

# THE WYOMING ARCHAEOLOGIST

WINTER 1964 VOL. VII. NO.4

#### WINTER ISSUE

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# Editor's Notes

Again we are indebted to George Agogino, W. D. Frankforter, and C. V. Haynes, Jr., for the revised report and for the addition of the Radiocarbon dates to the Brewster Site in Eastern Wyoming. Permission to reprint was granted by Bruce Bryan, Publications Editor for Southwest Museum at Highland Park in Los Angeles, California.

We hope to have information on the summer schedule at Hell Gap so that all may plan a visit to this outstanding Archaeological excavation, which is under the direction of Project Engineer Dr. Jo Brew, with co-field directors Dr. Cynthia Irwin-Williams, Dr. George Agogino (both of whom are at Eastern New Mexico University), and Dr. Henry Irwin of Harvard University.

Chapter Secretaries----please send in roster of new officers with a copy of last year's activity report by March 15th. Manuscript deadline also is March 15th. Publication of the Spring issue will be immediately following annual meeting in April.

#### PRESIDENT'S LETTER

#### Dear Fellow Members:

Since there was no "president's letter" in the last issue, this one will cover for that one and the current one.

Many, many thanks to our hosts at the summer meeting --- the Cody chapter. We thoroughly enjoyed the visit to the site of their dig north of town and the excellent commentary on this activity given by "Doc" Kinnan. The evening meal in City Park which the ladies of the Cody chapter prepared was delightful.

We all want to express our gratitude to Dr. Harold McCracken, Director of the Whitney Gallery at Cody, for the gracious hospitality he extended to us in providing a conducted tour of the dig under way at "Mummy Cave" west of Cody. It was also very much of a privilege to view the interesting array of artifacts and other materials which had been found at the site.

It was most gratifying to have the excellent attendance at the summer meeting. All chapters were represented. Thanks to all of you who made the trip. It was good to visit with members from all parts of the state.

1964 was a year of activity for all of our chapters. We viewed the Cody chapters dig at our summer meeting. The Sheridan chapter, with the professional assistance and direction of George Frison, did some excellent work on a late period site. The Casper group investigated some rock figures and also engaged in some other activity of which we will hear further in the future. Our Cheyenne members engaged in field work as well as giving ARCHAEOLOGIST Editor Grant Willson assistance in the physical effort of assembling our fine publication. Let's all keep up the good work in 1965!

We are advised that Governor Hansen will ask the 1965 session of the Wyoming Legislature to authorize a state archaeologist to work under the administrative supervision of the University of Wyoming. We hope that our representatives will enact this proposal which is urgently needed to insure the preservation and proper study of Wyoming's valuable antiquities.

Announcements will be out soon for the annual meeting in Casper in early April. I am looking forward to seeing you all there. Members of committees appointed at the summer meeting please be ready to present your reports. These committees are listed on page one in the Fall 1964 issue of the ARCHAEOLOGIST. In addition, I would like Florence Castle, Margaret Powers, Wally Allford, and Grant Willson to act as a nominating committee.

Dave Baskett State President

#### SCAFFOLD AND TREE BURIALS

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#### Tommy D. Steege

After viewing the remains of a scaffold burial near Torrington, Wyoming (appearing elsewhere in this issue), my curiosity was aroused and I decided to do some research on the subject. Several interesting articles were found under "The Study of the Mortuary Customs of the North American Indians", by H. C. Yarrow. This is one contribution in "The Annual Report of the Bureau of Ethnology, 1879 - 1880", by J. W. Powell.

Scaffold and tree burials are not limited to the Plains Indians alone. The natives in some parts of Australia use trees for the final resting place of a body. If trees are not growing in the selected spot, an artificial platform is constructed by fixing ends of stout branches in the ground and connecting them at their tops by smaller horizontal branches. These strange tombs are mostly placed among the reeds, so that nothing is more mournful than the sound of the wind as it shakes the reeds below the platform of which the corpse is lying.

Tree burials were not uncommon among the nations of antiquity. The Colchiens enveloped their dead in sacks of skin and hung them in trees. The ancient Tarters and Scythians did the same.

The following paragraphs are taken from an account written by William J. Cleveland of the Spotted Tail Agency, Nebraska, of the mortuary customs of the Brule or Teton Sioux.

"In disposing of the dead they wrap they body of the deceased tightly in blankets or robes (sometimes both), winding it all over with thongs made of the hide of some animal, and place it reclining on the back at full length either in the branches of some tree or on a scaffold made for the purpose. These scaffolds are about eight feet high, and made by planting four forked sticks firmly in the ground, one at each corner. Other sticks are placed across the top so as to form a floor on which the body is securely fastened. There have been instances of placing more than one body on a scaffold but generally a separate one is made for each occasion. The Indians being in all things most supersititious, attach a kind of sacredness to these scaffolds and all the material used on or about the dead. This superstition is in itself sufficient to prevent any of their own people from disturbing the dead, and for one of another nation to in any way meddle with them is considered an offense not too severely punished by death. The same feeling also prevents them from ever using old scaffolds or any of the wood which has been used about them, even for firewood, though the necessity may be very great, for fear some evil consequence will follow. It is also the custom, though not universally followed, to bury the deceased in the ground after being on the scaffold for two years."

"All the work about winding the body, building the scaffold, and placing the dead upon it is done by the women. After they finish their labor they return with the men to show them where the body is placed so they can find it in the future. Valuables of all kinds, such as weapons, ornaments, pipes, etc., in short, whatever the deceased valued most highly while living, and locks of

hair cut from the heads of the mourners at his death, are always bound up with the body. In case the dead was a man of importance or if his family could afford it, one or several of the horses the man valued most was shot and placed under the scaffold. The idea is that the spirit of the horse will accompany and be of use to his spirit in the "happy hunting grounds", or, as the Indians express it, "the spirit land."

Another extremely interesting account of scaffold burial is furnished by Dr. L. S. Turner, United States Army, Fort Peck, Montana, who states:

"The Dakotas bury their dead in the tops of trees when limbs can be found sufficiently horizontal to support scaffolding on which to lay the body, but as such growth is not common in the Dakotas, the more general practive is to lay them upon scaffolds from seven to ten feet high and out of the reach of carniverous animals, as the wolf. These scaffolds are constructed upon four posts set into the ground. Like all labors of a domestic kind, the preparation for burial is left to the women. The work begins as soon as life is extinct. The face, neck and hands are thickly painted with vermillion, or a species or red earth found in various portions of the Territory when vermillion cannot be obtained. The clothes and personal trinkets of the deceased ornament the body. When blankets are available, it is then wrapped in one, all parts of the body being completely enveloped. Around this a dressed skin of buffalo is then securely wrapped, with the flesh side out, and the whole securely bound with thongs of skin, either raw or dressed; and for ornament, when available, a bright red blanket evelopes all other coverings, and renders the general scene more picturesque until dimmed by time and the elements. As soon as the scaffold is ready, the body is borne by the women, followed by the female relatives, to the place of final deposit, and left prone in its secure wrappings upon this airy bed of death. This ceremony is accompanied with lamentations so wild and weird that one must see and hear in order to appreciate. If the deceased is a brave, it is customary to place upon or beneath the scaffold a few buffalo heads which time has rendered dry and inoffensive; and if he was a brave in war, some of his implements of battle are placed on the scaffold or securely tied to its tim-If the deceased was a chief, or a soldier related to his chief, it is not uncommon to slay his favorite pony and place the body beneath the scaffold, under the superstition that the horse goes with the man."

Although the idea of using trees and scaffolds for disposing of the deceased were mainly used by the Plains Indians, evidence of these type burials have been found on earlier people in other regions of the world. One thing is a mystery to archaeologists today. Why the eastern Indian tribes never used trees for their burials when trees were so prominent? It seems the Indians tried to preserve their dead as long as possible and one theory is that because of the dry climate of this region, it was possible to preserve a body on a scaffold for quite awhile. This leads me to believe that the Indians living on the Plains were quite aware of this desiccating property of the air of this arid region. This desiccation would pass for a kind of mummification.

#### A SCAFFOLD BURIAL NEAR TORRINGTON, WYOMING

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# L. C. Steege

The first week in June 1964, human remains were uncovered during land leveling operations on a farm owned by W. B. Jones near Torrington, Wyoming. The site and the remains were investigated by Grant Willson, Tommy Steege, Beeg Steege, and Lou Steege, members of the Cheyenne Chapter of the Wyoming Archaeological Society. Permission to view the site and remains was given by the landowner, W. B. Jones.

