WYOMING ARCHAEOLOGICAL SOCIETY

THE WYOMING ARCHAEOLOGIST



DECEMBER ISSUE VOL. IX NO. 4

DECEMBER ISSUE CONTENTS

Note from the President	<u>Page</u> Contents
Symposium on Stone Circles by Dr. Mulloy, Mr. Jack Moomaw, and Dr. Malouf	2
Photograph of an Unusual Rock Structure	12
Geologic Dating of Selected Archaeological Sites in the Rocky Mountain Region, by Arthur Randall	13
Phantom Ghosts by G. A. Bedish, Jr.	23
A Bill to Create an Archaeological Survey	26
1966 Membership List	30

Reminder From the President

I have made the following committee appointments:

Nominating:	Mrs. Clara Jensen (Casper) - Mrs. Bee Steege (Cheyenne)
	Mrs. Norman Ribble (Lander) - Mrs. Bob Burns (Cody)
	Mrs. Jane Hilman (Sheridan)
Scholarship:	Mrs. Helen Bryant (Casper), who will select her Board
By-Laws:	Mr. Jim Goodwin, Mrs. Elaine Hilman and Dr. Carl Hoffman
	(all from Sheridan)
Site-Report:	Mr. Bart Rea (Casper) - Mr. Jim Goodwin (Sheridan)
	Mr. Harry Palmer (Cheyenne) - Mr. Bob Edgar (Cody)
	Mr. Jim Adams (Lander)
Legislative:	Mr. David Basket (Casper) - Mr. Henry Jensen (Casper)
	Mr. Ralph Casner (Cheyenne)

The last two committees carry over from 1965.

Seasons Greetings and Best Wishes for the Coming Year!

Margaret Powers

Editor's Note

Congratulations to Mr. David Basket, his Legislative Committee and all who have worked through the years trying to establish an Archaeological Survey and the position of a State Archaeologist. At a historic meeting December 12, Dr. King, President of the University of Wyoming, expressed his approval of the enclosed Bill and would include financial implementation within the University Budget Request. It is our job now to get the Bill into the hands of our own legislators as soon as possible.

LATE PREHISTORIC STONE CIRCLES *

by Dr. William Mulloy of University of Wyoming

(Stone circles) are to be found throughout the Plains and transitional portions of the Montana-Wyoming area, in western Nebraska and Dakotas, southward through Colorado into northern New Mexico and northward an undetermined distance in adjacent Canada. The writer has seen a few examples from the mountains, but it is his impression that they are not a prominent feature to the west.

These have not yet received the attention they deserve and they will be difficult to investigate because of the paucity of artifacts associated with them. It is somewhat significant, however, that those the writer has investigated in and about a dozen localities in the vicinity of Billings, Montana, six localities in the Shoshone Basin of Wyoming, and eight localities near Laramie, Wyoming have produced in all 29 whole or fragmentary projectile points. All of these are corner notched with either concave or convex bases. In five cases they are near camp sites of the Middle Prehistoric Period and in two cases camp sites of the Middle Prehistoric Period and in two cases camp sites of the Late Prehistoric Period. Forbis has reported what appears to be the butt of a corner notched point from a stone circle in the Gates of the Mountains area in Montana. More evidence is necessary before these structures definitely can be assigned to this period, but the corner notched projectile points are suggestive.

There is a good deal of confusion about these most interesting archaeological manifestations. They are usually regarded as tipi sites, with the idea that the stones were used to hold down the hide covers. Informants from several tribes in the region have stated that tipi covers were sometimes held down with stones. The early accounts of the area by explorers, army officers, and emigrants repeatedly refer to the circles as having served this function. Similar statements are not lacking in the professional literature. Some of the circles possibly have this origin, but the writer is strongly convinced after having observed several thousand examples in the Montana-Wyoming area that the vast bulk of the stone circle complex has nothing whatever to do with tipis or any other kind of habitation site.

The locations in which they are found are puzzling. The typical location is on the edge of a cliff, the highest points of a cuesta, or along the wind swept edges of terrace fingers. Usually the locality is without

* Excerpted by John Greenway, Editor of <u>Southwestern Lore</u> with permission of the publisher from "A Preliminary Historical Outline for the Northwestern Plains", University of Wyoming Publications, XXII, 1 (July), 1958.

shelter, wood, or water and altogether a poor camp site. Typically a wide view of surrounding territory is commanded. Occasionally the location differs and examples are found in valley bottoms in reasonably good camp sites. The circles vary enormously in size, some being as small as five feet in diameter and others as large as 40 feet. The size range appears too great to suggest a lodge outline. They may consist of a simple band of irregular stones two-and-a-half or three feet wide with stones laid continuously and sometimes one on top of another or they may vary to circles of a single row of stones laid two or three feet apart. Usually many more are present than would have been necessary to secure a hide cover. Sometimes an entrance-like break is present but more often Frequently there are many large stones in the interior, sometimes in disarray, sometimes arranged in one or more spoke-like lines, a small central circle, or other geometric figures. Shape of the circle may vary to a slight rectangularity, pyriform, "D" shaped, or other occasional odd variants. Numbers may vary from one isolated circle to a group of several hundred. Frequently the circles overlap each other. The writer has heard reports of hearths in "tipi rings" but he has never seen any evidence of either fire or a hard packed floor either in, or associated with any example. Perhaps most convincing is the paucity of artifacts and lack of evidence of household activity on these sites. In a site of 40 or 50 circles, a diligent search typically reveals an arrow head or two and a small handful of stone chips. Any habitation group of as many lodges as circles could hardly avoid leaving much more than is usually found, even if the occupation were very temporary. The writer has never found an historic object on one of these sites.

It is suggested that the stone circles are part of a complex which had a ceremonial rather than a practical function. They may have been erected as shrines, dance areas, or for some more obscure purpose. Possibly they are related to the Great Medicine Wheel high in the Big Horn Mountains east of Lovell, Wyoming

Possibly one of the sources of confusion about hearths in "tipi rings" and the use of them as habitation sites results from the existence of another type of stone circle which is superficially similar but unrelated. The log lodges which already have been described from Thirty Mile Mesa and other locations usually had a row of flat stone slabs laid vertically against their outsides. After the wooden superstructures have been completely destroyed these slabs appear as a circle of stones. These are, of course, habitation sites, possess central fires, hard packed floors, entrances, and are usually in desirable camp sites. They are sometimes mistaken for the previously described stone circles, though they are usually made up of slabs rather than irregular stones. Present evidence suggests that they date from the Late Prehistoric and Historic Periods. One site described as a "tipi ring" by Shumate in the Great Falls area of Montana and which contained a hearth and a collection of artifacts is almost certainly of this category.

Of some chronological significance in indicating that, at least, in some localities, stone circles post-date Eden Valley Yuma material is the fact that several such circles lie on the surface at the Horner Site near Cody, Wyoming, and appear to be later than the Eden Valley occupation.

TIPI RINGS *

by Dr. Carling Malouf, of Montana State Universtiy

Stones arranged in circles are numerous throughout the Great Plains from New Mexico to Alberta, Canada, and they are common in other parts of the West. Almost everywhere in the Plains they are usually called "tipi rings", although little serious study heretofore has been made to ascertain their actual use or purpose. Amateurs have speculated most widely on their origin with guesses ranging from domestic structures to games and ceremonial usages. Professional archaeologists, on the other hand, have remained more restrained in exercising their opinions.

Despite speculations, factual information has been very scant on tipi rings. Only four professional papers to date have offered descriptions of individual rings and cluster arrangements. Two summers of intensive work along a pipeline project between Green River, Wyoming, and Denver, Colorado, however, have provided a valuable opportunity to obtain more detailed data on tipi rings and their locations. Facts can now provide some of the solutions to the problems of tipi rings and their origin.

Tipi rings were found as far west as Rock Springs, Wyoming. The clusters however, were small and they usually consisted of just two or three circles of stones arranged within a few yards of each other. Moreover, the rings themselves were relatively small, ranging from 12 to 15 feet in diameter. Such clusters were several miles apart, and they were usually located at the bases of hills and mountains, near springs of water. Throughout much of the area between Rock Springs and Rawlins, Wyoming, occupation sites, without rings, were far more commonly found.

Eastward across the Wyoming Basin, and over the Laramie Mountains in the southeastern part of that State, more and more tipi ring clusters were noted. Moreover, the clusters contained more rings, and the circles themselves were larger and more numerous. Their frequency especially increased in the vicinity of Elk Mountain, and in the hills east of Rawlins, Wyoming. There were no rings in the middle of Laramie Valley itself, nor along the main river course, but they were confined to the bases of the Snow Range, Elk Mountain, and the Laramie Range. Instead of a simple line of stones around the periphery of the circle there were more complex plans.

* Funds for this study were provided by the Colorado Interstate Gas Co., through arrangements with the National Park Service, Regional Office, Santa Fe, New Mexico. Dr. Jesse Nusbaum, NPS, was the administrator in charge of the arrangements. The valuable help and interest of officials of the Colorado Interstate Gas Co. must also be gratefully acknowledged here.

Tipi rings were found almost to the very crest of the Laramie Range, although in higher elevations they had a tendency to be smaller in size and less complex in arrangement. At the mouth of Lone Tree Creek, where the stream emerges from the Laramie Mountains to flow into the Great Plains the clusters immediately became larger again. True, there were some small clusters here and there, but on the average the trend was definitely toward large rings and very large clusters. Along Lone Tree Creek and Owl Creek they were very numerous and some groups were among the largest clusters recorded so far in the west. One cluster on Lone Tree Creek, just south of the Colorado border, and some 25 miles south of Cheyenne, Wyoming, contained 85 rings, and another one contained 135 large rings. Occupation sites, incidently, decreased proportionately as tipi rings sites increased in numbers.

Between Cheyenne, Wyoming, and Greeley, Colorado, en route to Denver, the ring clusters continued to be abundant. South of Greeley, however, none were found during this survey. Intensive cultivation in this area doubtless obliterated thousands of these evidences of antiquity, but a few occupation sites were found here and there along main river courses.

