WYOMING ARCHAEOLOGICAL SOCIETY

# THE WYOMING ARCHAEOLOGIST



SEPT. 1977

VOL. XX NO. 3

# SKULL POINT :

# A PRELIMINARY REPORT OF

48 LN 317

By

David J. McGuire

Western Wyoming College

Occasional Papers No. 7

Rock Springs, Wyoming April, 1977

# **ACKNOWLEDGEMENTS**

Excavations were made possible at Skull Point through the interest of the FMC Corporation. Mr. Russ Hynes and Mr. Merle Newell were cooperative in providing funding for the project and Mr. Ken Jensen provided a series of color photographs of the site's locale. The Morrison-Knudsen Construction Company provided heavy equipment for removing rock fall from cultural deposits.

Initial investigations at the site were conducted by Charles M. Love. Michael D. Metcalf was overall project director. The author acted as excavation foreman and conducted laboratory analysis as well.

Excavation crew members included Kathleen Carey, Fletcher Carter, David Dethlefs, Ross Hilman, Susan McGuire, Steve Moore, Jack Radosevich, Karin Mallock-Taber, and Russell Tanner. Laboratory space and field equipment were provided by Western Wyoming College in Rock Springs.

### INTRODUCTION

48Ln317, or the Skull Point Site, was first described in a 1973 survey report for FMC Corporation by Charles Love as a lithic scatter with associated petroglyphs, ceramics, and fire cracked rock. According to various collectors in the area, Skull Point has been known for many years and has yielded many artifacts to private collections.

It is believed that Skull Point represents a Shoshonean camp related to the Late Prehistoric Period. This tentative cultural assignment is based on the preliminary analysis of the ceramics (Mulloy 1958; Frison 1971; Brox 1974), the projectile point styles, and indications of a hunting and gathering subsistence. The results of radio-carbon dating

were not yet available as of the writing of this report, therefore chronological placement is tentative.

In September of 1976 a field crew of Western Wyoming College based archaeologists was organized by Michael D. Metcalf. Funding was provided by FMC Corporation for test excavations along the sandstone cliffs to the north of Skull Point Reservoir. Some physical obstructions around the site appear in the time lapsed since the first recognition. Every effort was made by FMC personnel as well as the individuals from the Morrison–Knudsen contractors to cooperate in removals and rerouting to suit the archaeologists' needs. One problem that could not be helped was the disturbance caused by rodent activity which was present in most of the area.

It should be noted that this is a report of preliminary test excavations and by no means a final report of aboriginal activity at 48Ln 317 and vicinity.

# PHYSICAL SETTING

48 Ln 317 is located in southern Wyoming in section 27, township 20 north, range 117 west. Geologically the area is in a major bedrock structural zone referred to as the Fossil Syncline (Fig. 1). Skull Point is the southernmost extent of a ridge made up of Lazeart sandstones situated between Oyster Ridge to the east and the Bear River Divide to the west.

At an elevation of 6870 ft. the immediate site location and surrounding area falls into the Transition Zone as described by Cary (1917). Vegetation suited to this zone such as sage, wheat grasses, rabbit brush, junipers, currants, and prickley pear cactus were noted.

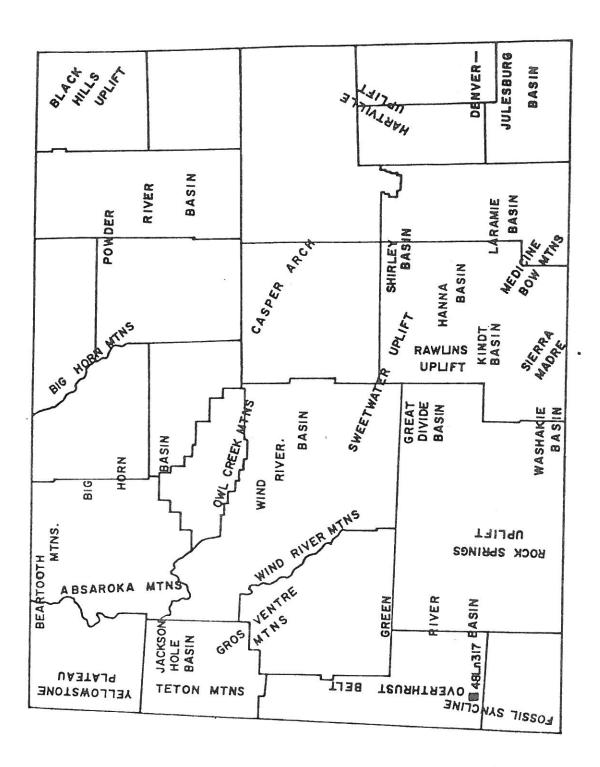
The observed local fauna included antelope, jack rabbit, cottontail, sage chicken, coyote, prairie dog, ground squirrel, gopher, mule deer, sparrow, magpie, and lizzard. Undoubtedly, other varieties of flora and fauna common to the area exist.

