# THE WYOMING ARCHAEOLOGIST

**VOLUME III**

April, 1960

**NUMBER IV**

## TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>CASPER CHAPTER WILL OPEN FIRST DIG IN MAY</td>
<td>a</td>
</tr>
<tr>
<td>NEW CHAPTER INSTALLED AT CODY</td>
<td>1</td>
</tr>
<tr>
<td>PALESTINE'S OLDEST LETTER</td>
<td>1</td>
</tr>
<tr>
<td>OLDEST CIVILIZATION SOUGHT</td>
<td>1</td>
</tr>
<tr>
<td>SOCIETY AWARD SCHOLARSHIP</td>
<td>3</td>
</tr>
<tr>
<td>POSSIBLE ABBAITOIR FOUND</td>
<td>3</td>
</tr>
<tr>
<td>SKETCHING ARTIFACTS</td>
<td>3</td>
</tr>
<tr>
<td>AVAILABLE REFERENCE LITERATURE</td>
<td>5</td>
</tr>
<tr>
<td>WANTED: POTS AND GRAVES</td>
<td>10</td>
</tr>
<tr>
<td>OVER THE CAMPFIRE</td>
<td>10</td>
</tr>
</tbody>
</table>
The Casper Chapter plans to open its first dig on May 7th at the Lee Site west of Midwest. The dig is expected to last most of the summer, and to provide plenty of fun and information to all those who attend.

All persons interested should write immediately to Art Randall at 1440 W. 29th, Casper, Wyoming. It is important that all those who are interested contact Art immediately and state when they plan to attend and how long they plan to stay, in order that the work at the site can be planned ahead.

The site has already been described to the readers, and it is expected from its surface aspects that the site will yield a wealth of information about Late and Middle Period archaeology in this area, and quite possible the Early Period as well. The volume of the site is large, and many hands can be kept busy for some time.

NEW CHAPTER INSTALLED AT CODY

Don Grey, Bob Brown, Glenn Sweem and Ray Bentzen installed a new chapter at Cody during April. The chapter has about twenty-five paid-up members at the present time. Mrs. Pat Neely acted as chairwoman pro-tem until a subsequent meeting could be held for the election of regular officers. At the time this issue went to press, no slate of regular officers had been received.

The wealth of sites in the Cody area, many of them of great importance in the history of the Early Period, makes it likely that some very important work can grow out of the new organization. As long as that work is kept on the highest of professional standards, it will certainly be a point of pride for the Wyoming Archaeological Society. It is hoped that a first dig can be organized for this fall with some experienced directors from the Casper or Sheridan chapters helping to get things started.

PALESTINE'S OLDEST LETTER

During recent excavations of an ancient fort about eight miles south of Tel Aviv, Israeli scholars uncovered an important find in the form of a letter written by a simple farmer to a governing prince, asking redress in the matter of a stolen or confiscated cloak. The letter is written on potsherds, as was often the case in those times, when parchment was expensive and paper was almost unknown except to the wasps.

The fragments of the sherd on which the letter was written were found some six inches below the surface of the dirt in one of the guard rooms of the fort. A number of other potsherds were found in the same area.

Details of the writing, when examined by experts, indicate that the letter was written in the second half of the seventh century B.C. If the dating of the letter is correct, it is the oldest yet found in Palestine.

It is quite possible that the cloak was confiscated for lack of payment of some debt owed by the farmer, since this was a common practice of the times. Exodus 22 cites the Mosaic Law as opposing this general practice.

OLDEST CIVILIZATION SOUGHT

The term civilization literally means city-building, and the most
ancient of the city-builders were evidently the Sumerians, as far as anyone knew until recently. Their cities flourished in the valleys of southern Mesopotamia around 3000 B.C. Their famous city of Ur was a tremendous trading center for the entire area.

Archaeologists have long puzzled over the origins of the Sumerians. There were many suggestions in their legends of an origin which was other than Mesopotamian. These legends spoke of a place called Dilmun from which they had come to build their cities and establish trade in the lands bordering the Persian Gulf. Dilmun, according to the legends, was the dwelling place of Ziusudra, the sole survivor of the Flood (the legend of the Flood, as well as much of the other material of Genesis, is borrowed from these people).

Evidently Dilmun served as a clearing center for trade between Ur and the civilizations of the Indus Valley in Pakistan. In both Ur and the Indus Valley have been found similar items of trade, including some peculiar disk-shaped stone seals. These seals were different from the cylindrical Mesopotamian seals, and from the square Indus seals. Archaeologists wondered if the disk-seals were not from Dilmun.