Certain conclusions could be made after the survey was completed. In high elevations, such as in mountainous areas (e.g., atop the Laramie Mountains), the rings were on ridges and crests. Springs, incidently, were always located just below. Evidently, such sites were utilized during the summer months, since the elevation here is above 8000 feet. In lower elevations, such as along streams in the Plains, after they emerged from the Rocky Mountains, ring clusters were in bottomlands or on low terraces alongside creeks which contained water for at least a large portion of a year. In all instances, the sites were close to fuel and water supplies. Where water and timeber were lacking along even such streams as Lone Tree Creek and Owl Creek, the rings were also lacking. This alone is good evidence of the domestic origin of the rings.

No definite communal arrangements of the structures which left rings as a residue were noted from cluster maps. They were merely arranged along the edges of terraces. Sometimes there is a hint of rows of rings in larger clusters, but they are not well defined. It might be remembered that even during historic times the Plains Indians did not always arrange their tipi camps in a nice circle with large plazas and other features. Instead, they were frequently clustered at random. Tipi rings, however, do appear fairly close together - this in spite of the vast acreage available to them in ancient days for "spreading out".

In several clusters artifacts were found, and these consisted mainly of scrapers, knives, and other domestic tools - more evidence of the domestic origin of rings. Occasionally a corner-notched point was also found, and the scarcity of projectile points may indicate the pacific nature of the life of Indians in more ancient days.

Interestingly, no fire hearths were found in or among the rings. Dozer operators were instructed to uncover wide areas around tipi rings sites at depths established by the archaeologist, but no hearths were found.

Many rings in the Plains showed internal features such as rock piles, or alignments of various kinds. Not all rings were circular; some were ovoid or even somewhat square in outline. The term "tipi ring", therefore, is somewhat misleading. It is possible that some rings with internal features are the remains of domestic structures which had been temporarily converted to a special religious or ceremonial lodge - a practice not uncommon among Indians during historic times.

It is obvious now that different types of structures can leave similar residue. That is, circles of stones, although alike now, may be the remains of structures which originally were quite dissimilar. Rings over 20 feet in diameter, for example, are not likely to have been the base of a tipi, but could have been part of a former corral-like structure which had five or six sides made of logs, cribbed instead of in a conical arrangement. After the five-sided or multi-sided log wall deteriorated, the rocks which had been set among the timbers fell to the ground leaving a circular pattern on the ground. Such structures have been noted by Dr. William Mulloy, near Billings, Montana. Circles of stones in other parts of the west, such as those reported in western Colorado by Huscher and others, as well as similar circles in the Great Basin do not have to be the remains of "tipis" as such, but they could easily been parts of conical structures in which materials other than skins were used for covering the base poles. After the organic materials disintegrated, a circular stone outline was left.

All in all, the evidence are clearly in favor of attributing most of the rings to a domestic origin, although one must confess that at least some types of rings had other origins as well. The remains are not distinct enough to give many clues as to their place on a temporal scale in the Plains, but the points suggest they are rather late, possibly from 2000 years ago at earliest to the historic period. This, of course, is approximately the horizon referred to as "The Late Hunters."

THE "RING MAKERS"

by Jack Moomaw, Formerly with Rocky Mountain National Park Service at Estes Park Colorado.

In the eastern foothills of northern Colorado there are thousands of stone circles embedded in the sod, sometimes alone and sometimes in groups of nearly a hundred rings. These circles vary from a few feet in diameter up to 20 feet across, and contain stones weighing as much as 50 pounds, though 10 to 20 pounds seems about average - the availability of local material seemingly to govern the size of the stones. The circles do not extend very far out onto the plains, except on terraces and table mountains along water courses, nor are they found very far back into the higher mountains, except in a few isolated places where groups of three or four may be found.

Through the years nearly everyone took it for granted that these stone circles were Indian tipi rings - that is, stones that had been piled around the bases of tipis to hold down the hide covering. But now the archaeologists say they are convinced that most of these stone circles are not tipi rings. However, they do think that these rings are the work of Indians.

Most human beings find it difficult to change their beliefs, especially when nearly everyone thinks the same thing; so, in order to determine the facts of the matter, I examined all the old photographs and sketches of tipis that I could find. None of them showed stones piled around the bottom of tipis. The hide covering of historical tipis was pegged down and/or tied to the pole framework. However, Charles Eagleplume, a Sioux, told me that the Indians did pile stones and sod around the bases of their tipis during the winter. Some photographs in a paper by Thomas F. Kehoe, brought to my attention later, show that this is true for the historical Indians of northern Montana.

While making a closer examination of some "tipi rings" I automatically began counting them, and I soon found that it would have been almost impossible for the recent, historical Indians - the known tipi-makers - to have had that many tipis. According to the records, the tipi was a fairly recent type of dwelling on the western plains, introduced soon after the year 1800, and there have been no tipis in the area I surveyed for almost 100 years.

Sample plots of 1000 acres were examined. One northeast of Lyons, Colorado, produced an average of one ring to every 11 acres; another plot northwest of Fort Collins, Colorado, showed one ring to every eight acres; a general average for the region is probably one ring to every ten acres. A strip of land 20 miles wide from Boulder, Colorado, to the Wyoming line, therefore, would produce not thousands, but hundreds of thousands of rings; and if the ring areas extend northward through Wyoming and Montana, as I have been told they do, the number would run into the millions. Of course, any total obtained will never be any more than a rough estimate because many of the rings have been obliterated by farming, rock hauling, erosion, and sodding over.

When I homesteaded on Rabbit Mountain in 1915, there were seven tipi rings near the cabin. The land to the west of the homestead was plowed up, and through the years wind-blown soil has completely covered these seven rings. I also destroyed dozens of rings while clearing fields for farming. This same process has gone on in the vast areas now being farmed in this region, and the old rock piles from cleared land, stone walls, and fills, are good "Indian hunting" for manos and metates.

Archaeologists point out that these stone circles are often located on exposed terraces, ridges, and slopes, and in other places very poorly fitted for camp sites. In any case, considering the amount of effort necessary to build these rings, they must have been important in the lives of their makers. Moreover, their numbers would indicate a large population of "Ring Makers" at one time, or there must have been a small, roving population over a long period. Of these alternatives, the latter seems more logical.

After "hunting Indians" for over 50 years and talking with many archaeologists, I have come to believe that only a small fraction of the artifacts found in this area were left by the recent, historical Indians. The lack of evidence of fire (such as fire boxes, charcoal, or ashes) in most of these stone circles is a riddle. Out of 1000 rings examined, I found only a little more than three percent that had fire boxes, though these "Ring Makers" lived at a time when primitive man had fire, and in this area fire would have been necessary for survival during part of the year at least. They may have had a communal fire in the open, or individual fireboxes nearby in some sheltered spot; there is, in fact, some evidence to support this supposition.

There is in this area an archaeological gap between Folsom man and the historical Indians. This gap was not occupational - it is a gap in our knowledge that may be filled by these "Ring Makers". Young archaeologists, looking for something new to work on, could find no better field.

Many of the artifacts found in and around these stone circles are of intermediate types - that is, older than the historical Indians but not as old as the classic cultures. Archaeologists new to this area have been amazed at the number of manos or rubbing stones scattered over the area, both on the surface and buried; it has always appeared that the quantity of these manos was far greater than could have been accounted for by the recent Indians. Is it possible that this great accumulation of manos was made by the "Ring Makers" over a period of several thousand years? If most of the manos belonged to the "Ring Makers" - and there is strong evidence that they did - then these people must have been to a great extent vegetarians, living on the abundance of edible plants and seeds that still grow in this area. For instance, the fleshy stems and roots of cattails are almost pure starch; if dried and powdered by manos, they yield a rich flour.

Several miles north of Boulder, Colorado, just south of Saint Vrain Creek, there is a plateau of some ten acres that juts out into the lowlands forming a peninsula into what is more or less boggy terrain that very likely was anciently a swamp of several hundred acres. There are no stone rings or other evidence of dwellings on this plateau, but there are hundreds of rubbing stones and broken metates embedded in the sod. Flint chips and other artifacts are extremely rare here. Whatever it was that the Indians were grinding for food must have come out of the swamp. There are several small campsites, with stone rings, in the foothills a mile to the west; evidently these people went out onto the peninsula to process the food from the swamp, and then carried the finished product back to their camps. It would be interesting to see how often this pattern is repeated in the entire ring area.

In a few places these stone circles overlap or intersect one another, and some are on slopes, which presents a confusing problem if the circles were bases of structures. It has been suggested that these "tipi rings" might be sepulchers. Excavation shows that they are not graves in the sense of the word as we use it, but they may have been symbolic or spirit houses for the dead. Many tribes to this day in northeastern Asia do not

bury their dead, but carry the bodies out onto the wasteland and leave them there. This could account for many of the rings being located out on the plateaus. Often there is a small pile of stones and in some cases small circles of stone just outside the larger circles, but like the larger circles, these small appendages contain no evidence of fire. Could these have been spirit houses for a child or wife?

Some of the stones in these circles seem to have been scattered beyond what could be expected from natural causes. These scattered stones are as deeply sodded as the stones in the circles, indicating that some of the circles may have been destroyed soon after they were made. It has been postulated as an explanation that these stone circles were used by primitive man to hold down animal hides for curing. I have tried it with the stones from a "tipi ring" and it does not work.

Very few of these stone circles show any evidence of a doorway, and the ones that do have a gap show no consistent direction of an opening as should be expected. The few "doorways" that do exist may easily have been made by natural causes during the years since the circles were laid down.

The shelters and dwellings of primitive men all over the earth were and are nearly always dome-shaped. Could these "tipi rings" be the sites of dome-shaped, yurt-like dwellings such as the Mongolians use - that is, wicker framework huts covered with hides, grass, or leaves? It is almost certain that they were not covered with earth or sod, since enough earth to cover that large a structure would have left a discernible mound. Local material of the foothills, such as willows and cottonwood sprouts and limbs, could have supplied material for wicker frameworks and would have been the logical stuff for construction, while the stones around the base held the timber in place as it was bent into a dome. These structures could also have been made of woven reeds, they are today in some parts of Asia. Furthermore, the probability of this increase as one realizes that the area surveyed was much swampier in the past than it is today, thus supplying an abundance of reeds. North of Fort Collins, Colorado, these reeds can be seen partly petrified several feet below the present surface.