According to Jones, the land on which the burial was found was grazing land which was being leveled preparatory to farming. Jones stated there was a mound of sand approximately four feet higher in elevation above the average level of the surrounding ground. Below this mound the remains were located. None of the burial had been exposed during the leveling operations. The burial was revealed when the leveled ground was being plowed.

The remains were disarticulated and well scattered by the plow, but enough materials and bones were salvaged to give a reasonably accurate account of the method and type of burial. Large poles and branches plowed up with the remains indicates that this was a scaffold type of burial. The scaffold had undoubtedly collapsed sometime after interrment which caused a natural trap for wind blown sand. This would account for the mound of sand over the remains.

The cranium was broken up and the largest portion recovered was that of the frontal region. This fragment included the lower portion of the orbits, malar bones, and a portion of the maxilla. The mandible was badly broken and the largest portion recovered contained only two teeth.

The thoracic region was the least damaged. Only the frontal portion was broken away which included the sternum and the anterior extremities of the vertebrosternal ribs. Most of the thoracic vertebrae were intact. The bones of the upper extremities were intact as were the upper limbs with the exception of the carpus, metacarpus and phalanges. The Os Coxae were intact. The lumbar vertebrae and all bones of the lower limbs were well scattered by the plow.

The remains appear to have been those of a young woman, whose age at the time of death was in the mid-twenties. Full permanent dentition with eruption of the third molars in the maxilla places the age at approximately twenty five years. Minimum wear on the teeth including the incisors is also an indication of this age at death. Sex was determined by the fine malar bones and the pelvis.

Copper stains were present on fragments of bone from the parietal region of the cranium. Fragmentary sections of two large copper disks were recovered from the site which could have been used as hair plates. This would account for the copper stains in this area of the cranium.

Vermillion stains were noticeable on the right clavicle and on some of the cervical vertebrae. Small pieces of vermillion were found scattered throughout the general area of the burial.

It was from the thoracic region that much was learned about the method of interrment.

In this area was found the type of apparel of the deceased as well as the outer wrappings of the corpse. The remains had been dressed in a cotton blouse which had been hand made. The stripes and printed designs were still visible on a fragment of material from the lower portion of the blouse. A fine delicate hand sewn hem is also visible on this same piece of material. One color, red, is quite plain. However, the darker colors in the print are not discernable. They could be blue, black or brown. The predominate color may have been white or yellow.

A wide leather belt was around the waist. This belt was covered with four rows of copper studs about the size of a dime. These were evenly spaced over the entire length. The fastening device of the belt was torn away by the plow, and metal buckles or thongs cannot definitely be associated with the belt. Some leather thongs with copper wrapped ends were recovered from the site and I am of the opinion that these could have been used to tie the ends of the belt in the front.

A finely woven shawl or small blanket was wrapped over the blouse. The color of the shawl could not be determined. The weave is a southwestern type.

The entire remains appear to have been wrapped in a heavy cotton blanket. This also is a southwestern type of weave. Over the blanket was a coarsely woven fiber mat, the texture of which was somewhat like coarse burlap. The remains and wrappings were held in place by harness leather straps ranging from one-half to an inch in width. Some of the buckle ends recovered are sewed with a chain stitch with heavy cotton cord.

The radius and ulna of both arms were encircled by approximately twenty-five copper bracelts. Some were made from round wire and others were made from triangular wire. These stained the bones a bright green. The metacarpus and phalanges were also stained a bright green.

The tibiae and fibulae show green stains from contact with copper items. What caused these stains is not definitely known. One theory may be that the body might have been interred in a flexed position. In this position the lower limbs could have been in contact with the bracelets on the arms. However, a flexed type of burial on a scaffold would be an unusual deviation from the more common type which was practiced by Plains tribes.

Miscellaneous items found with the burial include an oval glass mirror, pieces of fringed buckskin which could possibly have been a skirt, fragments of iron which originally had been a kettle or pot, and a small oval shaped stone about an inch and a half in diameter and two and a half inches in length. This stone was polished smooth and appears to have been fashioned from a stream worn quartz pebble. The stone bore rust colored stains which would indicate a contact with either the kettle or one of the buckles from a leather strap.

A small quantity of ceramic seed beads were recovered from the site. The predominate colors were a royal blue and a turquoise blue. Other colors include white, green, yellow, red and a few crystal clear. A few short strands were recovered which were held together by the cotton thread on which they were originally strung. Nothing was found which would indicate the article of apparel that had been beaded.

Numerous fragments of slender willow withes were scattered throughout the entire site. These were undoubtedly the remains of a tipi back rest on which the wrapped corpse was placed on the scaffold. This was a common practice among the Plains Indians during the later years.

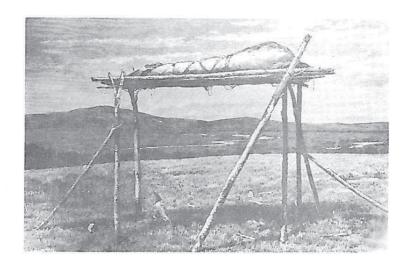
The articles of clothing, beads, bracelets, blankets, etc., shows a definite close contact with white traders. Fort Laramie is only a few miles west of the site and it is quite possible that this place could have been the source of the trade items. The old Emigrant Trail is just across the river from the site and this could be another source of the trade items. I would place the date of death and burial circa 1870. The tribal affiliation of the deceased was not determined. Sioux, Cheyenne, and Arapaho all resided in this area around 1870 and the mortuary customs of each of these tribes were quite similar during this era.

#### EDITOR'S NOTE:

On Tuesday, June 2, at 9:30 a.m., I received a telephone call from Robert Murray, Curator at Ft. Laramie National Monument. The exposure of a human burial had just that morning been reported to him but all museum personnel were unavailable. "Would it be possible for the Cheyenne Chapter to make a hurried reconnisance and properly report on this matter?" By 11:00 a.m., we were on our way to Torrington, and with wonderful cooperation from the landowner, Mr. Jones, the above report was prepared.

As the Ft. Laramie Monument Museum had a great quantity of similar burial materials, we suggested that the landowner donate the material to the local museum which has just been established in a vacant downtown building in Torrington.

This report reflects an unusual instance of a very successful cooperative effort between a Federal Agency, a landowner, and an active amateur archaeological group. Wyoming Archaeology can benefit greatly from such efforts.



#### THE BREWSTER SITE

#### A PALEO INDIAN SITE IN EASTERN WYOMING

By

George A. Agogino and W. D. Frankforter

Revised from preliminary report published in the Master Key, Vol. 34, No. 3, July-September, 1960.

During the antelope hunting season of 1958, University of Wyoming geology students, Melvin McKnight and James Duguid, discovered multiple bone strata along the south bank of Moss Agate Arroyo in eastern Wyoming. A short time later James Duguid, seeking to secure a bison skull for the University of Wyoming paleontology museum, dug into the bone producing strata disclosing a multiple component archaeological site that seemed to indicate the presence of a Folsom level under an Agate Basin horizon.

Realizing the importance of this discovery, James Duguid made local inquiries and found that the new site area was on ranch land adjacent to the property on which the original Agate Basin discoveries were made in 1943 (Roberts 1951: 18-19). The two site areas were roughly one-quarter of a mile apart in the same drainage system. However, the type site exhibited but a single cultural horizon while the new site area had multiple cultural strata.

James Duguid informed Lou Steege, at that time curator of the Wyoming State Museum, of this discovery. Steege informed the authors of the existence of this site at the 1958 Society for American Archaeology meetings in Salt Lake City. George Agogino in turn secured permission from Frank H.H. Roberts, Jr., the excavator of the Agate Basin type site, to survey the situation and conduct limited excavations. Shortly afterward, Agogino and Duguid visited the site location, verified existence of the multiple cultural horizons, and secured radio-carbon samples of both burned bone and charcoal from each cultural stratum.

The site, located on a prominenece between two arroyos, was highly subject to water erosion and due to this danger the authors sought and secured permission from Dr. Roberts to conduct salvage excavations. In order to distinguish this site area from the nearby original Agate Basin location, it was named the Brewster site, honoring a retired Iowa farmer who has offered volunteer service to plains archaeologists for a number of years. This decision was made after the 70 year old man unexpectedly appeared, ready to work at Moss Agate arroyo.

In order to facilitate excavations, a small grant was obtained from the National Geographic Society, and excavations were conducted from August until the end of October, 1959, when cold weather ended the project. By this time the prominence between the two arroyos had been rounded off and the bank cut back in such a manner that the danger from erosion was minimized.