The annual precipitation around Skull Point is less than 12 in. with an average yearly temperature of approximately 40° F. (Brown 1970). Extremes in the nearest reporting station of Kemmerer are -32° F. to 96° F. (Becker, Alyea 1964). Wind is an important factor here due to the forcing of low extremes that are not recorded. The hostility of unbearably cold winters and very hot, dry summers leaves the spring and fall for comfortable habitation. The growing season lasts a brief 60-80 days (Becker, Alyea 1964) due to the frequency of damaging frosts during what are considered to be summer months.

The site fill is mainly blow sand settled in a semi-stabilized dune protected by the concave cliff face.

# PREVIOUS ARCHAEOLOGICAL INVESTIGATIONS

Archaeologists, paleontologists, geologists and other representatives of their respective



disciplines have studied this area from the 1930s to present:

- 1. E. B. Renaud, surveys: 1936 and 1938
- 2. U. of Pennsylvania, project; Finley Site; 1940s
- 3. Assorted salvage surveys; 1940s
- George Frison, Wardell Site, Eden-Farson Site; 1960s
- 5. William Mulloy, Boysen Reservoir; 1958
- 6. Assorted surveys; Western Wyoming College, University of Wyoming; 1960s-1970s

The above are but a handful of many projects relating in some manner to the Skull Point Site and vicinity in as far as the distribution of cultural resources is concerned. Most of the later survey work was done or is being done in connection with energy development to fulfill requirements protecting cultural resources.

### **PROCEDURE**

Upon the arrival of an investigatory crew at Skull Point in the early fall of 1976, it was noted that new road fill occupied an area previously described as containing a scatter of lithic material. Further investigation produced fringes of the material eroding from beneath the new road beds on the original terrace surface approximately 200 m. south of the sandstone cliff (Fig. 2). The road beds are functioning as barriers protecting underlying artifacts and must be kept in mind if extensive excavation of the site is ever undertaken.

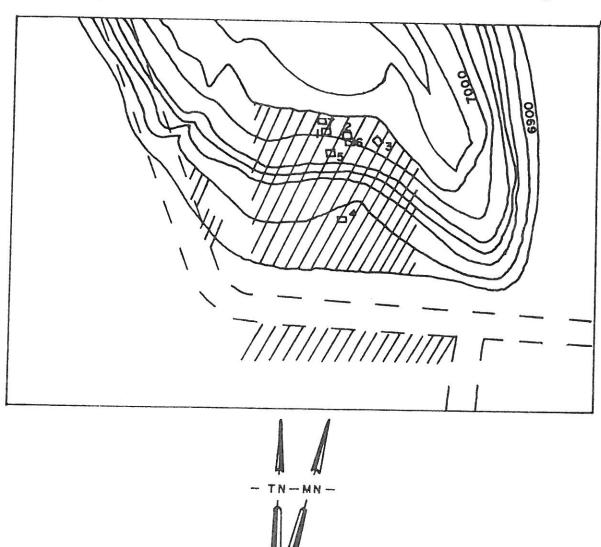
Placement of trenches was subjective as there were few surface features to use as a guide in locating fire hearths, flake concentrations or other cultural manifestations. Utah State University recorded "a partial rock alignment, rectangular, ca. 6 ft. by 4 ft." (USU 1974) which no longer exists. Depending upon where they defined the "middle of the site", the feature may have been covered by road fill.

A total of seven trenches were opened in an area of 256 sq. m. Each unit originated as a 2m-2m with one exception and each was numbered sequentially for simple reference purposes (Fig. 2). Levels were dug in arbitrary 3 cm. increments and all concentrations of material, fire hearths, and other distinguishable features were mapped and photographed with depths given as below surface. All levels were troweled and screened with 1/4 inch screen. The use of trowels in all instances was deemed necessary due to the many pottery fragments and bone fragments present. All of the levels for each trench were bagged separately. Soil samples and radio-carbon samples were collected.

### FEATURE DESCRIPTIONS

Fire hearths were the most common features in the site and appear to possess noteable differences in construction. The majority of the hearths are stone filled basins with oxidized sand surrounding them.