If these rings are the remains of dwellings, the fact that they are often located on mountain tops, ridges, and terraces, where they could be seen from miles away, could indicate that the "Ring Makers" had little or no fear of enemies. Perhaps during the "archaeological blank" there were long periods of time when the inhabitants of the area were undisturbed by hostile invasion.

As I stated earlier, not all of the stone circles are located upon the exposed wastelands. Many can be found in valleys and around springs and along streams, where there is considerable evidence of fire, though seldom within the rings themselves. But, since we are dealing with a long period of time, the rings on the exposed places and those in the sheltered places could easily have been made thousands of years apart, and therefore at different stages in the living habits of the "Ring Makers".

In a few places, about one in a hundred rings, the stones were laid down in a more or less square pattern. I have never found any of these squares in exposed places; they have always been in valleys and near a water supply. Some of these squares seem to be as old as the oldest rings, but some are recent and could be the remains of "pale face" tent sites. Sometimes these squares have a whole side missing and suggest a shed-like structure, the opening always being in an easterly direction.

In several places in the area mentioned, there are other small groups of smaller rings that do not seem to be like the larger rings. These suggest pit-houses and there is some evidence that they were. In these there is usually evidence of fire, and often a depression in the surface; these are nearly always four to six feet in diameter and produce more flint chips and artifacts that the larger circles.

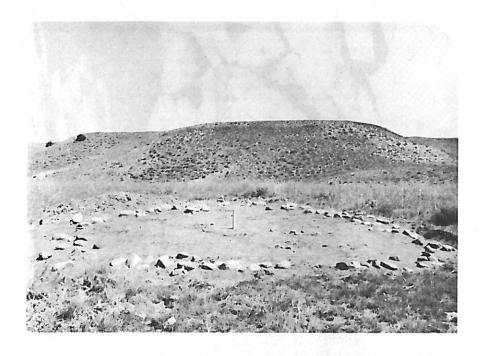
The artifacts left by the "Ring Makers" have been almost entirely cleared from the surface by generations of souvenir hunters, and this makes it difficult to date these ancient people by the weapons and implements they left behind, though it seems to me that seriation studies by competent archaeologists could do much to place them in history. Perhaps, when many of these "tipi rings" have been excavated by archaeologists, enough material may be found to prove their ages and more definite clues may be discovered to explain what they really were and why the "Ring Makers" made them.

EDITOR'S NOTES

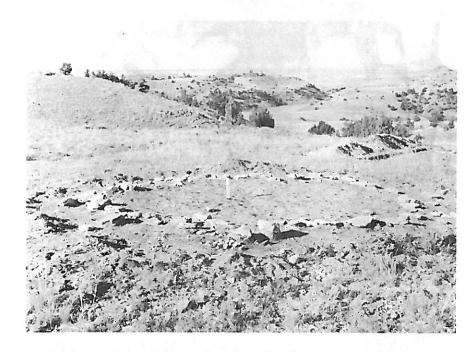
Permission to reprint "Symposium on Tipi Rings", <u>Southwestern Lore</u>, Vol. XXV, No. 4, March 1960, was granted by Mr. Dave Breternitz, Editor, and Mr. Owen Stewart, Executive Secretary. The three articles enclosed represent the thoughts of two professional archaeologists and one of Colorado's most knowledgeable amateur archaeologist.

From the controversial nature of Stone Circles, it is evident that much more work needs to be done. If such a project were made a basic chapter activity, everyone would benefit from this exercise in plane table mapping, and every member regardless of their acquired archaeological knowledge, could participate. Dr. Mulloy's Shoshone Basin Report has many plates showing reduced scale outlines of mapped circles.

On the following page are pictures of excavated stone circles.



Circumference 35 ft. +



Circumference 30 ft. +

Stone Circles and Cover Photo by Lou Steege



A Very Unusual Rock Structure, Photographed by Mr. Ross Stapp, Superintendent and Chief Engineer of the Wyoming Highway Department, in 1935, five miles west of Shoshoni, Wyoming.

GEOLOGIC DATING OF SELECTED ARCHAEOLOGICAL SITES IN THE ROCKY MOUNTAIN REGION*

Arthur G. Randall: Sunray DX Oil Company, Houston, Texas Active Member, Casper Chapter, Wyoming Archaeological Society

ABSTRACT: Changes in the tools of early man in the Rocky Mountain region help provide a stratigraphic record that distinguishes between early, middle, and late Recent deposits and late Pleistocene sediments. Of the 43 selected sites studied, 13 were determined to be of late Pleistocene age (pre-10,000 \pm y.o.**), 12 of early Recent (10,000 \pm to 4,964 \pm y.o.), 7 of middle Recent (4,964 \pm to 1,964 \pm y.o.), 8 of late Recent (1,964 \pm y.o. to present), and three sites of questionable or undeterminable age. Pleistocene and Recent mammal bones are very useful in determining the age of these sites.

INTRODUCTION

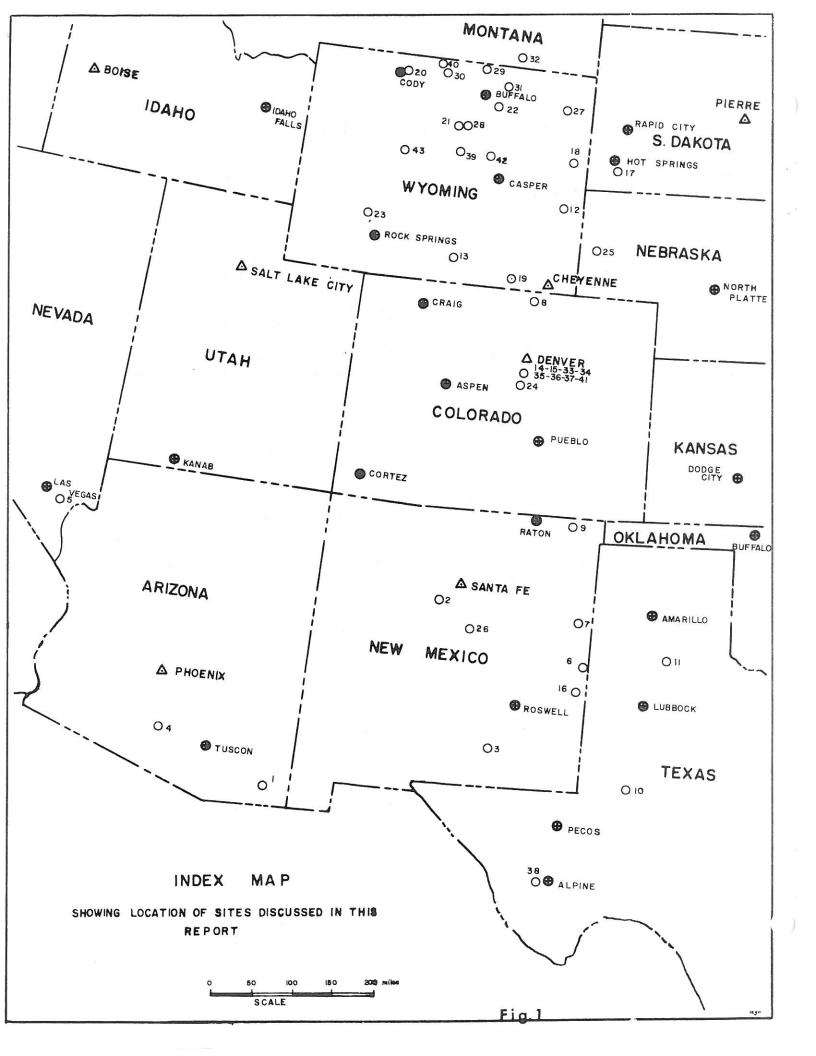
Notable changes in the tools of early man in the Rocky Mountain region help provide a stratigraphic record that distinguishes between early, middle, and late Recent deposits, and between late Pleistocene sediments. In recent years accurate dates of many sites have been obtained from charcoal by utilizing the radiocarbon method. Of the 43 selected sites studied, 13 were determined to be of late Pleistocene age (pre-10,000 \pm y.o.), 12 of early Recent (10,000 \pm to 4,964 \pm y.o.), 7 of middle Recent (4,964 \pm to 1,964 \pm y.o.), 8 of late Recent (1,964 \pm y.o. to present), and three sites of questionable or undeterminable age.

Pleistocene and Recent mammal bones are very useful in determining the age of archaeological sites. The disappearance of the Pleistocent elephants and camels coincides with a widespread unconformity in the late Quaternary deposits of the Rocky Mountain region. For instance, Bison bison bones have been described from Recent sites while Bison taylori, Bison occidentalis, and Bison antiquus remains have been noted in late Pleistocene rocks.

LOCATION

The location of the selected 43 sites are scattered from southern Montana to southwest Texas (fig. 1) in a north-south direction and from central-northern Texas to southern Nevada in an east-west direction. It should be noted that the greatest concentration of sites are in the states of Colorado and Wyoming.

^{*} First published by The Mountain Geologist, v. 2, no. 1, 1965, p. 35-41. ** y.o. (years old)



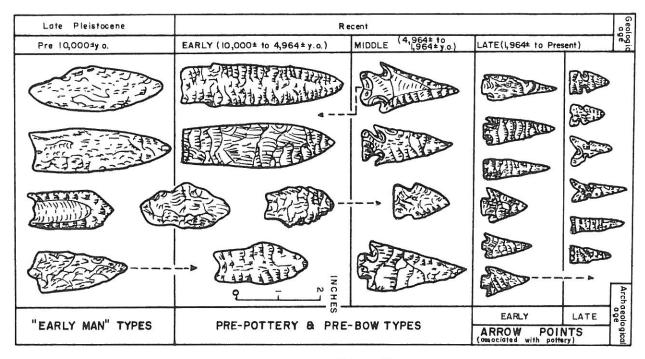


Fig. 2

GENERAL INFORMATION

The age, as outlined in the following described sites, represents the oldest culture reported. In many instances several dates from various horizons within the site are available. Many, but not all, of the artifacts from various sites have been described. Anyone desiring more detailed information such as the number and type of artifacts should refer to the specific publication describing the site.