Due to the proximity of the Brewster site to the original Agate Basin location and in gratitude to Dr. Frank H.H. Roberts, Jr., for his cooperation throughout the project, the unexcavated portion of this multiple component site has been turned over to the Smithsonian Institution. Credit must also be given to Richard Wheeler of Mesa Verde, Colorado, whose extensive correspondence regarding previous work done in the general area was invaluable.

The excavation crew consisted of University of Wyoming students and members

of the Iowa and Wyoming Archaeological Societies. Initial research was restricted to two brief periods of ten days, but following the publication of the original Brewster report extensive work was conducted gathering charcoal for radiocarbon dates and enlarging the site area. It was later found that similar kill sites were to be found the entire length of Moss Agate arroyo until it merged with the Cheyenne River three miles from the Brewster site and the type site location. Much of this later work was done with the help of geologist, Vance Haynes, of the University of Arizona.

Under the direction of George Agogino and aided by paleontologist W. D. Frankforter, and geologist, C.V. Haynes, Jr., one principle and three auxillary trenches were dug along an east-west parallel. The largest trench was sixteen feet in length while the three smaller ones were between six and ten feet long.

Excavation in all trenches was conducted from the surface downward stratum by stratum until the lowest cultural level was exposed.

#### CULTURAL HORIZONS

It is now determined that the Brewster site has three cultural bearing strata. Originally it was believed to have four productive levels but more recent excavations determined that the upper two productive levels were a part of a single cultural level that had slumped. The upper two cultural horizons are both Agate Basin while the third underlying horizon is Folsom. A dozen points of Agate Basin style came from the two upper levels, and two Folsom points, one broken, were found in the lowest level. The Agate Basin knives were leaf shaped and Agate Basin scrapers were generally side scrapers. An interesting bone tool discovery was that of a serrated flesher found by James Duguid. This tool can currently be seen at the Rawhide Museum in Orin, Wyoming. Three crude knives or side scrapers and a spokeshave were found in addition to points in the Folsom horizon. Eight Agate Basin points were made of chalcedony and four were made of jasper. The complete Folsom point was made from purple jasper while the fragmentary point is of chert.

#### PALEONTOLOGY

Bison metapodia were collected from all of the culture-bearing strata, but only in the Folsom level have skulls been acquired for study. On the basis of the metapodia collected during the original Agate Basin excavations it was decided that the bison associated with the Agate Basin level were a modern variety. However, it must be pointed out that the only sure identification of bison variety is through a comprehensive study of skulls having adequate horn cores, and many interested in this site area feel that the species is not yet firmly established.

In zone four, which is believed to be a lower Agate Basin horizon, a single bison skull was found that was too fragmentary to cast. On the basis of admittedly inadequate measurements taken of the skull while "in situ", Agogino believes that the specimen was a bison type other than "Bison bison".

The bones of one elk and several bison were found in the Folsom level and we were fortunate to obtain two skulls in sufficiently good condition for laboratory study. One of these specimens was taken to the Sanford Museum,

Cherokee, Iowa, by W. D. Frankforter, while the other was cast and carried to the University of Wyoming paleontological museum for study by Paul McGrew. Following introductory observations and measurements both men were of the opinions that the bison were not of a modern type and probably were female "Bison antiquus."

In obtaining the University of Wyoming skull, Agogino and his crew cut into and regrettably had to destroy four less desirable skulls that surrounded the prime specimen. This skull pile is similar to the one reported by Joe Ben Wheat during his excavation of the Olsen-Chubbock Site in Colorado.

#### CHRONOLOGY AND CONCLUSIONS

Radiocarbon charcoal samples were obtained and processed from all levels at the Brewster site. The most recent of the two Agate Basin levels was dated at 7490 B.C. while the older Agate Basin level produced an 8029 B.C. date. This suggests that Agate Basin is among the oldest of the Paleo point types and may be the oldest point type outside of fluted forms and Sandia points in the High Plains. The lowest level, that of the Folsom complex gave a radio carbon date of 8430 B.C.

It is interesting to note how frequently Agate Basin artifacts are found directly above Folsom in the High Plains. This occurs at the Agate Basin type site (Roberts personal communication), Brewster site, Hell Gap, Lindenmeier, and at Blackwater Draw, Locality number one. From this high occurrence it would seem that Agate Basin may have replaced or assimulated Folsom people about 10,000 years ago.

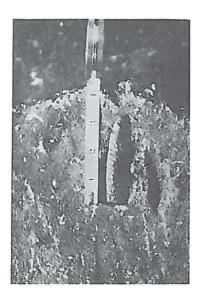
A great deal has been said about the similarity between Agate Basin and Angostura material. Both sites are of Paleo age, and both sites are only forty miles apart. In addition both sites produce point styles so similar that the majority today feel that the angostura type is simply a variation of the more widespread and fundamental Agate Basin form.

The angostura complex presents a confused chronological and typological picture. Richard Wheeler is at present in the process of revising his view of this complex, and no doubt the situation will be clarified in the near future. If the type point is similar or the same as Agate Basin, then the date is probably of similar age, and the older 7,424 B.C. date from the Ray Long site is probably valid. If the Angostura type point resembles the photograph published in "Ancient Man in North America" (Wormington 1957), which has received widespread circulation, then the younger dates averaging 6,439 B.C. have greater acceptability since a point type somewhat similar to Angostura is found above a Scottsbluff-Eden level dated at 6,640 B.C. at the Hell Gap site. A decision has been made to identify this Hell Gap level as the Frederick Complex until the Angostura classification has been crystalized.

It is the senior author's belief that little of diagnostic importance distinguishes the Angostura point from the basic Agate Basin style and within the Agate Basin collections are points that include those normally claimed to be Angostura. The senior author suggests that until a controlled Angostura site is located, that all point types commonly called Angostura be reclassified and simply labeled Agate Basin.

While the Brewster site was small in scope and culturally meager, it is still

archaeologically important as Wyoming's first excavated and reported Folsom site and because this location produced the first Agate Basin radiocarbon date and one of the earliest Folsom radiocarbon dates.

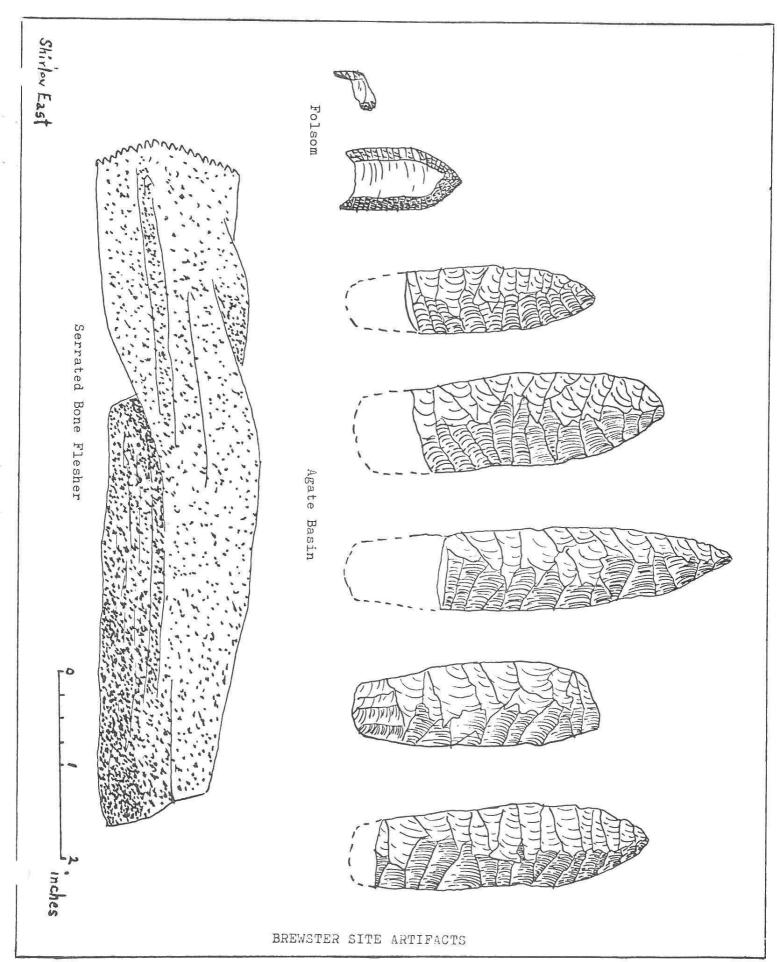


Section at Brewster Site with Agate Basin Point in place.