Dilmun vanished centuries ago except for the persistent legends among the Sumerians. Tales of rich trade, involving copper, gold, ivory and woollen goods from Dilmun made it seem likely that the place must have been a thriving shipping center. One story related that Dilmun lay on an island some three days' sail down the Persian Gulf.

Just after World War II, a young Englishman was visiting the oil-rich island of Bahrein in the Persian Gulf and was struck by the vast cemetery on the north end of the island. Around a hundred thousand burial mounds were visible. Under each of these was a T-shaped stone chamber, containing the remains of a single person.

The young Englishman, Geoffrey Bibby, was taken away from the island by his business before he could investigate, but the cemetery had excited his imagination, and he longed to return. His chance came when he worked his way up to the post of director of oriental antiquities in a Danish museum. He promoted some funds and returned to Bahrein.

In 1953, the first systematic investigation of the island started. Investigation of the burial chambers revealed that most of them had been looted, but some still contained a few gold and ivory relics. After excavating a few of the burial chambers, attention was turned to the search for the city. A long mound (200 feet long, 1200 feet wide, and 10 feet high) on the north end of the island, was the logical starting point, and an exploratory trench was begun.

Layer after layer of prehistory unfolded before the diggers. Done with extreme care, the work occupied several years, and is just getting a good start. The mound contained a stone-built city of perhaps 10,000 inhabitants. Ash layers showed that the city had been burned at least once. The next city had a strong stone wall around it for protection. Interestingly, some 250 of the discoidal seals were found. Since these may have been imported, the finds were only suggestive, not conclusive.

In the summer of 1959, the most exciting find of all occurred. A stone-carver's workshop was excavated, and among the chips and fragments was found one of the disk seals, unfinished and broken. The round seals were now known to have originated on Bahrein, and it seemed quite possible that the city was the long-lost Dilmun.
Before the dig is finished, it is possible that it may be established that these were the ancestors of the Sumerians, and that another step backward in time toward the oldest known civilization will have been made. Dates indicate that the earlier levels of the city flourished before 2500 B.C., which makes it contemporaneous with, or earlier than, Sumerian settlements in Mesopotamia.

SOCIETY AWARDS SCHOLARSHIP

At the organization of the Cody chapter of the Wyoming Archaeological Society, Mr. Gene Smith, a high school senior, was awarded a one-hundred dollar scholarship to the University of Wyoming or one of the colleges in the state, for his outstanding amateur work in the field of archaeology. Gene is planning to major in anthropology, and we expect him to make good in it.

POSSIBLE ABBATTOIR FOUND

Tom Hampton, of Woodland Park near Sheridan, reported to Glenn Sweem that he had seen some bison skulls in the wall of a gulley on the divide between Powder River and Crazy Woman Creek. Since Bill Sand had discovered some bison occidentalis skulls at the place where the new highway was crossing Crazy Woman Creek, the report sounded interesting.

Tom, Glenn and Don Grey visited the site a couple of weeks ago and did some poking around. Three bison skulls were found in walls of different gullies in the area. One of these was at a depth of nine feet below the surface. Several other bones of the bison were present also. During the removal of the skull, several fragments of burned bison bone were found, indicating that the number of kills in the area may well have been due to human action rather than natural causes. While the site does not currently look like a possible "buffalo jump," it may have been possible that with nine feet of dirt removed from the gullies, they may have been good traps.

No artifacts were found at the site, so no estimate of the age can be made, but the bison skulls appear to be those of bison bison, and it doesn't seem likely that the kills are too old.

SKETCHING ARTIFACTS

One of the valuable techniques in recording information about archaeological materials is that of sketching stone artifacts. A good sketch is almost as good as having the original artifact, and requires a good deal less storage space. While many artifact drawings appear to be, and in some cases are, works of art, it is actually quite easy to make passable sketches in a few moments work, once a few basic ideas have been learned. This article will attempt to present some of the basic ideas, and the rest can be learned by anyone willing to spend a little time in practice.

One of the first observations to make is that any stone which is suitable for artifact production has what the geologist calls a conchoidal fracture. That is, when a chip or flake is removed from the stone, a shell-shaped scar is produced. This is illustrated below.
Notice that the scar has an initial point, A, from which lines seem to radiate, indicating the direction of the force which was applied to remove the flake, and that there are also semicircular lines which look like ripples spreading out from the point of application of the force. These ripple marks are usually much more prominent than the rays. In sketching, these ripple marks clearly indicate the direction of flake removal and should be indicated by curved lines in the drawing.

The second thing to note is the difference between a percussion flake and a pressure flake. The various features of both are sketched below. The pressure flake is usually used for finer work than the percussion flakes. The pressure flake is usually thinner, and does not have the pronounced bulb of percussion that the percussion flake has.