Figure 2 illustrates the typical projectile points of the Basin and Range province, Colorado Plateau, and the High Plains. Folsom, Sandia, Clovis, and Gypsum Cave projectile points are associated with late Pleistocene deposits while points varying in age from Scottsbluff to Harrell are found in early, middle, and late Recent beds.

In paleontology it is the faunal assemblage rather than any one particular fossil that is important; in archaeology it is the collection of associated traits rather than the individual artifact that is important. The more evidence available in a site containing artifacts the more accurate the dating. For instance, a site containing abundant charcoal, Bison taylori bones, and Folsom points would be much easier to date than a site yielding only scattered pottery fragments and rare projectile points.

SUMMARY AND AGE OF SELECTED ARCHAEOLOGICAL SITES

Thirteen of the selected sites studied have reported late Pleistocene

artifacts and mammal remains (fig. 3). For the purposes of this report late Pleistocene is pre-10,000 y.o. (Scott, 1963, p. 39). Quaternary deposits, age span, and history of life in the Denver area are shown in table 1.

Late Pleistocene (Wisconsin) Sites (pre-10,000 ± y.o.)

No. 1 - Whitewater Creek

Location: 12 miles northwest of Douglas in southeastern Arizona. Age: $9,000 \pm y.o.$

Artifacts: Pottery was found of an approximate age of A.D. 1300. Stone artifacts represent the Sulphur Spring stage, Chiricahua stage, and the San Pedro stage.

Bones: Fish, mammoth, domestic cow and horse. Also bones of the extinct horse, camel, pronghorn antelope, and the dire wolf were found.

Remarks: Charcoal of hickory was noted at the five-foot depth. The proposed boundary between the Pleistocene and the Recent occurs between the three- and four-foot level.

No. 2 - Sandia Cave

Location: East of the City of Albuquerque, north end of Sandia Mountains in Las Huertas Canyon, New Mexico.

Age: 15,000 - 20,000 y.o.

Artifacts: Sandia points, Folsom-type artifacts, and pottery of early Spanish or pre-Spanish date (A.D. 1400-1600).

Bones: Horse, bison, camel, mastodon, mammoth, ground sloth, wolf, and bones of modern fauna.

No. 3 - A cave

Location: East slope of the Guadalupe Mountains, or 50 miles west of the City of Carlsbad, New Mexico.

Age: Late Pleistocene.

Artifacts: Folsom point and artifacts of early Basket Maker culture. Bones: Musk-ox horn.

No. 4 - Ventana Cave

Location: 75 miles south of Phoenix, Arizona on the Papago Indian Reservation in the Castle Mountains.

Age: Late Pleistocene.

Artifacts: Folsom point, stone artifacts of the Chiricahua stage and San Pedro stage, and pottery.

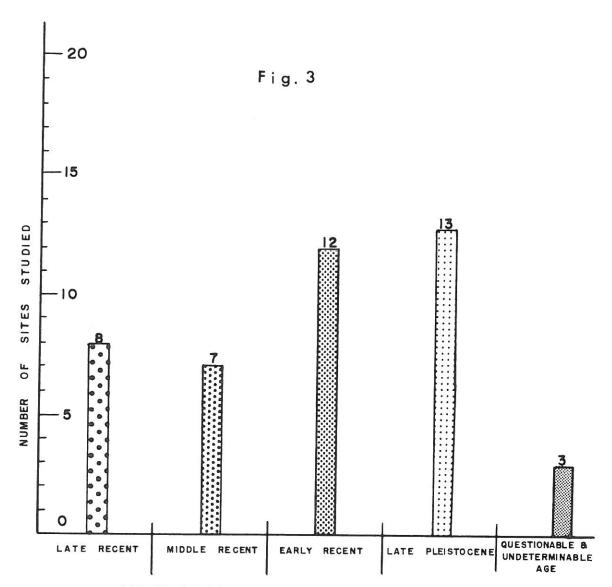
Bones: Extinct horse, jaguar, sloth, four-horned antelope, tapir, and bones of modern mammals.

No. 5 - Gypsum Cave

Location: 20 miles southeast of Las Vegas, Nevada.

Age: $7,500 - 10,455 \pm y.o.$ (dated by radiocarbon from dung).

Artifacts: Stone and wood artifacts; pottery with Puebloan artifacts. Bones: Bones and dung of sloth, camel and horse bones, and mountain sheep dung.



AGE OF OLDEST ARTIFACTS REPRESENTED

No. 6 - Clovis

Location: Between Clovis and Portales, New Mexico, near Texas-New Mexico border on Staked Plains.

Age: 10,000 - 15,000 y.o.

Artifacts: Clovis fluted points.

Bones: Mammoth, camel, extinct bison, and horse.

No. 7 - San Jon

Location: South of the Canadian River near San Jon, New Mexico.

Age: Late Pleistocene.

Artifacts: San Jon projectile points and Scottsbluff points.

Bones: Bison taylori and Bison bison.

No. 8 - Lindenmeier

Location: 28 miles north of Fort Collins, Colorado.

Age: $10,780 \pm 375$ y.o. (charcoal by radiocarbon dating).

Artifacts: Folsom material.

Bones: Bison and camel; fossil gastropod shells.

No. 9 - Folsom

Location: Eight miles west of Folsom, New Mexico.

Age: 9,000 - 11,000 y.o. Artifacts: Folsom points.

Bones: Bison taylori.

No. 10 - Scharbauer

Location: Near Midland, Texas.

Age: 11,000 y.o. (charcoal by radiocarbon dating).

Artifacts: Midland points.

No. 11 - Plainview

Location: Near Plainview, Texas.

Age: $9,000 \pm y.o.$ (charcoal by radiocarbon dating).

Artifacts: Plainview point. Bones: Extinct bison bones.

No. 12 - Hell Gap

Location: In Hell Gap Valley, approximately 20 miles north of Guernsey, Wyoming.

Age: 10,850 y.o. (charcoal by radiocarbon dating). Artifacts: Several including the Hell Gap point.

No. 13 - Union Pacific Mammoth Pit

Location: 25 miles southwest of Rawlins, Wyoming

Age: $11,280 \pm 350$ y.o. (charcoal by radiocarbon dating).

Artifacts: A knife which resembles the Clovis point, graver, scraper, chopper, and chips.

Bones: Mammuthus columbi.

Early Recent Sites $(10,000 \pm to 4,964 \pm y.o.)$

No. 14 - Roxborough Park Site No. 1

Location: SE/4SE/4 sec. 11, T. 7 S., R. 69 W., Kassler quadrangle (1:24,000), Douglas County, Colorado.

Age: 5,780 + 160 y.o. (charcoal by radiocarbon dating).

Formation: Pre-Piney Creek Alluvium.

Artifacts: Shallow-bowl metates, manos, projectile points, scrapers, choppers, and bone tools.

Bones: Ursus horribilis (grizzly bear), Odocoileus hemionus (Rafinesque) (deer).

No. 15 - Riverside

Location: Sec. 12, T. 6 S., R. 69 W., Littleton quadrangle (1:24,000), Douglas County, Colorado.

Age: Early Recent.

Formation: Eolian sand.

Artifacts: "Yuma" point found in basement excavation for a home.

No. 16 - Milnesand

Location: Three miles northeast of Milnesand, New Mexico.

Age: 5,960 - 8,960 y.o. Artifacts: Milnesand point.

No. 17 - Angostura

Location: Angostura Reservoir near Hot Springs, South Dakota.

Age: 7,000 to 9,000 y.o. Artifacts: Angostura point.

No. 18 - Agate Basin

Location: In Niobrara County between Lusk and Newcastle, Wyoming.

Age: 9,000 y.o.

Artifacts: Agate Basin points.

Bones: Bison bison.

No. 19 - Jimmy Allen

Location: South of Laramie, Wyoming.

Age: 7,900 y.o. (charcoal by radiocarbon dating).

Artifacts: Allen points.

Bones: Bison

No. 20 - Horner

Location: Four miles northeast of Cody, Wyoming.

Age: 6,900 y.o. (charcoal by radiocarbon dating).

Artifacts: Cody knives, Eden points, and Scottsbluff points.

No. 21 - Grey-Taylor

Location: West of Kaycee, Wyoming, on the east flank of the Big Horn Mountains.

Age: 3,900 to 9,600 y.o.

Artifacts: Meserve and McKean points.

No. 22 - Sisters Hill

Location: Near Buffalo, Wyoming, in the foothills of the Big Horn Mountains.

Age: 9,600 y.o. (charcoal by radiocarbon dating).

Artifacts: Many artifacts of which the Hell Gap is the oldest.

No. 23 - Finley

Location: Near Eden, Wyoming.

Age: 7,000 to 9,000 y.o.

Artifacts: Eden points.

Bones: Bison.

No. 24 - Lamb

Location: Near Waterton, Douglas County, Colorado.

Age: $7,000 \pm y.o.$

Artifacts: Eden point.

Bones: Bison, mammoth, and camel.

No. 25 - Scottsbluff

Location: Near Scottsbluff, Nebraska.

SYSTEM	SERIES	STAGE SUBSTAG		FORMATION	APPROXIMATE AGE Span in Years	HISTORY OF LIFE
		LATE		Post- Piney Creek alluvium	l,964 ± y,o. to Present	Historic – Upper Republica: culture Protokistoric – ceramic Woodland
	RECENT	MIDDLE		Piney Creek alluvium	4,964* 10 ,964*y.c.	Preceramic Woodland culture
QUATERNARY		EAR	LY	Pre—Piney Creek alluvium	i0,000≄ to 4,964±y.o.	Warm – loving mollusks
QUATE		WISCONSIN	LATE	Broadway alluvium Louvier	Pra 10,000± y.o.	Early man in North America
		¥ Si	EARLY	a Ilu vium		
		ILLING	DIAN	Slocum alluvium		
		KANSAN		Verdos a llu v i um	-	
	PLEISTOCENE	NE BRAS	KAN	Rocky Flat alluvium		
				* H1		

Table 1

Age: 7,000 to 9,500 y.o.