In T-1 two fire hearths were excavated and photographed (Plate 1). Both appear to be



AREAS OF SURFACE CONCENTRATIONS

APPROX. LOCATION OF EXCAVATED AREA

SCALE TO IOOMETERS

rock filled basins, are oxidized, and contain charcoal. No raw stone tools were found among the stones removed from the hearths; however, pottery, flakes, tools, and bone were found in context with the features. Both hearths appear to be temporally and spatially related in profile. Charcoal fragments resemble sagebrush.

T-2 shared a large fire hearth structure in the southeast corner with T-6 in the northwest corner. This may have been one hearth, however, a ridge between the two may suggest a later enlargement of a previous feature, or possibly the filling in of one for a new basin. Charcoal was present though not abundant, and large stones in the fill were common. This hearth was surrounded by tools, smashed bone fragments, and flakes. The source of the charcoal could not be identified.

Overriding the main fire hearth features in profile was a small basin (Plate 2). This proved to be an intentionally placed pit that adjoined the fire hearths beneath. Further excavation revealed a similar pit (in T-6) which also adjoined the main hearth below. Functionally these are best described as boiling pits similar to those noted by Frison in a game processing area in the Green River Basin (1971). Large stone tools were collected from debitage in the hearths.

T-3 exhibited a basin shaped hearth containing fire fractured stone, ground stone tools, and oxidized sand. The absence of charcoal suggests a specialized function in food preparation which was noted at the Eden-Farson Site (Ibid.). This hearth appears to be removed from the main camp area to the east.

T-5 revealed a hearth in the lower southwest corner that had been disturbed by an old arroyo cut. This hearth was not excavated, however, it was evident from the exposed portion that it was rock filled and basin in profile. Charcoal was also noted to be present.

T-7 was the last trench opened due to the inconvenience of cliff fall at the mouth of a small shelter. The rocks were removed by crane and revealed yet another hearth. The south portion was located on bedrock while the north portion dipped into the outer rim of the shelter mouth (Fig. 3). The hearth on bedrock was apparently historic and contained broken glass, a nail (round head) and a .22 caliber shell case. The area of the hearth that dipped slightly to the north contained projectile point fragments, pottery sherds, flakes, and a large cobble tool. The hearth is unlined and contains branches of unburned sage. The rock fall which rested on top of this feature was determined to have broken off in historic times as modern graffitti was located on the face down surface of the stone.

### LOCATION AND DESCRIPTION OF BONE

Most of the bone collected from around the fire hearths had been badly splintered; however, two groups or sizes can be discerned. The larger thicker bones apparently belong to two bison (Bison bison) specimens found in an old filled wash in T-5. The more grasile bones appear to be related to identified specimens of antelope (Antelocapa americana). The antelope bone is very fragmentary and exhibits numerous cut marks

I METER

CULTURAL DEPOSITS

BEDROCK

FIREHEARTH AREA IN T-7

(Plate 4). The heavier bones which have been supposed to be bison are smashed and broken, with the exterior of the bone deteriorated enough to obscure possible cut marks in most cases. The line of fracture on the long bone fragments correspond to wet break patterns or spiral fractures. The most complete portions of the bison bones were heaped together in an old arroyo cut against two large rock obstructions. They apparently washed down from the base of the cliff along with pottery sherds and other cultural material. Some foot and lower leg bones of the bison remained in the trenches and were recovered during excavation.

T-1 was the source of very splintered and fragmentary bones of what appear to be bison, antelope, and various rodents. Identifiable bones include one metacarpal, pieces of vertebrae and ribs, and one number two phalanx, all bison. What are presumed to be antelope bones are scattered throughout the trench and possibly represent a midden heap. The fragments have been compared with other butchered antelope bones and conform to patterns of breaks and thicknesses.

T-2 and T-6 seem to be the center of activity. Butchering and hide working tools were recovered as well as numerous bone fragments. The majority of the identifiable bones belonged to bison, antelope, and rodent groups. The specimens included phalanges of bison, metapodial and phalanx of antelope and various portions of rodent. Two #3 phalanges of a medium sized dog (probably Canis latrans) were also recovered. This appears to be a small processing area involved with various parts of the animals. If we are indeed dealing with a game processing area, it involves few animals that were thoroughly utilized judging from the complete smashing of the bone.

T-3 showed a very light scatter of bones. All were very splintered and few were identifiable. One projectile point fragment and a few flakes were recovered here.

T-4 yielded little bone material and is believed to exist outside the activity area.