The third item to note in sketching artifacts is light and shadow. In making the sketch, it is the treatment of the light and shade and shadow that make the picture. It is important to assume a direction of light travel before beginning the sketch, and to be consistent in the use of the light throughout the sketch. In the sketch below, note the consistent direction of the shadows from each of the obstructions. The dark area formed on an object by its own obstruction of the light is called a shade, while the dark area formed on a second object by the first is called a shadow.

To begin the actual sketch of an artifact, first draw an outline of the object. If the object is to be sketched in actual size, this may be done by simply laying the object on the paper and drawing the outline around the object. While this may not be an artistic approach, it does get quick results. This is step A below.

In the second step, look closely at the artifact and draw the outlines of the flake scars in their approximate size and positions on the outline. Most of these will be partial or complete U-shaped outlines with the open side on the edge of the piece. The irregularities of the outline of the artifact will often tell just where to place the flake-scar outlines. Pay particular attention to the order of flaking. Where one flake scar cuts across or into another, there is clear evidence of this in the intersection of the outlines. The order of flaking tells a great deal about the method of manufacture. The illustrations below show some examples of the order of flaking as shown by the flake outlines. The sketching of the flake scars constitutes step B.
With the flake scars sketched, the next step is to jot in a few ripple marks to show clearly the direction of flaking. The curvature of these ripple marks also serves to indicate the depth of the flake scar. Just imagine the surface of the artifact as it lies between the outlines of the flake scars, and sketch the ripple marks so they appear to lie on this surface. This is step C.

Finally, shade and shadow the area, keeping in mind a direction for the light, so as to produce an illusion of depth in the picture. This is the final step D. Notice that a surface which faces directly toward the light source will be unshaded, while one on the opposite side of the artifact may be completely shaded. Others may be only partially shaded. As surfaces curve away from the light source, they become more darkly shaded. Use strokes along the imagined surface in doing shading and shadows.

With these ideas, and perhaps a few sketches from articles on archaeology at hand, try your hand at sketching. With a little careful practice and attention to detail, you'll find that some surprisingly good sketches can be formed with just a few minutes time.

AVAILABLE REFERENCE LITERATURE

The following is a partial list of reference materials available in Sheridan to members of the Society. Those marked (G) belong to Don Grey, while those with no mark are Society property in the Sheridan College Library. Members living near Sheridan need only show their membership cards to check out materials. Those living at some distance may obtain the materials through the mail by writing to Don Grey in care of the College and by paying the round-trip postage.

Periodical Material

American Antiquity: Volume XXII, Numbers 1, 2a, 2b, 3, 4a, 4b. (Subscription)
Volume XXIV, Numbers 1, 2, 4a, 4b.
Volume XXV, Numbers 1, 3
Southwestern Lore: Volume XXV, Numbers 1, 2 (Subscription)
Archaeology in Montana: Volume I Numbers 1, 2 (Subscription)
Plains Archaeological Conference Newsletter: Volumes 1, 2, 5, 6, Index.
Plains Anthropologist: Numbers 1, 2, 3, 4, 5, 6, 7, 8.
River Basin Surveys Papers: 1-6, 7 (G), 8, 9-11.
Missouri Archaeologist: Vol. 11, Nos. 3, 4; Vol. 18, Nos. 1, 2.
Annual reports of the Smithsonian Institution (Subscription): Numbers 1936, 1954, 55, 56, 57, 58.
Newsletter of the Arkansas Archaeological Society (Subs.): Volume 1, Nos. 1, 2, 3.
Archaeological Progress Reports of the River Basin Surveys: Numbers 2 (G), 3 (G), 4 (G).
Ohio Archaeologist, Vol. 6, No. 3
Natural History, Vol. 68, No. 1
Eastern States Archaeological Federation, Bulletin 15, Jan. 1956
Reports on Indian Legislation by the Bureau of Indian Affairs: 1954-1959 (G).
Inter-Agency Archaeological Salvage Program: 5 reports (G).

Technical Data

Post-Cranial Skeletal Characters of Deer, Pronghorn, and Sheep-Goat, with Notes on Bos and Bison, Lawrence (G).

Cigar-Box Dioramas, Neat (G)

The Archaeologist's Problem of Getting Non-Artifactual Materials Interpreted, Olsen (Article reprint) (G).

The Carbon-14 Method of Age Determination, Roberts

Tree Rings and History in the Western United States, Schulman (G).