Artifacts: Scottsbluff point.

Bones: Bison.

Middle Recent Sites $(4,964 \pm to 1,964 \pm y.o.)$

No. 26 - Cerro Pedernal

Location: Rito de los Encinos, of north-central New Mexico.

Age: Middle Recent.

Formation: Intermediate alluvium.

Artifacts: Stone artifacts.

No. 27 - McKean

Location: Keyhole Reservoir, which is northeast of Moorcroft, Wyoming.

Age: 3,500 to 4,000 y.o. (charcoal by radiocarbon dating). Artifacts: McKean points.

No. 28 - Sweem-Taylor

Location: West of Kaycee, Wyoming, on the east flank of the Big Horn Mountains.

Age: $3,500 \pm y.o.$

Artifacts: McKean and Jackass Ears points.

No. 29 - Mavrakis-Bentzen-Roberts Bison Trap

Location: Near Sheridan, Wyoming.

Age: $2,600 \pm 200$ y.o. (charcoal by radiocarbon dating).

Artifacts: Projectile points.

No. 30 - Little Bald Mountain

Location: Big Horn County, Big Horn Mountains, Wyoming.

Age: 1,500 to 3,000 y.o.

Artifacts: Projectile points.

No. 31 - Kaufmann Cave

Location: Near Ucross, Wyoming.

Age: 150 - 4,500 y.o.

Artifacts: Stone.

No. 32 - Powers-Yonkee Bison Trap

Location: Powder River County, Montana.

Age: $4,450 \pm 125$ y.o. (charcoal by radiocarbon dating).

Artifacts: McKean points.

Bones: Bison

Late Recent Sites (1,964 + y.o. to Present)

No. 33 - Roxborough Park School Site No. 2

Location: NW/4NE/4 sec. 36, T. 6 S., R. 69 W., Kassler quadrangle (1:24,000), Douglas County, Colorado.

Age: Late Recent

Formation: Post-Piney Creek Alluvium.

Artifacts: Artifacts and pottery of the Woodland culture.

Bones: Camel, mammoth, horse and bison.

No. 34 - Roxborough Park Site No. 2

Location: SE/4SE/4 sec. 11, T. 7 S., R. 69 W., Kassler quadrangle (1:24,000), Douglas County, Colorado.

Age: $1,490 \pm 160$ y.o. (charcoal dating by radiocarbon).

Formation: Post-Piney Creek Alluvium.

Artifacts: Artifacts and pottery by the Woodland culture. Projectile points, scrapers, choppers, metates, manos, and bone awls.

No. 35 - Rainbow Creek

Location: NE/4SW/4 sec. 30, T. 7 S., R. 68 W., Kassler quadrangle (1:24,000), Douglas County, Colorado.

Age: 1,490 + 160 y.o. (charcoal dating by radiocarbon).

Formation: Eolian sand.

Artifacts: Scrapers, manos, metates, projectile points resemble Upper Republican culture. Pottery of the Parker and Franktown focus of the ceramic Woodland Culture.

Bones: Leg bone of mule deer.

No. 36 - Jarre Creek

Location: NW/4NW/4 sec. 4, T. 8 S., R. 68 W., Kassler quadrangle (1:24,000), Douglas County, Colorado.

Age: 900 ± 250 y.o. (charcoal dating by radiocarbon).

Formation: Loess.

Artifacts: Pottery and stone artifacts of the ceramic Woodland culture.

No. 37 - Dutch Creek

Location: NW/4 sec. 27, T. 5 S., R. 69 W., Littleton quadrangle, Jefferson County, Colorado.

Age: 1,490 ± 160 y.o. (charcoal dating by radiocarbon).

Formation: Post-Piney Creek Alluvium.

Artifacts: Artifacts of ceramic Woodland culture.

No. 38 - Alpine

Location: Trans-Pecos region of southwest Texas.

Age: 860 + y.o.

Formation: Calamity.

Artifacts: Pottery. Stone artifacts.

No. 39 - Brown-Weiser

Location: Natrona County, Wyoming, in the Big Horn Mountains.

Age: $450 \pm y.o.$

Artifacts: Several, of which the Harrell point is included.

No. 40 - Medicine Wheel

Location: Northern Big Horn Mountains, Big Horn County, Wyoming.

Age: 200 y.o. (dating by dendrochronology).

Artifacts: Very rare - only pottery fragments.

Questionable or UndeterminableAge

No. 41 - Roxborough Park School Site No. 1

Location: NW/4NE/4 sec. 36, T. 6 S., R. 69 W., Kassler quadrangle (1:24,000), Douglas County, Colorado.

Age: Middle Recent?

Formation: Piney Creek Alluvium.

Artifacts: Metate.

Bones and fossils: Bison bison and Mollusk shells.

No. 42 - Lee

Location: 50 miles north of Casper, Wyoming in Natrona County, sec. 33, T. 41 N., R. 80 W.

Age: $1,020 \pm 86$ y.o. at 42 inch level (charcoal dating by radiocarbon). Believed to be much older at the 96 inch or lowest level.

Artifacts: Projectile points, scrapers, fleshers, drills, awls, knives, hammer stone, blade, shaft smoother, pestle, spoke shave, and pottery fragments.

No. 43 - Muddy Creek

Location: North of Riverton, Wyoming

Age: Recent.

Formation: Sand dunes.

Artifacts: Scrapers, grinding stones, and hearths.

REFERENCES CITED

Bell, R. E., 1958, Guide to the identification of certain American Indian projectile points: Oklahoma Anthropoligical Society, Spec. Bull. 1, $104~\rm p_{\odot}$

, 1960, Guide to the identification of certain American Indian projectile points: Oklahoma Anthropological Society, Spec. Bull. 2, 105 p.

Hayes, Vance, and George Agogino, 1960, Geological significance of a new radiocarbon date from the Lindenmeier site: Denver Museum Nat. History, Proc. 9, 23 p.

Hunt, C. B., 1953, Pleistocene and Recent boundary in the Rocky Mountain region: U.S. Geol. Survey Bull. 996-A, p. 1-25.

, 1954, Pleistocene and Recent deposits in the Denver area, Colorado: U.S. Geol. Survey Bull. 996-C, p. 91-140.

, and Hunt, A. P., 1961, Use of archaeology in Recent strati-graph: U.S. Geol. Survey Prof. Paper 424-B, p. B-195 to B-197.

Leopold, L. B., and Miller, J. P., 1954, A postglacial chronology for some alluvial valleys in Wyoming: U.S. Geol. Survey Water Supply Paper 1261, 90 p.

Randall, A. G., 1962, Correlation of Lee site artifact rock type with quarrysites, Wyoming, in Wyoming Geol. Assoc. Guidebook, 17th Ann. Field Conf., Symposium on Early Cretaceous rocks, p. 209-315.

Scott, G. R., 1962, Geology of the Littleton quadrangle, Jefferson, Douglas, and Arapahoe Counties, Colorado: U.S. Geol. Survey Bull. 1121-L, 53 p.

, 1963, Quaternary geology and geomorphic history of the Kassler quadrangle, Colorado: U.S. Geol. Survey Prof. Paper 421-A, 70 p.

Steege, L. C., and Welch, W. W., 1961, Stone artifacts of the northwestern plains: Northwestern Plains Publishing Co., 131 p.

Wormington, H. M., 1957, Ancient Man in North America: Denver Museum Nat. History, Pop. Ser. no. 4 (revised), 322 p.

Manuscript received April 23, 1964.

PHANTOM GHOSTS OF THE LARAMIE MOUNTAIN RANGE COUNTRY

By G. A. Bedish, Jr., Cheyenne Chapter Member

If I were asked to capture and measure a rainbow, I would try ultimately to control a rate of change of a measure of a happening of such a formation. Then, I would try to locate where the condition would exist - to be there ahead of such phenomena - while a rainbow formed about me. A happy man would I be, for I would have set myself apart with Nature!

While it is doubtful that I would ever succeed in doing the aforementioned, it perhaps explains some part of my feelings when I stumbled upon this ancient cairn near Cedar Hill.

Constructed of primitively, masoned rock, the cairn had been erected from a circular plan, sloped upward from 75 degrees to 80 degrees. No revetment held up the receding sides.

I peered inside through several openings near the bottom of this mysterious structure. There, I noticed remains of what might have been red ochre, (F) with a yellow-beige ochre, at varying locations about the sides. Underneath, upon the base rock, appeared a number of bluish-creme cast skeletal members, (D) of apparently mineralized condition. The members seemed to me of a human origin, but smaller when compared to those of present man. Possibly the bones were those of a child.

To the far side was a mineralized skeleton of an animal that might have resembled a common cat of today. (C)

Near the center of the base rock, there appeared a fused, hardened pool of yellow-beige ochre. (D) Immediately south, a dark pool resembling hardened varnish remained.

Some other skeletal members, though not enough to make up a torso, lay scattered throughout the area close to the base.

No leg bones, skull, mandible, or teeth seemed present. A skeleton like that of a rabbit lay near the south side. Due to a removal of some 3 to 4 rocks from the south side it is in my thought the cairn might have been rifled at some remote period.

I was most deeply impressed at the time regarding the make-up of the cairn with the enclosed compartments which comprised the form of capping that was left by the humans who constructed the cairn. The drawings show this as well as I can remember, and perhaps the capping should be most significant; tableau capping, perhaps, or of practical significance?

GEOLOGY: The land about the cairn is bordered with badly eroded hills. It is a land of transition from fair sized benches to mountains. Deep ravines are present. As is known, great outcroppings were thrust out and upward from the surface in the Laramide Revolution of the Late Holocene to create what is the Laramie Range.

Ice fields of the Mankato, Late Pliestocene epoch, failed to enter the region. It could be safe to say little disturbed the land except flooding and storms. Gravel deposits, varying in depths, are found in the region.

Spring-fed North Elkhorn Creek lies about three fourths of a mile north and, 150 to 200 feet below where the cairn then stood.