T-5, as mentioned previously, contained the two bison remains. One mandible, obviously from the smaller and younger animal, had an erupted M-2, however, the M-3 was not yet erupted. The incisors were very sharp and intact in the mandible. No skull bones or intact long bones were found with the rest of the skeletal material. Three thorasic vertebrae were articulated on the larger vertebral column. The most common bones in the pile were ribs, vertebrae, and some long bone fragments. None of the bones had fused epiphises, again suggesting a young age for both specimens. Two fish mandibles and several vertebrae were collected from the pile of bones. One mandible indicates a large specimen although it has not been speciated as of yet. The vertebrae showed no signs of decorative alterations.

T-7 contained various bone fragments, most of which were undiagnostic. One of the diagnostic specimens was identified as the #3 phalanx of a bison.

### ARTIFACT ASSEMBLAGE

# Chipped Stone

The most dominant material in the site is a brown chert represented by specimens that are opaque to translucent. No cores of this stone were recovered. The material is known to exist in large amounts in the Green River Basin which may represent the collection source. There is an abundance of obsidian present especially in the form of artifacts although debitage does exist. Obsidian appeared in every trench in one form or another. The closest and best known source for volcanic glass is in the Yellowstone Park and Jackson Hole area.

Many cobbles and flakes of local quartz and quartzites constitue most of the remaining stone types although pebbles of chalcedony presumably from local creek bottoms infrequently appear.

# Projectile Points

Twenty-seven projectile points -- whole and fragmentary -- clustered around four main groups:

- 1. Small side notched -- basally notched (Plate 5d)
- 2. Small side notched -- concave base (Plate 5c)
- 3. Unnotched -- possibly preforms (Plate 5f)
- 4. Tip and midsection fragments

One projectile point possessing a single notch is believed to have been discarded or lost before completion (Plate 5e). Materials utilized included chert, obsidian, and chalcedony. Eight of the twenty-seven were manufactured from obsidian. Projectile points were one of the criteria used to place the site around the Late Prehistoric Period. The use of these artifacts in such a way is fine as long as a certain amount of reserve is employed so as to not imply that absolute confirmation was derived.

# Scraping Tools

Three plano convex end scrapers were recovered which were similar in form to those found in any butchering assemblage (Plate 6). All were made from chert and exhibited extreme to minimal wear. No side scrapers were noted which remains a point of curiosity as these are generally quite common in most animal procurement sites.

# **Cutting Tools**

A total of twenty-two cutting tools were placed into this broad category of which eleven were unifacially worked (Plate 7), ten were bifacially worked (Plate 8), and one was notched (Plate 7a). Chert, chalcedony, and quartzite were utilized. Edge wear ranged from maximum, which probably constituted a discard to minimum which could represent initial preparation. Edges were concave to convex and most of the tools

originated as large thinning flakes. Here again is a group of tools usually found in large numbers in animal procurement sites although their use in the gathering of grasses must also be considered.

# Chopping Tools

Five large quartz cobbles, three of which were probably choppers, and two that were apparently used as anvils constitute this category. These cobbles could have been gathered locally less than 400 m. from the site where large numbers were noted. The chopping tools all bear slight serrations or zig-zagged working surfaces on approximately one quarter to one half of the available surface (Plate 9). All of the tools exhibit battering and very minimal preparation. The cobbles thought to be anvils have large irregular flakes removed from the flat surfaces which on one example extended to the lateral portion. Although much speculation is employed in a category of this nature, it was noted that concentrations of smashed bone were mapped in association with a number of these stones. It may further be noted that the use of a large cobble as a platform for breaking bone would be more efficient than the blow sand floors available at the site. Many of these stone tools were found in or around fire hearths.

### Hammerstones

Five blunt battering tools of quartz, quartzite, and sandstone were placed in this category. The battering appears random and no preparation was noted in all but one instance; the exception being what appears to be a sandstone grinding tool which was also used for battering (Plate 10). Many of these stones were also found in fire hearth, debris. Functionally these tools may have been used in both the smashing of bone and stone tool manufacture.

### Ground Stone

Fragments of four manos and seven metates represent the ground stone (Plate II). These tools are manufactured from local sandstones and most have been burned. All of the mano fragments are pecked, shaped, and ground. One specimen exhibits a slight keel. Only one of the metate fragments exhibits pecking and possible shaping. All of these specimens are too fragmentary for a description of the bowl. The presence of ground stone may indicate that vegetal material constituted at least a portion of the group's subsistence which is consistent with hunting and gathering societies.