W. D. Frankforter excavates skull of Bison antiquus: James Duguid collects charcoal in the background.

Excavation trench showing exposed front leg of bison.



by Mary E. Garling

THE ROSS ROCK SHELTER
(48 NA 331)
in the
Arminto Area, Natrona County, Wyoming

# History of Investigation

The foothills of the Bighorn Mountains in Wyoming are well known in central Wyoming as a good spot for surface hunting of Indian artifacts. Sheepherders in the early years traded arrow or projectile points for supplies or gave them away. In later times more citified folk have spent many profitable hours roaming these hills. There are hundreds of stone circles in the area.

Immediately north of Arminto a series of hogbacks have been formed on the southeastern flank of the Bighorn Uplift. Southward, a plain extends for many miles to the Platte River. There are producing oil fields in the immediate area.

The Garling family, upon suggestion of Mr. W. H. Alford of the Casper chapter of the Wyoming Archeological Society, surface hunted this area one Sunday afternoon in May, 1964 with interesting results--Mr. Ross Garling discovered several well worked chippings down a slope. He crawled on hands and knees through the southeastern end of what appeared to be just another outcropping of weatherworn sandstone. Using a small stick, he probed the top inch or so of loose sand and discovered several small stone knives and two projectile points. Subsequent trips were made by the Garling family, including Mr. and Mrs. Garling, Wendy, age 15, and Roger, age 11, early in June, 1964, and again through September, 1964, to screen the top four to six inches of soil covered by the overhang. This was the present total deposition of the overburden in the shelter above the sandstone bedrock.

# Physiography

The Ross Rock Shelter is located northeast of the town of Arminto, Wyoming, T 37 N, R 86 W, Natrona County, Wyoming. The site is located on the Rochelle Ranch. (Plate 1). The Wall Creek sandstone, member of the Frontier Formation, forms a set of hogbacks along the SE side of the Bighorn Mountain Uplift. Trellis drainage between the hogbacks with headward erosion of gullies forms watergaps through the ridges. The site stands at approximately 6350 feet above sea level. There are springs about 1-1/4 miles west of shelter area.

#### Climate

The nearest weather station is 1150 feet lower and 50 miles East, at Casper, Wyoming. Its average precipitation is 11.8 inches per year, with average mean temperature 46.0 degrees (max.  $58.3^{\circ}$  and min.  $33.7^{\circ}$ ). Because of the difference in proximity to the Bighorn Mountain range and the difference in elevation (Casper's elevation is about 5,200 feet), it is conceivable

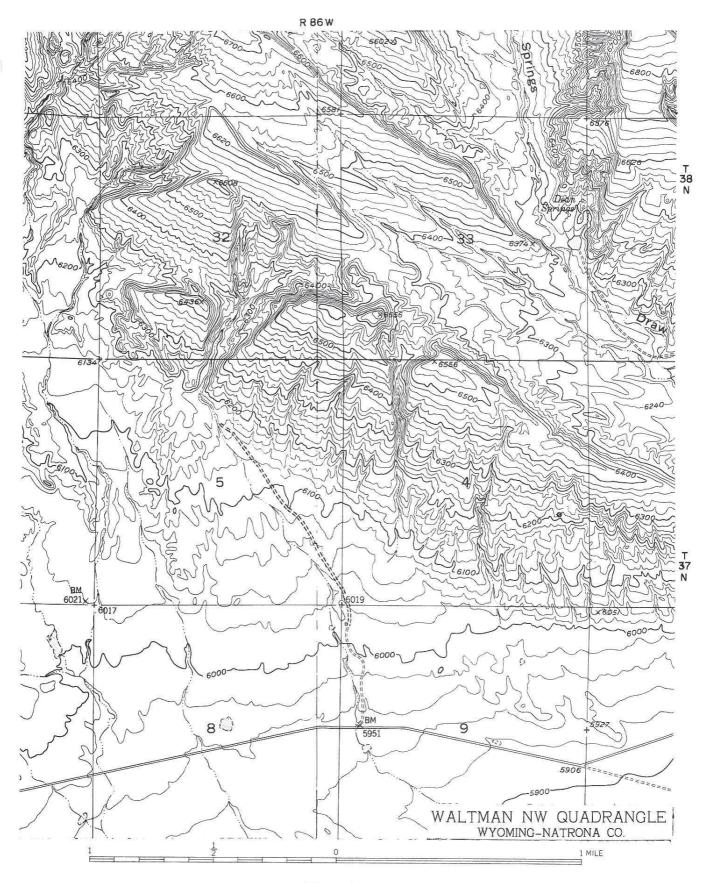


Plate 1

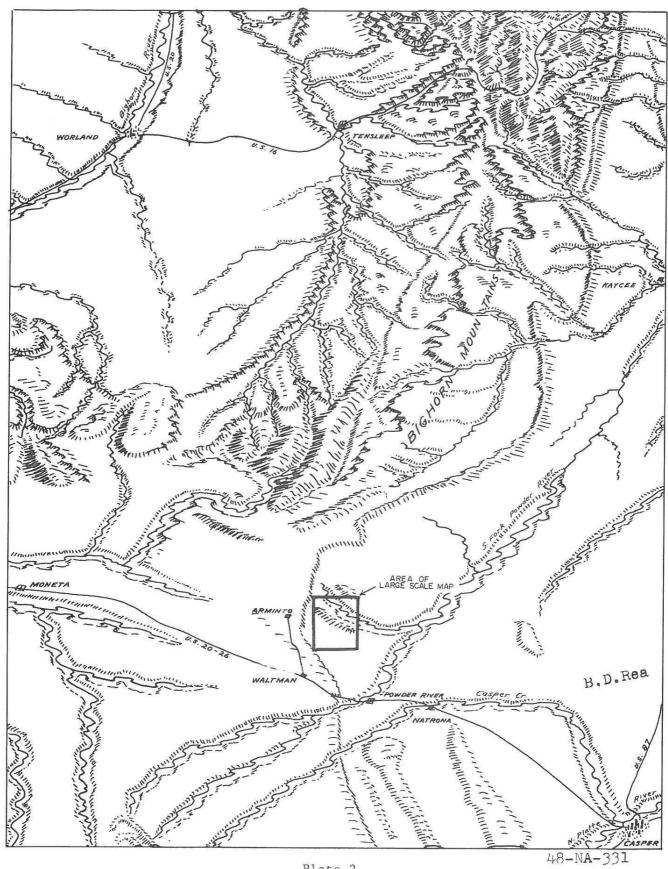


Plate 2

more moisture is felt in the shelter area. The average minimum temperature would be lower, although, because of the plains to the southwest, the average high temperature would be about the same.

### Description

The shelter is a small overhang, measuring 24 feet in length by  $10\frac{1}{2}$  feet in depth at the widest point; the ceiling, 7-1/2 feet at the outside edge, slopes inward to a height of about 4-1/2 feet, prividing six feet of complete protection from drizzling rain in the central part. (Plate 3). Two to six inches depth of loose dry sand covers the central part of the zone--the northwestern end having been washed downward and being barren of artifacts. The southeastern fifth of the overhang is now unprotected--the rain channeling through a broken spot on the roof. The shelter faces ENE.

A large piece of sandstone in front provides protection from the wind. An old juniper grows alongside the rock and provides shade from the sun. Shrubs grow in crevices of the rock in front and below and to the southeastern end. It is possible that brush could be piled in this entrance to completely close off this end of the shelter. A small fire pit was excavated here.

A gully of approximately fifty feet in depth cuts to within 100 feet of the entrance of the shelter; however, the site itself is on a gradual slope covered with sandstone, limber pine, and juniper. It is almost impossible to see the shelter from the gully.

#### Fauna and Flora

Transitional area--plains to the East and South; mountains to the West and North.

Fauna actually seen or known to be in the site area are: Mule deer, antelope, bobcat, jackrabbit, coyote, cottontail rabbit, sage chicken, grouse, ground lizard, pine squirrel, horned toad, striped gopher, deer mouse, various birds.

Flora; Shrubs and Trees

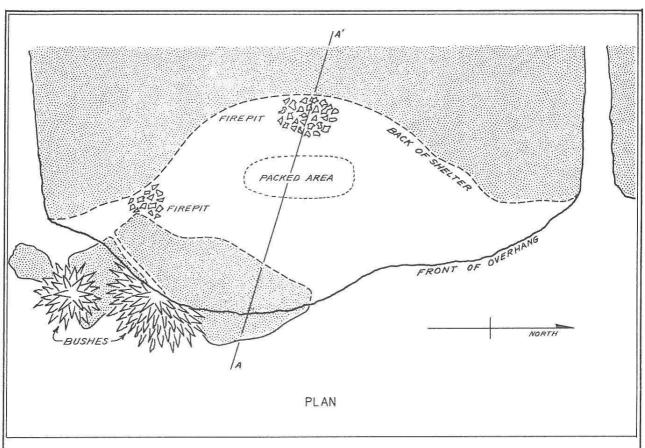
Limber pine, Rocky Mountain juniper, Ponderosa pine, greasewood, sagebrushes, currant, ninebark, antelope brush.