HISTORY: Just 20 to 35 miles northeast lie the Spanish Diggings, and an area containing countless stone quarries. There, Paleolithic North Americans extensively mined cryptocrystalline quartz and fine grained quartzite, which these highly skilled tool makers found would most readily flake. The famous hematite mine at Sunrise was first a source of red ochre for these men.

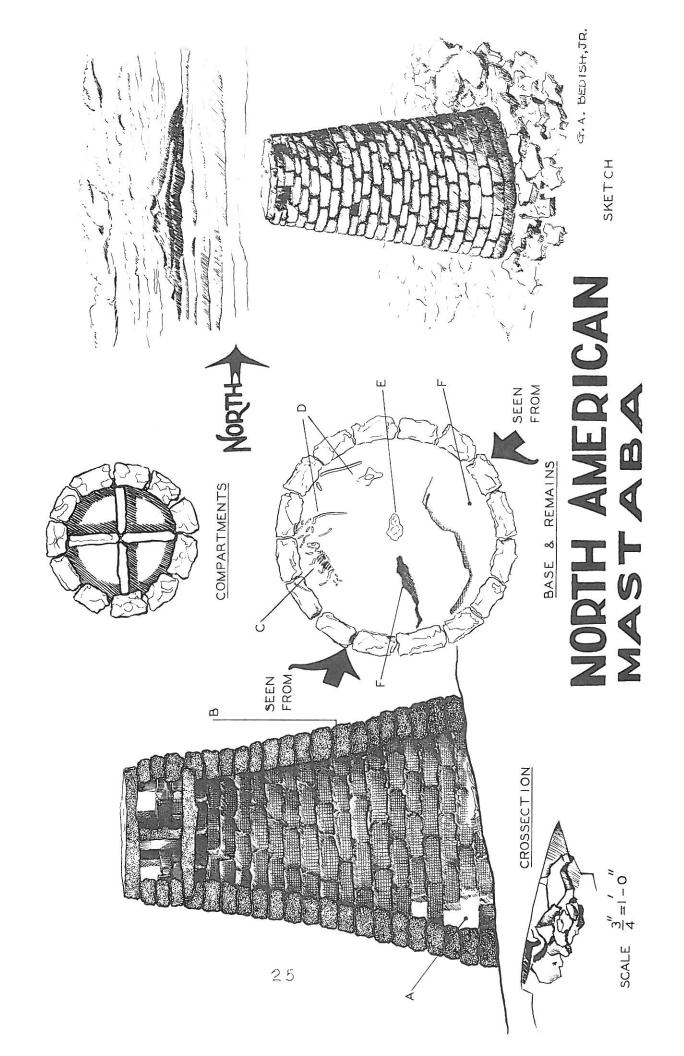
In January of 1966, I retraced steps to North Elk Horn Creek, determined to take photographs and careful measurements. Even though I had removed a bison femur from a ravine side to take out with me; I was unable to relocate either where I had dug, or, where the cairn had stood. Only a few flint and flint-quartzite implements have I found in subsequent searches. This poem best expresses what had happened.

The hills are shadows, and they flow
From form to form and nothing stands;
They melt like mist, the solid lands,
Like clouds they shape themselves and go.

- Author unknown

CONCLUSION: It is extremely difficult to account for erection of such a cairn without mortar. I have found no archaeological confirmation which could account for the "apparition". An apparition, however, that I have put my hands upon; seen where lichens closed over some of the rock joinings; and, observed where the uneven slabs weathered and settled into one another with the passage of many, many years.

June 14, 1965, a severe flooding ravaged the region. Several days later, tornado funnels were reported to have lashed the vicinity. Apparently, the site has for the greater part, been destroyed.



SAMPLE ARCHAEOLOGICAL BILL

- 1 AN ACT to create an Archaeological Survey of the State of Wyoming and
- Archaeologist; to designate the purpose of the Archaeological Survey;
- 3 to outline its powers and duties; to provide for an Advisory Board
- of the Archaeological Survey; and to provide for an appropriation.
- 5 BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF WYOMING:
- 6 Section 1. An Archaeological Survey of the State of Wyoming is
- 7 hereby created. The office and headquarters of this Survey shall be in
- 8 the Department of Anthropology of the University of Wyoming.
- 9 Section 2. The functions of the Archaeological Survey shall be:
- 10 1. To investigate, study, preserve and record such evidence of pre-
- 11 historic and early historic human activity as shall be reported from
- 12 time to time by citizens of the State or of which the survey may
- 13 otherwise become aware.
- 14 2. To begin and carry out as time permits an archaeological survey
- 15 of the State, locating and recording all evidences of prehistoric and
- 16 and early historic human activity that may be encountered and maintain-
- 17 ing records in the form of filed maps and documents deposited per-
- 18 manently at the University of Wyoming.
- 19 3. To engage in systematic, intensive archaeological investigations
- 20 of significance to the reconstruction of the prehistory and early history
- 21 of the State as time and facilities permit and to solicit funds for
- 22 this work from the various public and private foundations and other

- 1 sources generally available to the field archaeologist.
- 2 4. To prepare and publish from time to time technical reports bearing
- 3 on the investigations carried out and or of significance to the re-
- 4 construction of the prehistory and early history of the State.
- 5 5. To cooperate to the extent of capacity with communities and
- 6 other agencies in the State interested in the establishment of local
- 7 archaeological museums and related activities.
- 8 6. To cooperate with all agencies to the extent of capacity in the
- 9 protection from vandalism, natural and other kinds of destruction of
- 10 all objects of archaeological significance and to render aid in the
- 11 enforcement of the Wyoming Antiquities Act.
- 12 7. To cooperate to the extent of capacity with the Wyoming Archaeo-
- 13 logical Society, this Society being a voluntary group of public spirited
- 14 Wyoming citizens organized and dedicated to increased understanding
- 15 of the prehistory and early history of Wyoming and the preservation
- 16 of objects of antiquity as part of the cultural heritage of the State;
- 17 such cooperation to consist of such activities as using survey field
- 18 activities to further technical training of Society members, offering
- 19 technical advice and supervision when needed in the carrying out of
- 20 Society investigations and in the preparation of their reports for
- 21 publication, and offering aid in the establishment of local Society
- 22 museums.
- 8. To distribute all publications of the Survey to the public on
- 24 request, either free or at a price to be determined. All monies realized
- 25 from sale of said publications shall be paid into the treasury of the
- 26 State as part of the funds of the Survey.

- 9. To adopt, with the approval of the Advisory Board, such rules a
- 2 and regulations concerning the conduct of archaeological studies and
- 3 research within the State of Wyoming as may be deemed to be in the
- 4 best interest of the people of the State.
- 5 Section 3. There shall be an Advisory Board of the Archaeological
- 6 Survey of Wyoming which shall consist of the Governor, the President
- 7 of the University of Wyoming, the Chairman of the Department of
- 8 Anthropology at the University of Wyoming and the State Archaeologist.
- 9 Section 4. The President of the University of Wyoming, with the
- 10 approval of the Board of Trustees of the University and the Advisory
- 11 Board may appoint a State Archaeologist to serve as executive of the
- 12 Survey. This position shall be constituted as a research professorship
- 13 in anthropology within the Department of Anthropology at the University
- 14 of Wyoming.
- 15 Section 5. The State Archaeologist must be a person with an advanced
- 16 degree in anthropology with a specialization in North American
- 17 Archaeology and such other qualifications as may be determined by the
- 18 President of the University and the Advisory Board.
- 19 Section 6. The field investigations, preparation of publications
- 20 and all other executive functions relating to the above listed duties
- 21 of the Survey shall be under the supervision and direction of the
- 22 State Archaeologist. He shall prepare and submit an annual report of
- 23 all operations and work performed in connection with said Archaeological
- 24 Survey.
- 25 Section 7. All materials and specimens collected, having served
- 26 the purpose of the Survey, shall be cataloged and preserved in the study

- 1 or exhibition collections at the University of Wyoming provided that
- 2 duplicates may be distributed to various scientific and educational
- 3 institutions under such regulations as the Advisory Board shall formulate.
- 4 Section 8. The Survey, with the approval of the Advisory Board,
- 5 is hereby authorized to cooperate with the Smithsonian Institution,
- 6 other archaeological research institutions, other departments of the
- 7 State of Wyoming, the University of Wyoming and scientific institutions
- 8 in projects that will further the purpose of said Survey.
- 9 Section 9. As part of his work, under the provisions of this act,
- 10 the State Archaeologist may organize, from among the students of the
- 11 University of Wyoming who are pursuing courses of study in anthropology,
- 12 field expeditions to carry out the work of the Survey herein provided
- 13 for, using only such students as are sufficiently advanced in their
- 14 courses of study to be able to perform the work required. Funds for
- 15 such work, will be obtained from public and private foundations normally
- 16 available for archaeological field work.
- 17 Section 10. The cost of implementing the provisions of this act
- 18 will be borne by the University of Wyoming and are specifically included
- 19 in the current budget request.

1966 Membership List

Casper Chapter Members

Albanese, Mr. and Mrs. John Alford, W. H. Archibald, Chas. H. Baskett, Mr. & Mrs. David Belz, Carlton Berger, Mr. & Mrs. Geo. A. Bouril, Ada M. Bryant, Helen Campbell, Leon H. Chastain, Mrs. Robt. L. Davis, Bob Dinsmore, Mr. & Mrs. Jas. Foster, Martha Frazier, Mrs. John Fredricks, Tom Eklund, Dick Garling, Mary Hazlett, Wayne Henderson, Paul Jensen, Henry E. Jensen, Mrs. Clara M. Kropp, Carl McCord, Mrs. Harley Patterson, John W. Phelan, Grover Poestkoke, J. Fred Ramage, William Rea, Mr. & Mrs. Bayard

Red Buttes
2954 Imperial Place
Pine Tree Ranch
1544 Bellaire Drive
11937 East Colfax
P.O. Box 111
P.O. Box 475
P.O. Box 1166
Box 402

738 Lind 3064 Bruhn Way P.O. Box 14 P.O. Box 575 Alcova Route P.O. Box 1787 1500 Garden Creek Rd. 3768 South 89th St. P.O. Box 446 1022 South Willow 1022 South Willow 125 Northway P.O. Box 475 3100 South Coffman 606 Tenth Street 431 South Beech

5200 Yesness Lane

Casper, Wyo. Casper, Wyo. Gillette, Wyo. Casper, Wyo. Aurora, Colo. Saratoga, Wyo. Saratoga, Wyo. Casper, Wyo ... Midwest, Wyo. Saratoga, Wyo. Casper, Wyo. Casper, Wyo. Casper, Wyo. Saratoga, Wyo. Rawlins, Wyo. Casper, Wyo. Casper, Wyo. Milwaukee, Wisc. Bridgeport, Nebr. Casper, Wyo. Casper, Wyo. Casper, Wyo. Saratoga, Wyo. Casper, Wyo. Casper, Wyo. Casper, Wyo. Lysite, Wyo. Casper, Wyo.