# Miscellaneous Tools

Two bone awl fragments of polished but unidentified bone were excavated (Plate 4). Other bone tools may be present in the sample, but are discernable only through involved microscopic analysis.

The remainder of the tools in this category are three stone drills of chert and chalcedony (Plate 6). These all exhibit varying tip and shaft form which is undoubtedly related to function. Wear was not discernable to the naked eye, however, again, microscopic

analysis would undoubtedly reveal the presence or absence of alterations due to use.

# Ceramics and Vessels

This was another of the major criteria used in the chronological placement of the site. Seventy-six pottery sherds were both collected from the surface and excavated units (Plate 12). Seventy-four of the pieces including one rim sherd closely resemble the description of intermountain ware (Mulloy 1958). The temper used is apparently sand consisting of small quartz crystals. Some of these crystals are large enough to penetrate the outer surface. The paste is fairly uniform with an unlocated source. Samples of local sand are indistinguishable from the temper in the ceramic mixture. Thicknesses range from about 4 mm. to 10 mm. which may depend on the sherd's position in the complete pot. The number of pots as well as overall shapes have not been determined. The exteriors have not been decorated nor has the rim. Brushing striations are evident on both interiors and exteriors. The rim shows a slight recurve and the lip is rounded. Coloration runs from light grey to black and it appears that many of the sherds have been burned.

Two other pieces of pottery recovered from the site on the surface exhibit a slightly pink color on the interior which is probably due to oxidation during firing. A larger sample would be necessary to determine if possibly there is more than one type of pottery at the site. The temper and paste of these two pieces conform to the other sherds, however, these are the only two that display signs of oxidation.

One rim portion of a soft stone vessel was found to exist among a group of excavated pottery sherds (Plate 2b). The material is micaceous and dense and is believed to be a poor grade of soapstone.

# Pictographs and Petroglyphs

The sandstone cliff immediately above the site bears the remains of etched petroglyphs and painted pictographs. The red color used in the paintings has been nearly destroyed by erosion of the cliff face and can no longer be recognized except for the stain. The etched petroglyphs are of deeply incised geometric patterns or "bird feet" and that of a shield motif. Wedel (1970) describes such styles as probably relating to the Late Prehistoric Period. This art may have been left by nomadic groups prior to the campsite activities or was the product of the Skull Point inhabitants. Modern visitors to Skull Point have left their art work in the form of bullet holes, names, and dates. One such date adorns the prehistoric shield-bearing figure (Plate 13).

### CONCLUSION

Data from the Skull Point site indicates that one or several groups of people involved in a hunting and gathering subsistence frequented this area. The size of the group or groups involved were probably limited in proportion to the availability of food sources and the time of year the site was occupied. Wedel (1970) suggests that such an economy would hardly support more than a dozen people. Judging from the numbers of animals

present, very few people could have existed for a short period of time based on the dietary needs of other prehistoric groups (Gilbert 1969). Admittedly this is a preliminary speculation that may be changed upon a more detailed investigation of the site area.

The bones from the site seem to indicate a varied diet was probably prevalent at Skull Point. Although many rodent holes in the trenches would account for a certain number of the rodent bones encountered, many were smashed and burned in the same manner as the larger bison and antelope bones. The presence of fish may indicate an even broader plain of consumption, however, there is no actual evidence that these rodents and fish were consumed. The fact that similar groups as the Skull Point residents were also associated with such bone material may indicate a more than coincidental relationship (Wedel 1970; Frison 1971).

The tentative placement of this site in the Late Prehistoric Period was based on the presence of certain ceramic types (Mulloy 1958), projectile point types or styles (Frison 1971), and the fact that the economy seems somewhat similar to the described economy of the Great Basin groups in Wyoming (Lowie 1909). The level of importance placed on foraging, hunting, or the gathering of vegetal foods is unknown, but perhaps could be expanded upon with further field investigations. The results yielded by radio-carbon dates may also enlighten the understanding of this site.