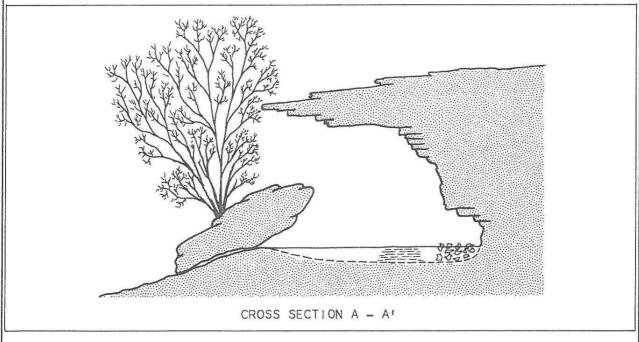
Flora; Flowers and Grasses

Many and various small flora, including: cactus, vetch, buckwheat, chiming bluebells, Canada thistle, miners' candle, aster, daisy, sunspots, locoweed, clover, wild onion, bitter-root, Rocky Mountain beeplant; various grasses, sedge, prairie sandreed, foxtail barley, crested wheat, cheat, blue, gramma grass, etc.

#### Acknowledgements

We are very much indebted to Henry Irwin and Cynthia Irwin-Williams for the LoDaisKa Site report; to Dr. Wormington for Ancient Man in North America; to Steege and Welch for Stone Artifacts of the Northwestern Plains, in helping to identify various artifacts and their uses.





5 10 15 20 25 scale in feet

PLAN AND CROSS SECTION OF ROSS ROCK SHELTER (48-NA-331)

Plate 3

Our gratitude also to Bayard Rea for his invaluable aid in mapping and correcting this report.

# Projectile Points - (Plate 4)

All points and fragmental points found were 1-1/2 inches or less in size except one. Point (j) appears to have had secondary use as a hafted knife after having been broken along one side. Glue remains on barbs. Point (a) was our "pride and joy", since two separate screenings produced both halves of the point and they fit together perfectly. Points were broken down into four types:

- A Small, side-notched c,d,e,h,j,p. 9 quartzite, 2 agate, 1 chert.
- B Un-notched triangular f,g,l,a,n,o. 14 quartzite, 1 jasper, 1 banded agate
- C Rounded base m. 1 agate, 3 quartzite
- D Misc. k,b. 2 quartzite.

# Knives (Plate5)

- A Small ovoid bifaces 1-1/4" to 1-3/4", thick in comparison to length. 1 agate, 1 chert, 4 quartzite (Plate 6)
- B Larger knives, generally triangular with squared bases. 10 quartzite, 1 chert, 4 agate (Plate 5)
- C long knives -- long in comparison to width. 4 quartzite, 3 agate, 1 obsidian

# Cutting Edges - (Plate 7)

- A Cutting edges, flakes showing use and work along at least one cutting edge. Length approximately double width. 7 quartzite, 7 chert, 9 agate.
- B Microblades, very small cutting edges. Usually rectangular, possibly hafted. 1 jasper, 1 flint, 4 agate, 2 obsidian, 2 quartzite, 2 siltstone.

# Gravers - (Plate 8)

- A Showing work on all of piece. Points used for making grooves in shafts, etc. 1 agate, 3 quartzite, 1 chert.
- B Prismatic gravers, showing work only on point. 2 flint, 1 agate, 1 obsidian, 1 chert.

# Thumb Scrapers - (Plate 9)

- A Keeled or on-flake type. Well worked. 8 agate, 5 jasper, 1 flint, 1 quartzite, 1 chert.
- B Prismatic, showing minimum of work on flake. Also called "blade" thumb scrapers. 3 quartzite, 4 chert, 4 agate-jasper.
- C Core, made from pebbles and partly incomplete. 3 chert, 2 jasper, 1 agate.

# End Scrapers - (Plate 10)

So classified because they have at least one squared end. Some worked completely around, some only on end. 1-5/8 inches to 3 inches in size.

