl, 4 bifaces, and 17 points, classified as follows: 12 corner-notched triangular, 2 McKean points, 2 triangular un-notched points, and one new and unusual type with a rounded point section, side notches and a deeply concave base. The outline resembled that of a donkey's head so it was irreverently dubbed a Jackass Ear at the dig.

Layer IV. This layer was dark, with much ash and charcoal. No constructed fireplaces were found, but there were several firepits. No bones were found. 32 stone artifacts were found, classed as follows: 4 scrapers, 6 blades, 5 bifaces, and 17 points styled as follows: 10 McKean points



3 corner-notched points with convex sides, 1 Jackass Ear, and 1 badly shattered lanceolate point with fine collateral pressure flaking. The predominance of McKean points here indicates an Early Middle Period date for this level.

Level V. This layer rested on bedrock in most places. It contained no firepits, charcoal or ash. No bones were found. 10 stone artifacts were found: 2 blades, 1 scraper, 3 bifaces, and 4 points. There was 1 McKean point, and 3 corner-notched points with convex sides. The date of this layer is hard to infer because of the small artifact sampling.

It is felt that another dig at the site next summer may offer a good deal of information about the Middle Period lithic industries in this area. It is quite possible that earlier levels may yet be found in places.

#### A POSSIBLE MESERVE SITE IN NORTH CENTRAL WYOMING

Site number 48 JO 303 was discovered in May, 1959 by Don Grey, Ray Bentzen and Albert Kester while doing reconnaissance for summer field work for the Wyoming Archaeological Society. It lies at an elevation of about 6500 feet on an old trail on the south side of, and parallel to, the canyon of the Middle Fork of Powder River on the east flank of the Big Horn Mountains. The canyon is impassable for a distance of about four miles in either direction from the site. The site is about two miles west of 48 JO 391.

The general quality of the area is typical submontane-arid. The area is on the borderline between conifer forest and sagebrush. At the present time the area abounds in deer antelope, elk, bear, small game, birds and fish. Edible plants include chokecherry, service berry, gooseberry, currant, bitter-root, ryegrass, wild onion, and sego lily.

*Tucca* is present also. Of nearly a dozen rockshelters that were observed in this area, all of those which showed signs of occupation had a patch of rye-grass growing on the midden.

Whether the ryegrass was seeded by a foraging people, or whether the conditions of soil fertility in the middens favored the growth of the grass is not known, but is being studied at the botany department of Sheridan College. The presence of the grass seems to be a fairly reliable indicator of inhabitation.

The site was a west-facing, wind-eroded overhang in the almost white sandstone of the Tensleep formation. The headspace, before excavation, varied from 8 feet to 6 feet. The floor of the main area measured about 16 by 20 feet. The total usable width was almost 60 feet, but the overhang was shallow over most of this length except for this main area, where the overhang was about 12 to 16 feet.

Work was begun by digging an exploratory trench from front to rear of the shelter. This revealed a surface or scuff layer averaging 4" in depth and composed of dust, animal droppings, etc. Beneath this was occupational level number I. This averaged 5 inches in depth, and was very dark, containing much ash, charcoal, and evidence of occupation. The next level, number II, averaged 7 inches in depth and seemed much lighter in color. It contained isolated firepits but no generalized ashes or charcoal. The bottom of this layer was quite pebbly. Level number III, the lowest, was about 5 inches thick, and was very dark, with much ash and charcoal throughout. The greatest depth of this layer was 39 inches. Below this was sterile white sand formed from decomposed bedrock.

The back end of the exploratory trench revealed that a portion of the floor area had been disturbed near the back wall of the shelter.

This disturbed material was removed next, exposing two sides of a large block of material in the center of the occupational area. It was decided to isolate this block in order to carefully study its strata. This was done, leaving an island of material about 8 by 10 feet. The edges were removed until all the strata could be seen clearly revealed around the entire periphery of the block. This was then troweled down a layer at a time. Nearly all the cultural materials were recovered in site. Charcoal samples were obtained from all levels.