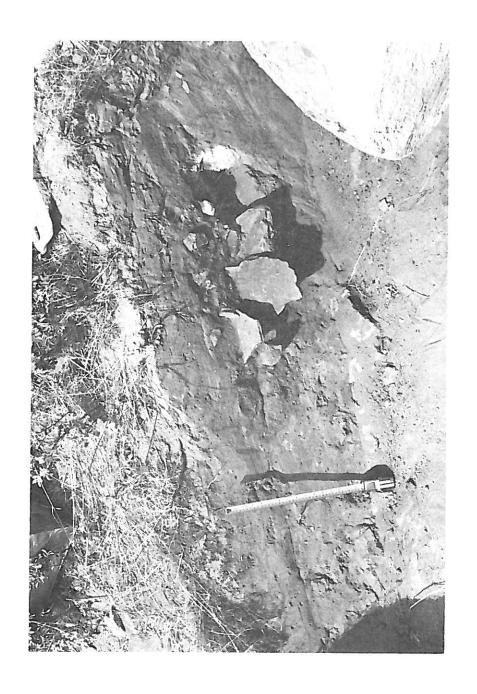


Plate 2: East profile in T-2.

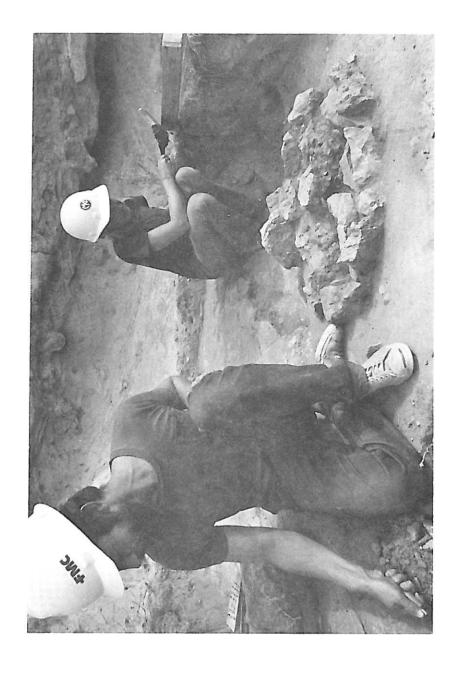


Plate 3: Fire hearth in T-3 containing no charcoal or ash.



Plate 4: Bone debris and artifacts

a. Shaft of bone awl (T-2); b. Phalanx of Antelocapra americana exhibiting butchering marks (T-6); c. Scapula of Antelocapra americana (T-6); d. Deeply incised bone fragment, probably Bison bison (T-6); e. Astragalus of Antelocapra americana exhibiting butchering marks (exploratory trench); f. Unidentified fish mandible (T-5).

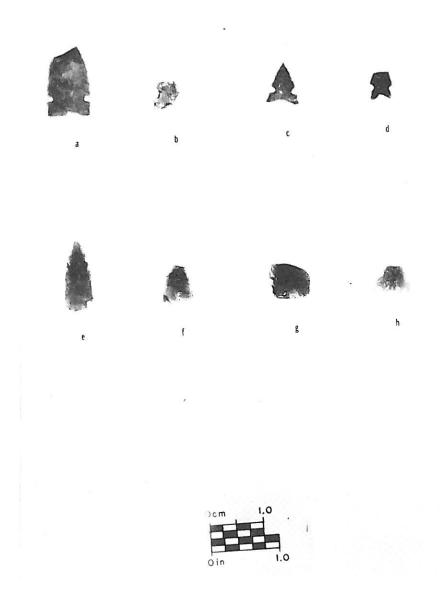


Plate 5: Projectile points

a. Exploratory trench; b. T-1; c. T-4; d. T-5; e. T-7; f. T-3; g. T-1; h. T-3.



Plate 6: Drills and scraping tools

Drills--a. T-1, b. T-1, c. T-5; Plano-convexed end scrapers--d. T-6, e. T-2 surface, f. surface.

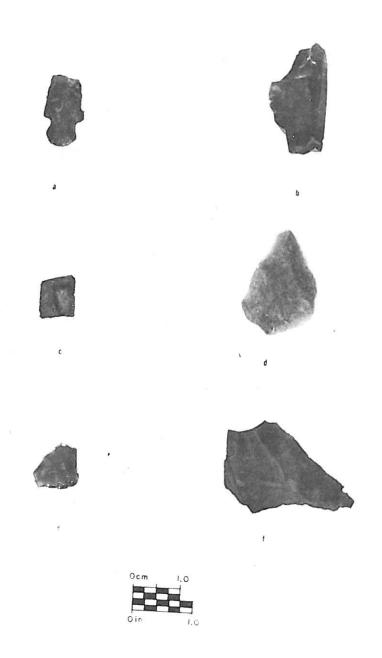


Plate 7: Cutting tools

- Notched blade, unifacial cutting tools; b. T-2; c. T-4; T-2; e. T-4; f. T-6. a.
- d.