Cheyenne Chapter Members

Acree, Rita Atwood, Russel Bennet, Harold H. Butcher, Mr. & Mrs. Joe Casner, Ralph Castle, Mrs. Florence Clark, Henry I. Duguid, Mr. & Mrs. James Edmunds, Mr. & Mrs. Wm. Durnford, Mrs. Paula Fosher, Dean Fox, Mrs. Galen A. Hammond, Mr. & Mrs. Ralph Harkness, Robert Hart, Ann E. Lane, Richard B.

2123 House Street Route 2, Box 940 5072 Tennyson St. P.O. Box 1344 818 Johnson Street 1438 Salisbury 6630 South Downing 309½ South 8th St. 1943 Garrett St. P.O. Box 886 702 Western Hills Blvd. 1717 Alexander St. P.O. Box 67 2800 Cribbon Ave. P.O. Box 393 2101 Cheyenne Place

Cheyenne, Wyo. Cheyenne, Wyo. Denver, Colo. Laramie, Wyo. Cheyenne, Wyo. Cody, Wyoming Littleton, Colo. Laramie, Wyo. Cheyenne, Wyo. Cheyenne, Wyo. Cheyenne, Wyo. Cheyenne, Wyo. Bushnell, Nebr. Cheyenne, Wyo. Cheyenne, Wyo. Cheyenne, Wyo.

Chevenne Chapter Members (Continued)

LaRue, Joe Lloyd, Major Henry Love, David Martin, Mr. & Mrs. Richard Meadow, Richard H.

Moritz, Mr. & Mrs. Joe McLoughlin, C. M. McPhee, Robert D. Oram, Robert Paulley, Mr. & Mrs. David Paulley, Mr. & Mrs. Gordon Phipps, Mrs. Mary Porter, Mr. & Mrs. Wade Rayko, Mr. & Mrs. Charles Roman, Dorothy Schoondermark, Dr. & Mrs. A.H. 826 West Myrtle Shupe, Mr. & Mrs. Alton Sigler, Mrs. and Donald Steege, Mr. & Mrs. L. C. Thobro, Clayton Towns, Harold Vowers, Mack Wheeler, Gary Widholm, Milton Willson, Grant Wunnicke, James Yelvington, Julia A.

5044 Greybull Ave. 98 - 5th Ave. 309 South 11th St. 2706 East 10th St. Peabody Museum Harvard University

4519 E. 14th St. 1931 Hudson P.O. Box 415 531 Dartmouth Lane Box 96 P.O. Box 38 5116 Syracuse 3307 East Ave. H-6 808 East 5th St. 4720 Moran Ave. P.O. Box 3043 118 East 2nd Ave. 1015 South 6th St. Meridan Route Box 200 602 S. Howard St. 1605 East 16th St. 404 East 18th St. 1915 East 15th 1712 Capital Ave. 1808 East 19th

Cheyenne, Wyo. Cheyenne, Wyo. Laramie, Wyo. Cheyenne, Wyo.

Cambridge, Mass. Pine Bluffs, Wyo. Cheyenne, Wyo. Denver, Colo. Rawlins, Wyo. Cheyenne, Wyo. Osage, Wyo. Bushnell, Nebr. Cheyenne, Wyo. Lancaster, Calif. Cheyenne, Wyo. Ft. Collins, Colo. Cheyenne, Wyo. Cheyenne, Wyo. Cheyenne, Wyo. Laramie, Wyo. Cheyenne, Wyo. Kimball, Nebr. Cheyenne, Wyo. Cheyenne, Wyo. Cheyenne, Wyo. Cheyenne, Wyo. Cheyenne, Wyo.

Fremont Chapter Members

Adams, Jim Ball, Mrs. Ronald W. Breece, Mrs. Edward Brownell, Sam Campbell, Don W. Cook, Albert C. Iverson, Mrs. Lorene Garber, Jos. D. Geslin, Mr. & Mrs. Howard Groves, Clarice Hawkins, Ora Holt, Even Insberg, Richard & Judy Johnson, Mr. & Mrs. Kenneth Lembke, R. & Mrs. Carl Lookingbill, Helen Mann, LaVerda Martinson, Mr. & Mrs. Kenn Milburn, Kenneth Miller, Geneva

175 Wood AA Ranch 291 Cascade 219 Custer Riverview Route c/o Dry Creek Ranch Gas Hills *Route, 4003 Fort Washakie 715 N. 2nd West 269 Eugene 266 Washington

685 West Lane 1208 East Washington Ave. Riverton, Wyo. 111 East Park 786 North 3rd St. 653 Park P.O. Box 212

Lander, Wyo. Big Piney, Wyo. Lander, Wyo. Lander, Wyo. Riverton, Wyo. Burris, Wyo. Riverton, Wyo. Ft. Washakie, Wyo. Riverton, Wyo. Lander, Wyo. Lander, Wyo. Ft. Washakie, Wyo. Riverton, Wyo. Lander, Wyo. Riverton, Wyo. Lander, Wyo. Lander, Wyo. Lander, Wyo. Ft. Washakie, Wyo.

P.O. Box 326

Fremont Chapter Members (Continued)

Miller, Mr. & Mrs. Norman	
Morgan, Irene	
Ribble, Mr. & Mrs. Norbert	G.
St. John, Mr. & Mrs. Jim	
Sable, Mr. & Mrs. Jim	
Scoggans, Mr. & Mrs. Ted	
Sorensen, Mr. & Mrs. Neils	
Stratton, Fred, Jr.	
Wheeler, Dale (Breezy)	

110	Fairview Drive
245	Washington
362	Popo Agie St.
285	North 8th
721	South Second
735	Cliff
Mort	iner Lane
Rive	erview Route
245	Custer

Riverton, Wyo.
Lander, Wyo.
Lander, Wyo.
Lander, Wyo.
Lander, Wyo.
Lander, Wyo.
Riverton, Wyo.
Lander, Wyo.

Northern Big Horn Basin Chapter Members

Burns,	Mr.	& M	rs.	Bob	
Edgar,	Mr.	& M	rs.	Bob	
Hansen	, Mr.	. &	Mrs.	Mil.	ford
Nelson	, Wal	lter	& F	Raymo:	nd
Slaught	erba	ack,	Cha	ırles	R.
Stevens	s, Mi	. &	Mrs	s. Ve	rne
Tyre11	, Mr.	&	Mrs.	Joe	
Weimer	, Rut	у			

P.O. Box 1173 Whitney Gallery W. Art 945 Nevada Ave. Route #2

Box 559 156 East 6th Cody, Wyoming
Cody, Wyoming
Lovell, Wyo.
Cody, Wyoming
Byron, Wyoming
Cody, Wyoming
Lovell, Wyoming
Belfry, Mont.

Sheridan Chapter Members

Bentzen, Dr. R. C.
Brock, Mr. & Mrs. Don
Byron, Elsa Spear
Carbone, Mr. & Mrs. Gerald
Carlson, Elizabeth Anne
Colkett, Mr. & Mrs. Tristam
Daniels, Ivan
Davis, Rev. Leo E.
Deininger, Anita W.
Eckerson, Don
Flesher, Virgil H.
Frison, R. E.
Fry, Mr. & Mrs. Gary R.
Eads, Mrs. Grace
Galloway, Eugene
Goodwater, Albert
Goodwin, Mr. & Mrs. James
Hamilton, Mrs. Pat
Heaton, Glenn
Hilman, Mrs. Fred
Hilman, Mr. & Mrs. Zane
Hoffman, Carl C., M.D.
Klieber, Mr. & Mrs. Hans
Kuzma, John and Mrs.
LaToush, Louis W. & Mrs.
Lupton, Mr. & Mrs. Ned

Box 109 Buffalo * Route 845 Sumner St. 1036 South Main 1510 S.E.46th St. n C. T - T Ranch P.O. Box 206 850 Gladstone 266 East Bennett St. 100 Rice Ave. 577 North Burritt Box 60, Route 2 911 Emerson St. 338 West Holland P.O. Box 94 Route 1 Route 1 Route 1 V. A. Hospital 379 W. Works St. 329 Carrington St.

Umpqua, Oregon Sheridan, Wyo. Sheridan, Wyo. Sheridan, Wyo. Lacey, Wash. Sheridan, Wyo. Dayton, Wyo. Sheridan, Wyo. Buffalo, Wyo. Big Horn, Wyo. Sheridan, Wyo. Buffalo, Wyo. Sheridan, Wyo. Sheridan, Wyo. Buffalo, Wyo. Dayton, Wyoming Sheridan, Wyo. Parkman, Wyo. Sheridan, Wyo. Big Horn, Wyo. Sheridan, Wyo. Sheridan, Wyo. Dayton, Wyoming Sheridan, Wyo. Dayton, Wyoming Sheridan, Wyo.

Sheridan Chapter Members (Continued)

Nelson, Mr. & Mrs. Harry
Nelson, Otto
Powers, Mrs. Margaret
Ramsbottom, Lyle D.
Reed, Harry
Smedley, Sherwood P.
Stevens, Mrs. H. C.
Warner, Mr. & Mrs. O. R.
White, Mrs. Clara
Wolfe, Margaret E.
Woods, Mr. & Mrs. Clifton
Worden, Mrs. Helen
Yost, Mrs. Charles
Zahradnicek, E. A.