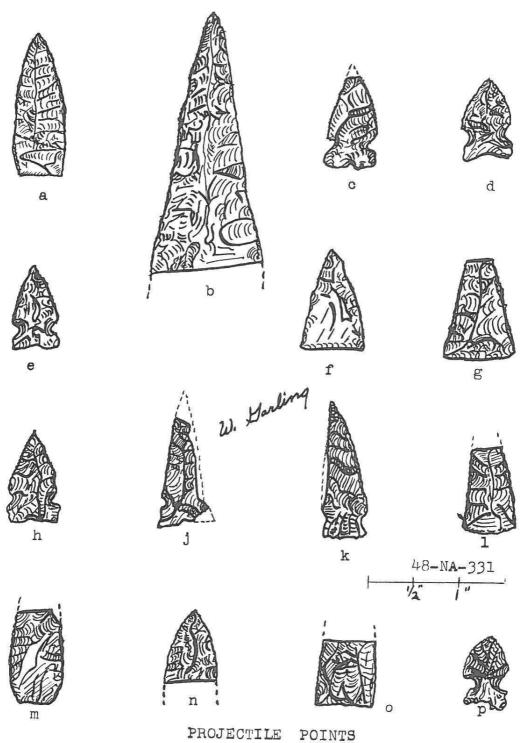


Plate 4

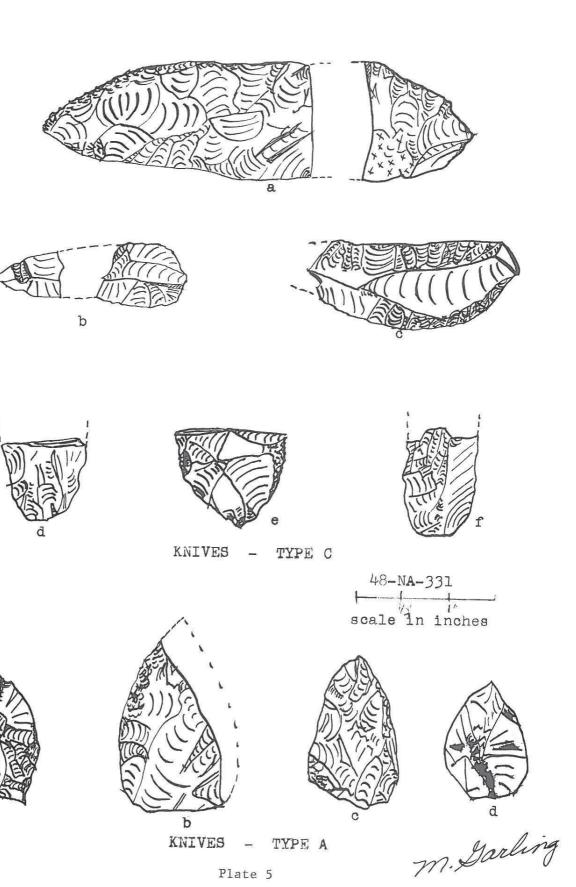


Plate 5

TYPE A

KNIVES -

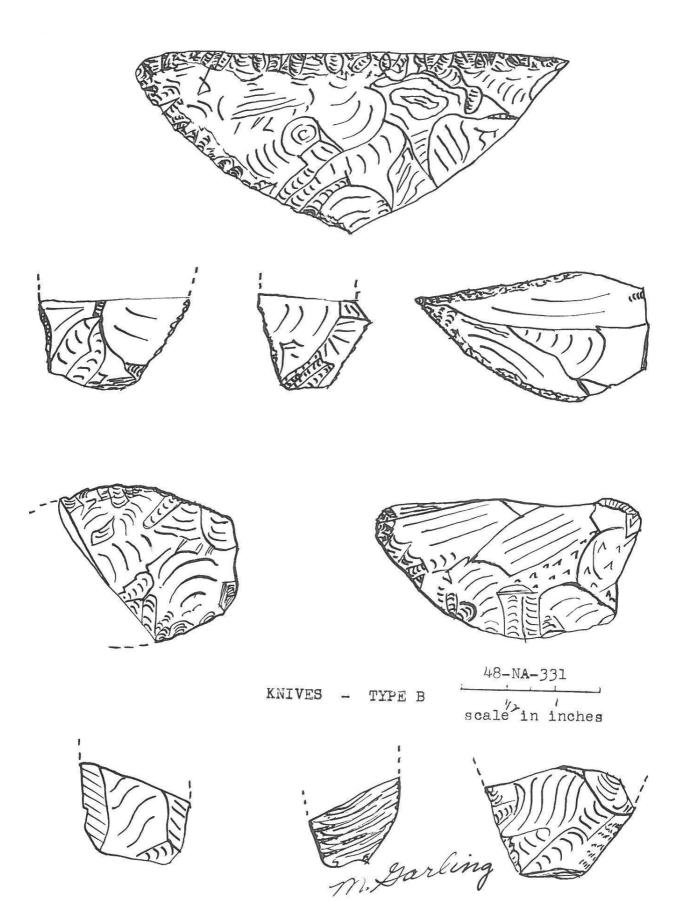


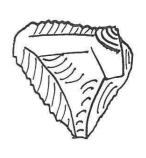
Plate 6 -20-









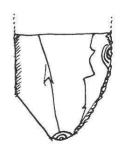


# PRISMATIC CUTTING EDGES



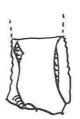






48-NA-331 scale in inches









MICROBLADES



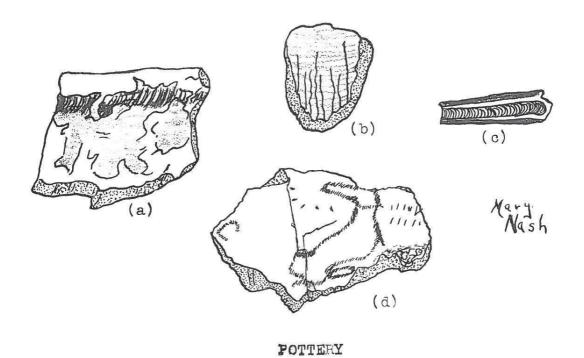






m. Garling

Plate 7













TYPE B GRAVERS









GRAVERS TYPE A

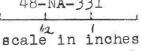
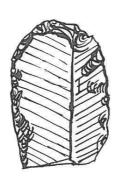


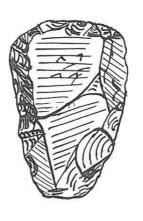
Plate 8 -22-

scale in inches

M. Sarling









THUMB SCRAPERS - TYPE A









PRISMATIC THUMB SCRAPERS

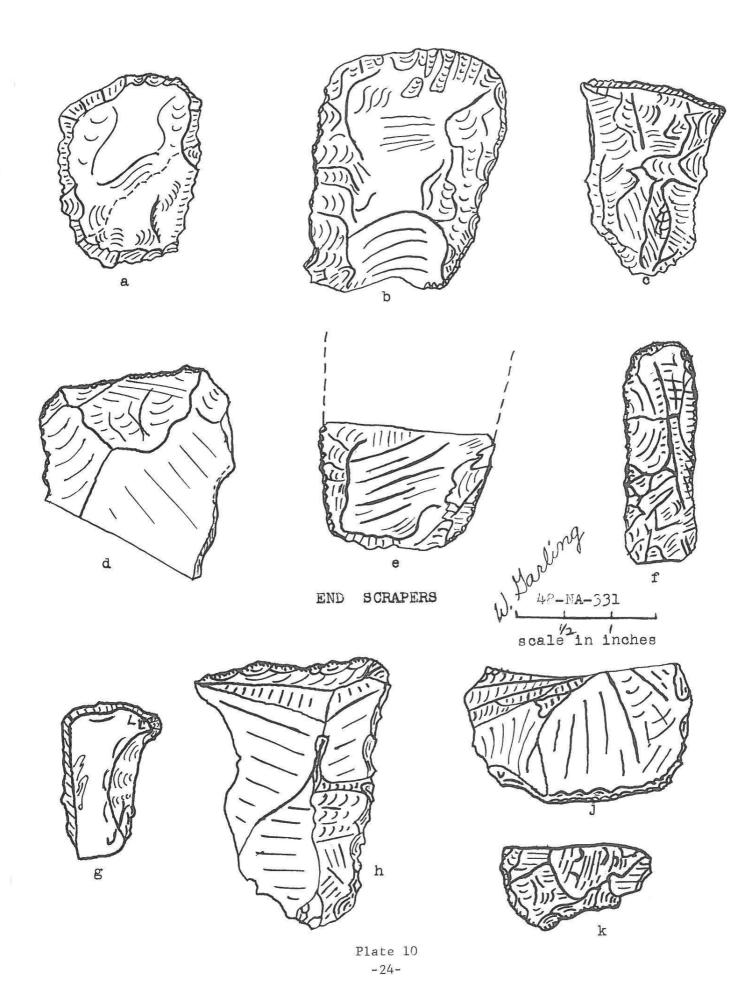








CORE THUMB SCRAPERS
Plate 9



Scraper (a) broken--one half found inside shelter, other half found directly outside. Weathering caused color difference, but pieces fit together. 10 quartzite, 2 agate, 1 flint.

# Triangular Scrapers - (Plate 11)

Thick triangular 1-1/2 inches to 2-1/4 inches. Well worked. 10 quartzite, 2 sandstone.

# Discoidal Scrapers - (Plate 12, Top)

Thick and oval in shape. 1-3/8 inches to 2 inches. Worked edges completely around. 3 sandstone, 4 agate-jasper, 2 quartzite.

# Side Scrapers - (Plate 12, Bottom)

So classified because of at least one well worked side. Usually larger in size compared to other scrapers. 1 chert, 1 flint, 5 quartzite. One possibly used as hand ax. (chert).

# Serrated Scrapers - (Plate 13)

A - 6 articles are designated as spoke shaves. (e) is a combined awl and spokeshave (siltstone). Not pictured is an awl of jasper. 2 siltstone, 1 chert, 1 quartzite, 2 agate, 1 jasper. B - 3 articles are designated as serrated scrapers. 1 flint, 1 quartzite, 1 chert.

# Other Scrapers - (Plate 14)

Pieces with one or more worked edges were classified as scrapers. 11 agate, 3 chert, 2 jasper, 2 sandstone (fine, banded), 25 quartzite.

# Other Worked Pieces - (Plate 14)

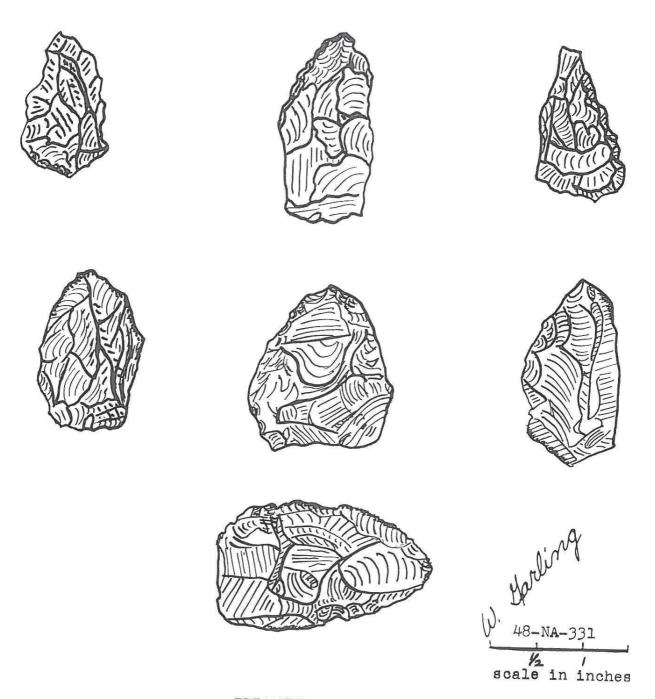
Percussors - 3 pebbles showing use, also several sandstone pieces. 1 mano, length 8 inches, 4 inches diameter; 1 metate, siltstone, showing lichens where exposed; 1 moccasin last, sandstone, small size; 1 beamer of fine sandstone; 1 grooved chunk of sandstone used for sharpening; microliths - problematical - complete tiny things 1 large half-pillow-shaped sandstone rock.