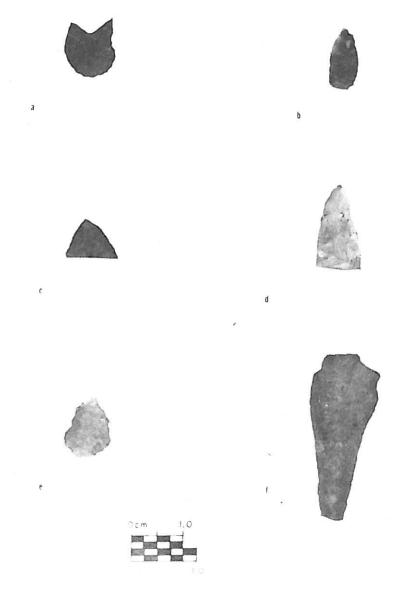


Plate 8: Bifacial tools

a. T-1; b. T-1; c. T-5; d. T-2; e. T-2; f. T-5.





Plate 9: Battering tools

a. Chopping tool (T-2); b. Anvil stone (T-7).



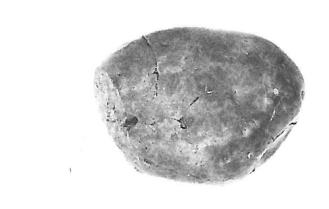




Plate 10: Hammerstones

a. T-5; b. T-5.



Plate 11: Ground stone

a. Mano fragment (surface); b. Metate fragment (T-5).

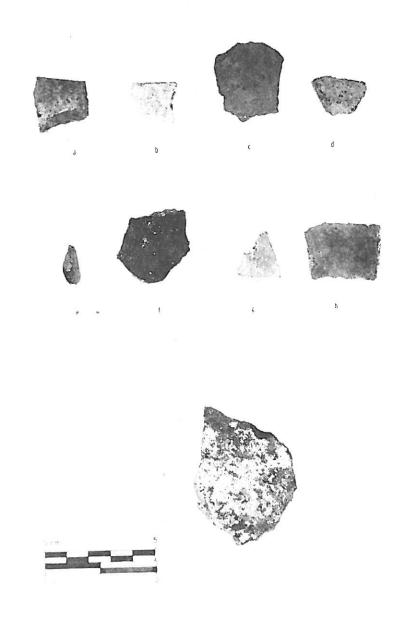


Plate 12: Ceramic and soapstone vessels

a. Rim sherd (T-5); b. Soapstone rim (T-2); c, Body sherd exterior (T-5); d. Interior of piece adjoining c (T-5); e. Cross section of piece adjoining c and d (T-5); f. Black, coarse tempered sherd (T-5); g. Oxidized interior (surface); h. Smooth, thin sherd (T-5); i. Burned sherd (T-1).

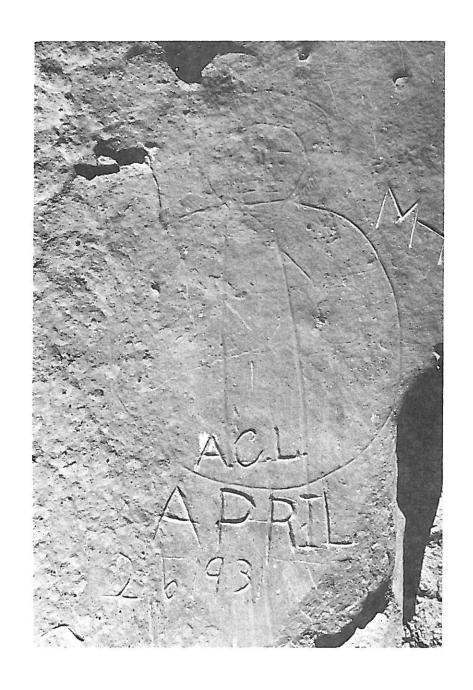
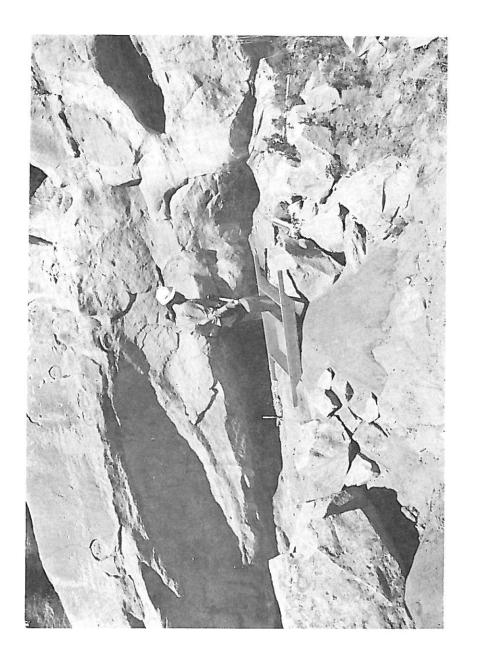