Level number I, the uppermost, produced 30 artifacts. There were 8 blades, 2 scrapers, 5 bifaces, and 15 projectile points. The points included 3 side-notched types, 4 corner-notched, 4 McKean, and one point of a type which was called a bi-bevel temporarily. There were also 3 unstyled fragments. The bi-bevel came from a disturbed area, and its cultural level could not be established.

Level II yielded 54 artifacts. These included 10 blades, 2 of which were finely worked, 7 scrapers, 2 polished bone awls, 6 choppers, and 29 projectile points. The points include 6 side-notched, 1 corner-notched, 16 McKean, 2 lanceolate types, and another bi-bevel along with 3 specimens which were too fragmentary to be classifiable. Again, the bi-bevel came from an area believed to have been disturbed. The McKean points were usually found near the periphery of a fire pit, and were often found with fragments of deer bones.

Level III, the oldest level, produced 39 artifacts. These were 4 blades, 1 scraper, 1 chopper, and 33 projectile points. The points included 1 side-notched, 1 corner-notched, 7 McKean, 20 bi-bevels, 1 lanceolate, and 3 unstyled fragments. The lanceolate point closely resembles the Agate Basin point, and was found close to two large canine teeth, believed to be those of grizzly bear.

The so-called bi-bevel point was the predominant artifact of the third level. It varied in length from 1 and 7/8 inches to 2 and 7/8 inches, and in width from 9/16 to 13/16 inches. The thickness ranged from 3/16 to 5/16 inches. Most were of quartzite but a few are of chert. They are characterized by a stemmed, slightly concave base with the sides of the base varying from parallel-sided to tapering, with the greatest width occurring at the junction of the base with the body. The edges of the point section are usually nearly straight and are bevelled by unilateral flaking. The edges are most often serrated. The bases are lenticular in section and show heavy grinding on the sides and basal edges. The point section is of rhomboid section. The points bear a strong resemblance to the Meserve and Dalton points.

Adequate charcoal for dating was obtained, and burned rock samples have been submitted for thermoluminescent dating.

The strata of the site were well-defined, and no evidence of a hiatus in the cultural sequence could be observed in the stratigraphy. McKean points were found with the bi-bevel points in the lowest layer. While it is possible that this layer may have represented a rather longer time-span than the others, it is nevertheless difficult to explain why points which seem to be definitely early period, and perhaps about 8,000 years old, should be temporally equated with the McKean complex which has not been previously dated, but which is believed to be about 3,500 years old. Charcoal from the site may give the McKean complex a slightly earlier date than had been previously assumed, but it does not seem probable that it could extend well into the Early Period.

There is room for much more work to be done in the area, and it is hoped that next summer will add sufficient data to clarify some of the questions raised during this summer's dig.

#### PLANS FOR MEMOIR PROGRESS

With the information gained at the Plains Conference, the reports of the summer's digs are going ahead, and it is hoped that the bulk of the work on the memoir will be ready for publication shortly after the first of the year. The drawing of maps, preparing artifact drawings, and compilation of data were well started before the conference, and it is hoped that the preparation of final manuscripts can be completed during the Christmas holidays.

The Sheridan College advanced typing class will prepare some of the stencils for future issues of the Archaeologist and possibly for the memoir if suitable arrangements can be made. If these arrangements are carried forward, an considerable improvement in the quality of our publication can be expected. The present typists leave something to be desired.

#### OVER THE CAMPFIRE

Don Grey tells us he became acquainted with 26 new people at the Lincoln conference. For an absent-minded professor like Don, that's quite an achievement, if true. He admitted he met a lot more people, but couldn't remember all of them. It sounds like fun, though.

Anyone who has some artistic talent is invited to help prepare some dioramas this winter which will help portray some of the aspects of early life in prehistoric Wyoming. We think that if we prepare some good dioramas, we can convince people that we have a real need and use for a



museum to put this information on display. How about ideas?

Time to sign off for this issue. Be thinking about next summer's digs, and plan to be there. We have some really important work to do.

EMBERS OUT