# Other Stone Found in Shelter

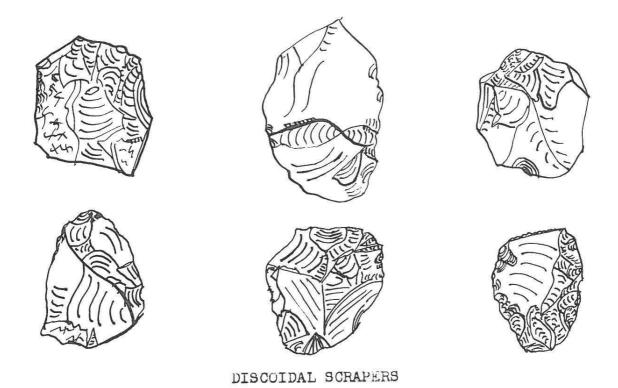
(Not counting sandstone, of which there was a great plenty, some pieces showing probable use). 57 pieces agate, flint, jasper. & opalized wood; 15 pieces of chert; 89 pieces of quartzite; 10 pieces obsidian; 4 pieces of siltstone; 3 spall blocks; 4 broken pebbles

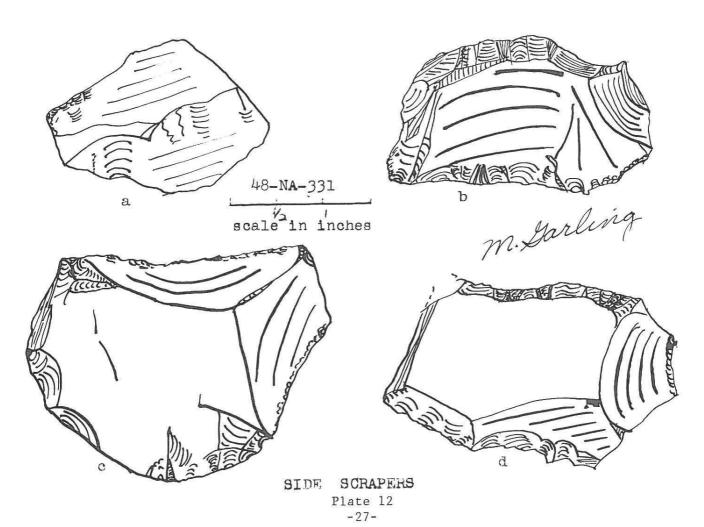
# Pottery (Plate 8)

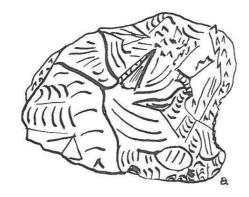
Indications suggest the majority of sherds were constructed by the coiled method. No two sherds could be fitted together Most pieces similar to (a) and (d), Plate 8; they are extremely friable, and 12/32 inch thick.

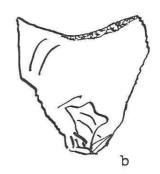


TRIANGULAR SCHAPERS
Plate 11

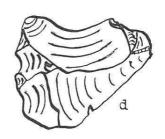






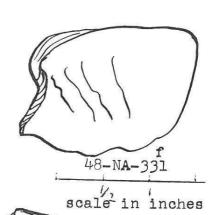






SPOKESHAVES - TYPE A

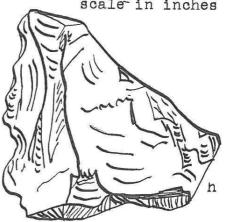


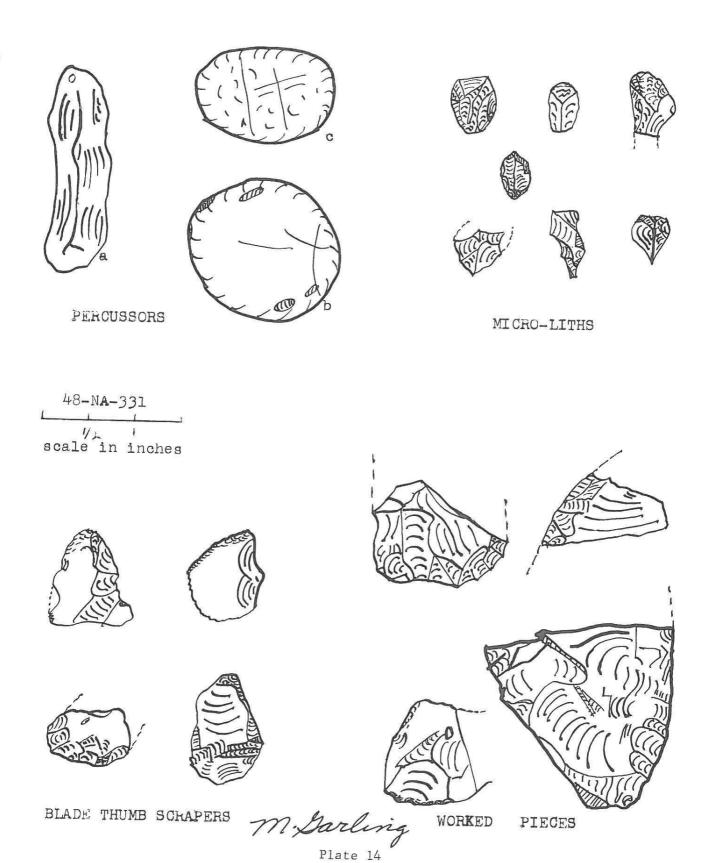




TYPE B

M. Yarling





#### Ross Rock Shelter

The exteriors were slipped and tan in color, with black interiors. In fact, black throughout. The rim piece is lipped outwards. Three sherds are grey-white throughout. About a dozen sherds were of 1/8 to 1/4 inches thick.

There are three different tempers of pottery in the shelter. Item (b), only one found, appears to be unfired, pale green and extremely micaceous. Item (c) is of almost pure clay, unfired, and appears to have been the stem of a pipe, being formed over a small reed. Several of these pieces were found, none of which fitted together.

On close inspection, Item (d) appears to have a jack-rabbit (Wendy and Roger's observation) incised on the slip, with a "C" possibly part of some other decoration in the upper left-hand corner.

# Other Articles Found in Shelter

1 talon
23 pieces small mammal bone
4 lbs. bone pieces
3 small pieces leather
1 pc. 7" x 12" leather
2 long ribs, 17-1/2", worked ends
1 piece rawhide
6 bone piercing tools
2 bone scrapers
2 wood awls
12 splinter bone awls

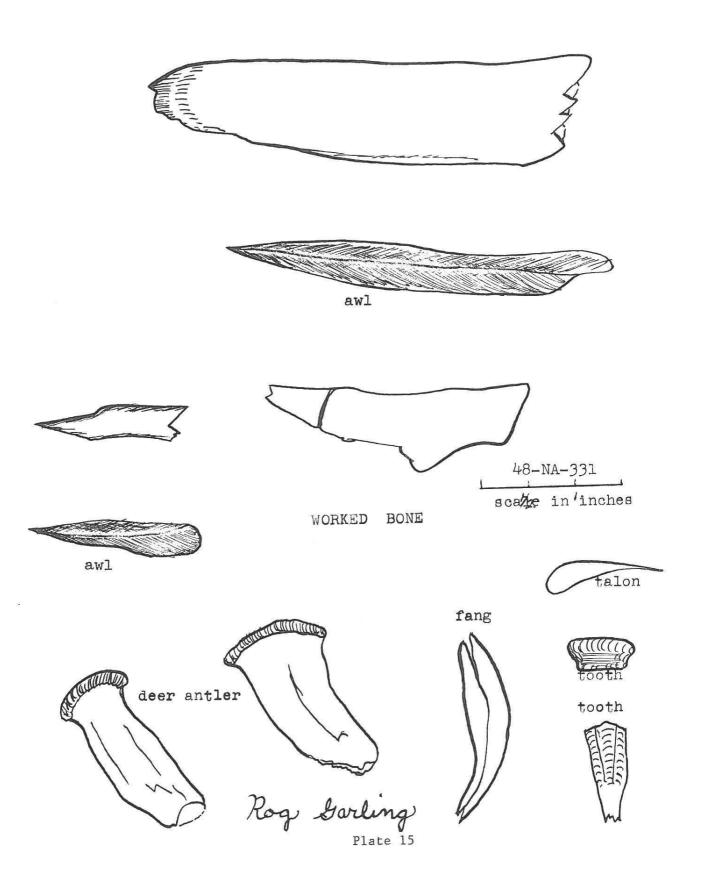
2 kinds larva shells
2 kinds pine nuts (limber, white)
1 grooved deer antler
1 wooden shaft piece
12 animal teeth, 6 showing cutting
1 moccasin
1 gut and wood snare (?)
100 pieces of clay pot
3 pieces of clay pipe
 many pine cones, bare
28 pieces bone showing cutting

animal hair

Various sizes and shapes of wood pieces, grasses and sheep, rodent, and rabbit dung were found in the shelter. Also reed. Some wood pieces had burned tips, much showed smoothing or cutting. Three small round pieces were fitted together and glued, plate 16, (e) shaft. Several pieces which could have been parts of a bow were found. As pure supposition, because a second moccasin was not found at the site, (also because there were two rounded pieces cut from the larger leather piece), plate 17, it seems as though an Indian made a moccasin for himself at this site! (The abundance of puncturing tools also points to this supposition.) Plates 17 and 15.