Plate 13: Shield-bearing warrior motif



View of shelter mouth and T-7 facing north Plate 14:

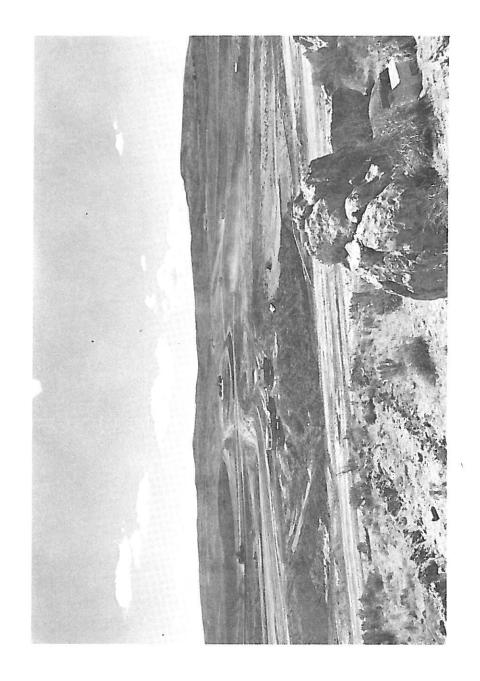


Plate 15: View of mining area facing south from southwest corner or T-2.

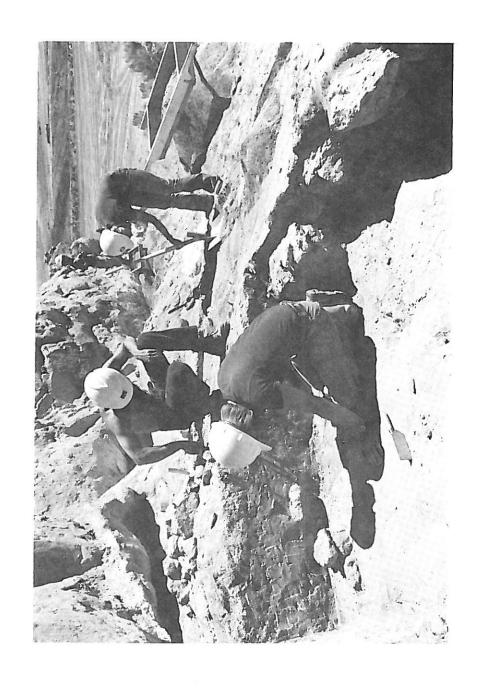


Plate 17: General site view facing north.

### REFERENCES CITED

Becker, C. F., and J. W. Alyea

1964 Temperatu

Temperature Probabilities in Wyoming. <u>University of Wyoming</u> Agricultural Experiment Station, Bulletin 415.

Brown, Robert Harold

1970

Wyoming Occupance Atlas. Robert Harold Brown, Department of Geography, University of Wyoming, Laramie.

Brox, George, and Mark Miller

1974

The John Gale Site 48 Cr 303: A Preliminary Report. The Wyoming Archaeologist, Vol. 17, No. 1.

Cary, Merritt

1917

Life Zone Investigations in Wyoming. North American Fauna, No. 42, U.S.D.A., Bureau of Biological Survey, Washington, D.C.

Frison, George C.

1971

Shoshonean Antelope Procurement in the Upper Green River Basin, Wyoming. Plains Anthropologist, Vol. 16, No. 54, Topeka, pp. 258–284.

Gilbert, B. M.

1969

Some Aspects of Diet and Butchering Techniques Among Prehistoric Indians in South Dakota. <u>Plains Anthropologist</u>, Vol. 14, No. 46, Topeka.

Lowie, Robert H.

1909

The Northern Shoshone. American Museum of Natural History Anthropological Papers, Part II.

Mulloy, William T.

1958

A Preliminary Historical Outline for the Northwestern Plains.

University of Wyoming Publications in Science, Vol. 22, No. 1,

Laramie.

Utah State University Foundation

1974

Archaeological Survey of the Naughten-Ben Lomond Powerline.

Wedel, Waldo R.

1970

Prehistoric Man on the Great Plains. University of Oklahoma Press, Norman.