17 North Badger St.

1624 So. Thurmond Meadow Brook Ranch Box 119 Route #1 237 Coffeen Ave. Route 2 P.O. Box 58

704 Gladstone

Box 55, Route #2

Sheridan, Wyo.
Jackson, Wyo.
Sheridan, Wyo.
Buffalo, Wyo.
Ranchester, Wyo.
Sheridan, Wyo.
Sheridan, Wyo.
Sheridan, Wyo.
Big Horn, Wyo.
Wolf, Wyoming
Sheridan, Wyo.
Clearmont, Wyo.
Tensleep, Wyo.
Sheridan, Wyo.

Sweetwater Chapter Members

Armstrong, Ralph J.
Bozovich, Joe
Delling, Mr. & Mrs. D.R.
Evans, Lillian S.
Graves, Mr. & Mrs. Leon
Hansink, James D.
Krmpotich, Jack
Larson, Mr. & Mrs. R. L.
St. John, Markley & Myrtle
Strain, Jack F.
Tolar, Mr. & Mrs. Matt
Vase, Chris
Weber, Maybelle
Willoughby, Franklin

P.O. Box 12 811 Ridge Ave. P.O. Box 442 P.O. Box 864 P.O. Box 381 118 Topaz St. 1226 Clark St. 1005 Wyoming Ave. P.O. Box 191 1910 Coral St. 815 Rugby Ave. 214 Virginia St. 216 Liberty St. 1028 Sixth St.

Opal, Wyoming
Rock Springs, Wyo.
Green River, Wyo.
Rock Springs, Wyo.

Associate Members

Barlow, William
Bruner, C. L.
Eddy, Mrs. Deborah
Hagerman, William D.
Kennedy, Donald
Mann, Mrs. John
Nash, Mrs. Don A.
Parsons, Mr. Orville
Perkins, Mr. C. P.
Poage, Bill
Robinson, Robert
Sand, William A.
Thorby, Miss Jean A.
Visborg, Mrs. Al T.
VonHoldt, Richard

Box D-419, Barlow Rte. 627 - 20 Road 277 Cedar St.

432 W. Works St. 1105 S. Douglas Ave. 3625 Garden Creek Road 406 Buckeye Gas Hills Sta., Box 5067

221 Kelsey Ave. 146 North Burritt Ave. 2180 St. Francis Drive Forks Ranch Gas Hills Rte., Box 4040 Gillette, Wyo.
Grand Junction, Colo.
Newington, Conn.
Upton, Wyo.
Sheridan, Wyo.
Urbana, Ill.
Casper, Wyoming
Ft. Collins, Colo.
Riverton, Wyoming
Torrington, Wyoming
Salt Lake City, Utah
Buffalo, Wyo.
Ann Arbor, Mich.
Decker, Montana
Riverton, Wyo.

Honorary Members

Wyoming State Archives & Historical Department Agogino, Dr. George A. Hays, Irving, Mrs. & Leonard Hilman, Fred Kehoe, Thomas F. Medicine Crow, Joe Mulloy, Dr. William T. McConnell, H. N. McCracken, Dr. Harold Shakespear, William

State Office Bldg. E. New Mexico Univ. 121 East Walnut

Nebr. State Hist. Museum

University of Wyoming 2151 Arapahoe P.O. Box 1029

Cheyenne, Wyo, Portales, N. Mex. Rawlins, Wyoming Big Horn, Wyo. Lincoln, Nebr. Lodgegrass, Mont. Laramie, Wyo. Boulder, Colo. Cody, Wyoming Arapaho, Wyo.

State Memberships

American Mus. Nat'l History Beebe, Mrs. Ruth Bergstrom, Spec. 4 Bruce W. Boese, Mildred M. Carnegie Public Library Connor, S. W. Colorado Arch. Soceity

Denver Public Library Earl Gregg Swem. Library Grosscup, Gordon L. Kerr, Jean Kinder, Donald A. Kinnan, Mr. & Mrs. A.B. Library, Periodicals Dept. Los Angeles Pub. Library Milk River Archae. Society Montana Historical Society Peabody Museum Library Randall, A. G. Ritter, Dale W., M. D. Rock Springs Gem & Mineral Shovlain, Georgia Smead, Mrs. Burton A. General Library Univ. Wyoming Library Washington State Univ. Library Serial Record Section Weber, T. J. Woodley, W. W. Wormington, H. M. Wyoming State Library

Central Park W. 79th Casper Route via Lander HQ & HQ Co. (6006-00) 176 South Sherman St. 300 Blair St. 805 Midland Bank Bldg. Denver Chapter 12347 W. Arizona Ave. 1357 Broadway College William & Mary Wayne State Univ. P.O. Box 258 405 Pearl P.O. Box 394 University of Alberta 630 West 5th St. P.O. Box 929 Roberts at 6th Ave. Harvard University 8326 Edgemoor Drive 6 Cohasset Circle 408 B Street Sheridan Cy. Pub. Library Sheridan, Wyo. 1281 South Downing St. University of Calif. Box 3334 Univ. Stateion P.O. Box 1320 3934 South Acoma Denver Mus. Nat'l History Denver, Colo. Supreme Court Bldg.

New York, N. Y. Rawlins, Wyo. Ft. Lewis, Wash. Denver, Colo. Rock Springs, Wyo. Billings, Mont. Denver, Colo.

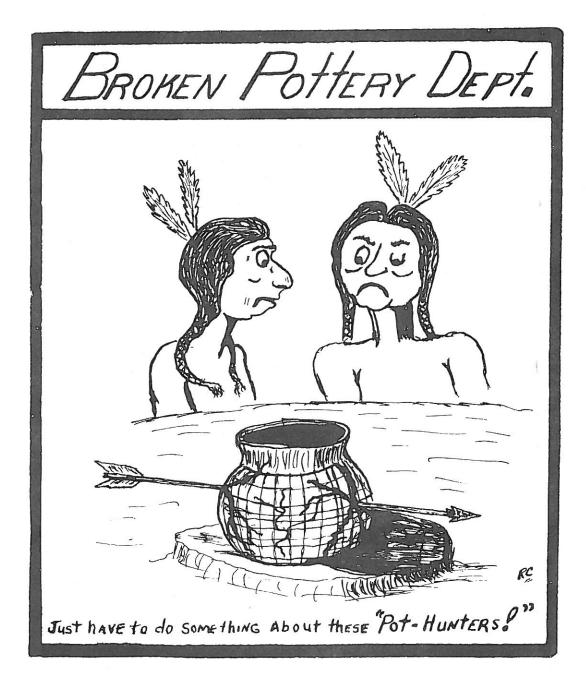
Denver, Colo. Williamsburg, Va. Detroit, Mich. Mill Valley, Calif. Kemmerer, Wyo. Cody, Wyoming Calgary, A., Can. Los Agneles, Calif. Havre, Montana Helena, Mont. Cambridge, Mass. Houston, Tex. Chico, Calif. Rock Springs, Wyo. Denver, Colo. Berkeley, Calif. Laramie, Wyoming Pullman, Wash. Boulder, Colo. Englewood, Colo. Cheyenne, Wyoming

Exchange Members

Archaeology in Montana
Arkansas Arch. Society
Fay, Dr. George
Iowa Archaeo. Society
Oregon Archae. Society
Saskatchewan Arch. Newsletter
University S. Dakota
Utah Archaeology

Montana State Univ.
Univ. Arkansas Museum
Colorado State College
Effigy Mounds Nat'l Mon.
1955 West 23rd Ave.
Museum of Natural Hist.
South Dakota Museum
University of Utah

Missoula, Mont.
Fayetteville, Ark.
Greeley, Colo.
McGregor, Iowa
Eugene, Oregon
Regina, Sas., Can.
Vermillion, S. Dak.
Salt Lake City, Utah



PUBLICATIONS OF THE WYOMING ARCHAEOLOGICAL SOCIETY AVAILABLE JANUARY 1, 1967

THE SMOKE SIGNAL	Vol. 1, No. 1 2 3 4 5 6 8 9 Vol. II, No. 2	March 1958 April 1958 May 1958 June 1958 July 1958 Sept. 1958 Nov. 1958 Dec. 1958 March 1959	\$.45 .25 .25 .45 .60 .25 .25 .60
THE WYOMING	voi. 11, no. 2	Halen 1939	1.30
ARCHAEOLOGIST	Vol. II, No. 3&4 6	1959 July 1959	1.50 .75
	7	Aug. 1959	1.50
	8	Sept. 1959	.90
	10	Nov. 1959	1.50
	11	Dec. 1959	1.25
	Vol. III No. 1	Jan. 1960	1.00
	2	Feb. 1960	1.50
	4	April 1960	.75
	5 6	May 1960 June 1960	.75
	7	July 1960	1.00
	8&9	Sept. 1960	.75 1.00
	10	Oct. 1960	.75
	11&12	Dec. 1960	.75
	Vol. IV, No. 1&2	Feb. 1961	1.00
	3	March 1961	1.00
	5	May 1961	1.00
	7	July 1961	1.00
	9	Sept. 1961	1.00
	10	Oct. 1961	1.00
	11	Nov. 1961	1.00
	12	Dec. 1961	1.00
	Vol. V, No. 1	Jan. 1962	1.00
	1	March 1962	1.00
	2	June 1962	1.00
	4	Dec. 1962	1.00
	Vol. VI, No. 2	June 1963	1.00
	3	Sept. 1963	1.00
	Vol. VII, No. 1	Winter 1963	1.00
	Vol. VII, No. 1 2	Spring 1964	1.50
	4	Summer 1964 Winter 1964	1.50
	Vol. VIII No. 1	Spring 1965	1.50
	2	Summer 1965	1.50
	3&	Fall &	1.50
	4	Winter 1965	3.00
	Vol. IX, No. 1	March 1966	1.50
	2	July 1966	1.50
	3	Sept. 1966	1.50
	4	Dec. 1966	1.50
			2.50