Dating Prehistoric Ruins by Tree Rings, Stallings

A Method for Calculating the Dietary Percentage of Various Food Animals Utilized by Aboriginal Peoples, White (G)

Observations on the Butchering Technique of Some Aboriginal Peoples, White (G)

Suggestions for Facilitating the Identification of Animal Bone from Archaeological Sites, White (G)

The Study of Osteological Materials in the Plains, White (G)
The Technic of Collecting Osteological Materials, White (G)

Summary Report on the Missouri River Basin Paleontological Survey in 1947, White (G)

Missouri Basin Chronology Program, Statement No. 2. (G)

**Physical Anthropology**

Adventures with the Missing Link, Dart (G)

Diseases of and Artifacts on Skulls and Bones from Kodiak Island, Hrdlicka (G)

Ear Exostoses, Hrdlicka (G)

Hypotrochanteric Fossa of the Femur, Hrdlicka (G)

Physical Anthropology of the Lenape or Delaware and of the Eastern Tribes in General, Hrdlicka (G)

Ritual Ablation of Front Teeth in Siberia and America, Hrdlicka (G)

Tuberculosis Among Certain Indian Tribes, Hrdlicka (G)

A Guide to the Study of Human Osteological Material, Krogman (G)

Some Observations of the Functional Organization of the Human Brain, Penfield (G)

The Evolution of the Human Pelvis in Relation to the Mechanics of Erect Posture, Reynolds (G)

Man and the Vertebrates, Vols. I and II, Romer (G)

Recent Advances in the Study and Techniques of Anatomy, Roege and Lesher (G)

A Reexamination of the Fossil Human Skeletal Remains from Melbourne, Florida, by Stewart (G).

**ARCHAEOLOGY, FOREIGN**

The Archaeology of Palestine, Albright (G)

The Prehistory of European Society, Childe (G)

The Prehistory of East Africa, Cole (G)

Archaeological Work in Arctic Canada, Collins (G)

The Origin and Antiquity of the Eskima, Collins (G)

The Pyramids of Egypt, Edwards (G)

Archaeological Investigations in the Corozal District of British Honduras, Cann (Sween)

The Hittites, Courny (G)
Kinreizuka—The Golden Bells Tomb of Japan, Hirano and Takiguchi, (G)
Foundations in the Dust, Lloyd (G)
The Ancient Civilizations of Peru, Mason (G)
Archaeological Investigations at the Mouth of the Amazon, Meggers and Evans
An Introduction to the Study of Maya Hieroglyphs, Morley (G)
Excavations at the Prehistoric Rock-Shelter of la Colombière, Movius (G)
The Etruscans, Pallottino (G)
The North Alaskan Eskimo: a Study in Ecology and Society, Spencer
The Problem of Dating the Dead Sea Scrolls, Trever (G)
The Aztecs of Mexico, Vaillant (G)
Archaeology from the Earth, Wheeler
Digging up the Past, Woolley

Archaeology, United States

Archaeological Methods, Cressman (G)
Archaeological Survey on the Northern Northwest Coast, Drucker
Excavations at La Venta Tabasco, Drucker, Heizer, Squier
Aboriginal Wooden Objects from Southern Florida, Fawkes (G)
The Petroglyphs of Dimwood, Wyoming, Gebhard and Cahn
Additional Information on the Folsom Complex, Roberts (Prison)
Archaeological and Geographical Investigations in the San Jon District, Eastern New Mexico: Roberts (Prison)
An Introduction to Kansas Archaeology, Wedel
Ancient Man in North America, Worthington (G)
Archaeological Investigations on the Uconcaphre Plateau, Worthington (G)
Prehistoric Indians of the Southwest, Worthington (G)
Reappraisal of the Fremont Culture, Worthington (G)

Field Reports from the Plains Conference for Archaeology

Fort Randall Reservoir Reconnaissance, 1953; Cummings (G)
Investigations at Tuttle Creek Dam, Kansas; Cummings (G)
Field Work of the University of Nebraska State Museum, 1953; Davis (G)
Recent Pre-Ceramic Archaeological Developments in Western Iowa; Frankforter and Agogino (G)
The Logan Creek Complex; Kivett (G)
Thomas Riggs Focus; Additional Data; McNutt (G)
Time Perspective Within the Coalescent Complex; Smith (G)
Southwest Pottery and Other Observations; Whiting (G)
Appraisal of the Archaeological Resources of the Dardanelle Reservoir, 1957; (G)
The Fort Thompson Focus (G)
The Paul Brave and Tony Glass Sites (G)
The Mill Creek Archaeological Manifestations (G)
The Shannon Focus (G)
The Rygh Focus (G)
General Anthropology