The tip of one large spear point, plate 4, (b), was found inside the shelter. A point  $(2-1/4 \text{ inch } \times 1 \text{ inch})$  was found outside the shelter site by Wendy Garling. It was made of red quartzite identical to that from which knife (a) type C was made.

The metate and mano were found at the extreme outside edge of the shelter area, the metate on its side to allow for drainage of dished area. Roger, the Garling son, found the moccasin near the fire-pit in the center of the shelter. Toward the front of the overhang, an area of fine black sand and disintegrated charcoal was noted, from 1/2 inch depth at the upper and lower ends and toward tht front, ranging to a depth of 2-1/2 inches in center. Plate 3. At the northwestern end the rain had bleached the ashes to dust. Many broken bits of bones were found, as were



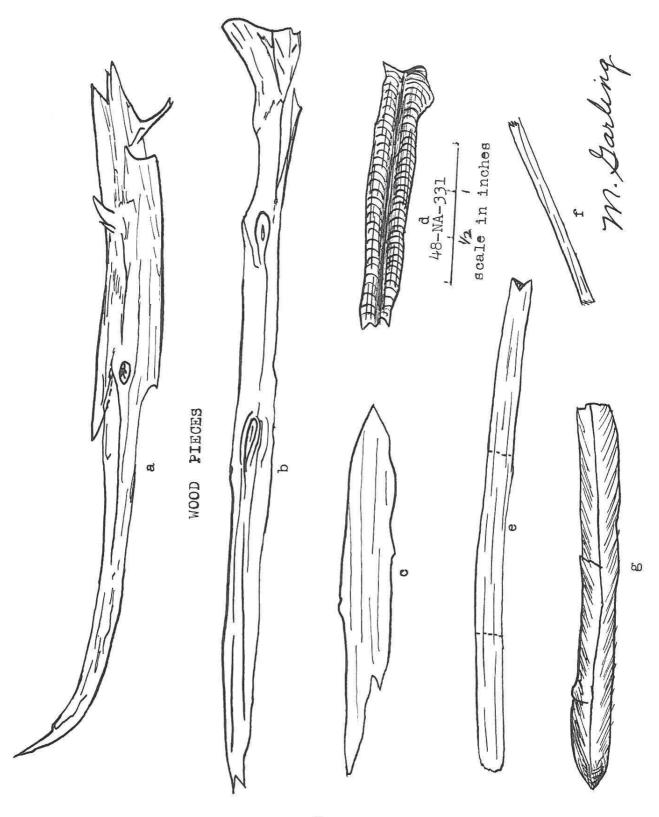
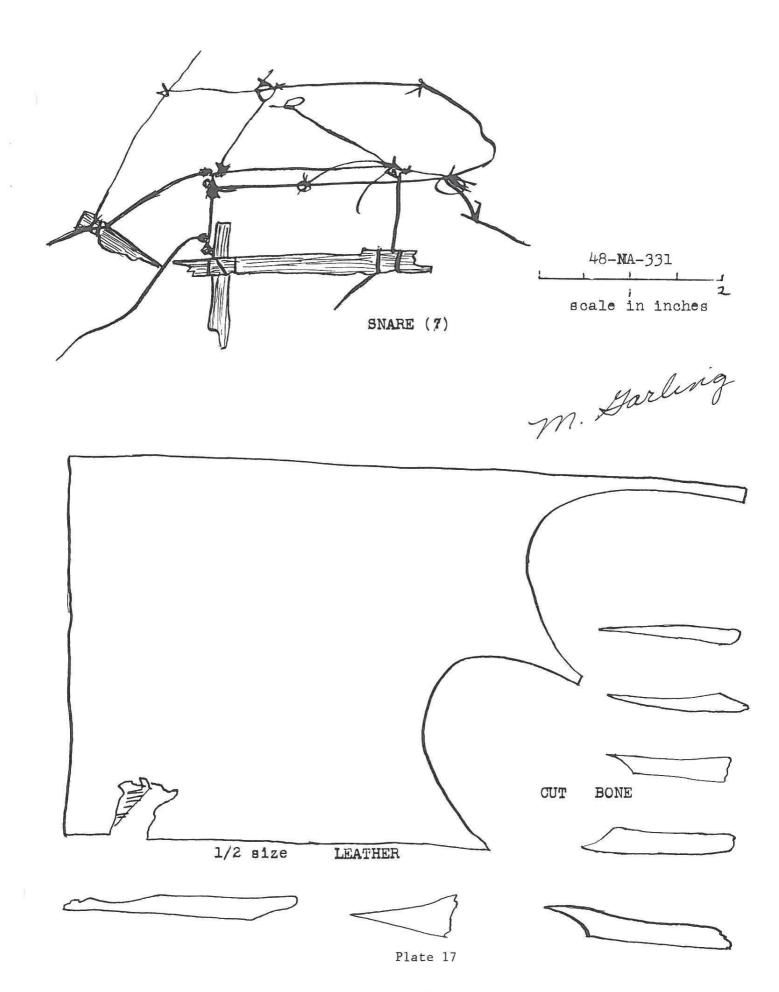
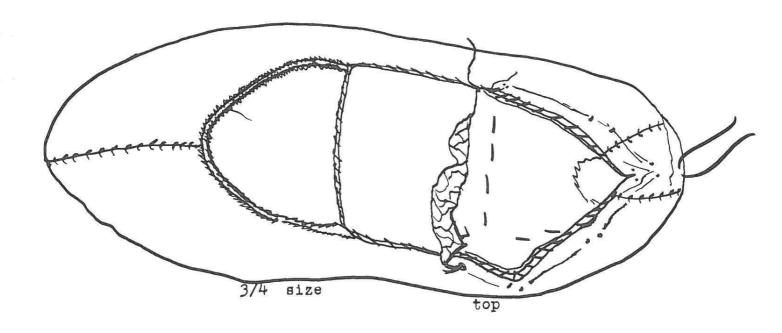
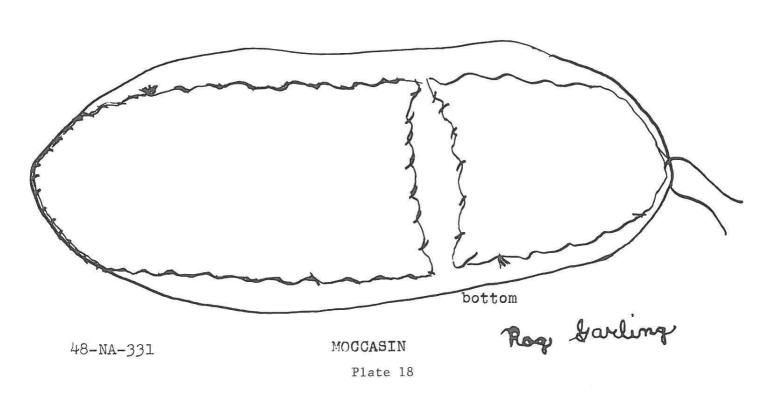


Plate 16





actual size-- 9 - 1/2" x 4 - 3/4"



many tiny pieces of pottery. Several socket and large leg bones were also found. (These bones have not yet been identified, and carbon dating appears to be out of the question at this time, due to the expense). The moccasin was referred to Dr. Mulloy, at the University of Wyoming, who stated that it is typical of those found in the third level at the Promontory Point Cave, Utah.

Twelve point bases were found at the site. Plate 4, g, l, o. It is the author's supposition that these bases may have been brought back attached to the shaft after use and breakage to allow the hunter to re-tip the shafts. He then discarded the broken pieces in the shelter. This would account for all the missing tips--not found in careful screening.

Found in the immediate area also were two small obsidian points, a blue bead (on an anthill), a dark pebble with fine carving etched (in a stone circle), triangular obsidian game piece (?) 1 inch by 3/4 inch, mica problematical pieces, pink quartzite knife about three inches in length, several well worked thumb scrapers, many odds and ends of partially worked or broken pieces of stone.

In October, 1964, the B. D. Rea family and the Garling family returned to the Ross Rock Shelter to finalize details on the site. While in the area, within 1/8 mile of the shelter, a Bison Basin was apparently discovered. Large leg bones, and several large vertebra were uncovered, with two small projectile points and one large broken spear point, plus two end scrapers and many, many cutting edges and knives in a fire-lens with the bones, at about 4 to 6 inch depth. It has been undecided whether or not to excavate this site.

As mentioned heretofore, this area has had wide usage by surface hunters for many years; and it would be impossible to obtain records of artifacts found near or at the shelter area.

This has been an absorbing project, and the author and her family feel quite privileged to have been able to have participated in it.