Primitive Art, Adam (G)
General Anthropology, Jacobs and Stern (G)
Introductory Sociology, Sutherland and Woodward (G)

Ethnology, Recent

Guaymi Grammar and Dictionary; Alphonse
Cherán, a Sierra Tarascan Village; Beals (G)
Burial Modes of Tribes West of the Mississippi; Bushnell
Indians of the Americas; Collier
Analytical and Critical Bibliography of the Tribes of Tierra Del Fuego and
Adjacent Territory; Cooper
Music of the Acoma, Isleta, Cochiti, and Zuni; Densmore
Papago Music; Densmore
Seminoles; Densmore
The Native Brotherhoods; Drucker
The Northern and Central Nootkan Tribes; Drucker
Primitive Manners and Customs; Farrer
Symposium on Local Diversity in Iroquois Culture; Fenton
Sierra Popoluca Speech; Foster and Foster
Arapahoe Child Life and Its Background; Hilger
The Tajín Totonic; Kelly and Palerm
The Story of a Tlingit Community; de Laguna
The Miracle of Language; Laird (G)
Coming of Age in Samoa; Mead (G)
Contributions to Fox Ethnology; Michelson
The Ryukyu Peoples--A Cultural Appraisal; Newman (G)
Index to Schoolcraft's "Indian Tribes of the United States," Nichols
Indian Tribes of the Northern Mato Grosso, Brazil; Oberg
The Terena and the Caduveo of Southern Mato Grosso; Oberg
The Dineh: Origin Myths of the Navaho Indians; O'Bryan
Universal Indian Sign Language; Tomkins (G)
Index to Handbook of South American Indians

Ethnohistory and History

Journal of an Expedition to the Hauvais Terres and the Upper Missouri;
Culbertson
Compendio y Descripción de las Indias Occidentales; Antonio Vasques de Espinosa
(G)
How Archaeological Investigations Have Affected our Historical Knowledge;
Stephenson (G)
Indian Tribes of the Lower Mississippi Valley and Adjacent Coast of the Gulf of
Mexico; Swanton (G)
The Winelands Voyages; Swanton (G)
Two Runic Stones, from Greenland and Minnesota; Thalbitzer (G)
Archaeological Remains in Central Kansas and their Possible Bearing on the
Location of Quivira; Wedel (G)
The Direct-Historical Approach in Pawnee Archaeology; Wedel (G)
Archaeology of Colonial Williamsburg; Wertzenbaker (G)
Dried Meat, Early Man's Travel Ration; (G)
Early Historic Sites of the Missouri Basin and Adjacent Areas (Map) (G)
Indians of the Northwestern Plains, Museum of the Plains Indian, Information
Letter # 4
Annual Reports of the Bureau of Ethnology, Nos. 13, 15 (G)
Selected References in Historical Archaeology

National Monument Papers

Aztec Ruins
Bandelier
Casa Grande
Canyon de Chelly
Chaco Canyon
Effigy Mounds
Mesa Verde
Montezuma Castle

Mound City Group
Ocmulgee
Pipestone
Sitka
Tonto
Tuzigoot
Walnut Canyon
Wupatki

WANTED: POTS AND GRAVES

The pottery situation in Wyoming doesn't appear to be very complicated, but very little is known about it. Only the "Shoshone" appears to be native, although some Fremont and Promontory types may appear in peripheral regions. Any other types appear to be imports by hunting or transitional groups.

Eugene Galloway, senior student in anthropology at the University of Wyoming and a member of W.A.S., is attempting to build a pottery reference library for the state. The library would eventually become the property of W.A.S. when complete. Eugene asks that W.A.S. members who have or know of pottery fragments found in Wyoming or adjacent areas contact him. If possible, the fragments could be donated to the reference collection permanently, but if the owner is unwilling to part with them on a permanent basis, Eugene would like to see them and get them into the catalog. Complete information on the location of the find insofar as it is known, the finder, and the date of finding should accompany each specimen.

Eugene is also interested in making studies of human skeletal material recovered in Wyoming, and any cultural materials which may have been found with it. If you know of any such material which Eugene might study (he will travel to the collection when possible), he would greatly appreciate the information.

Many collections of material must have valuable information to offer if they can be cataloged, and if Eugene is willing to undertake the task, W.A.S. members will certainly give him a hand. His address is:

Eugene Galloway
312 So. 10th
Laramie, Wyoming

or in the summer time usually just Buffalo, Wyoming will eventually catch him.

OVER THE CAMPFIRE

Secretary Bob Brown has written that the organization of the Cheyenne chapter of the Archaeological Society has been postponed until the fall.

Bob says that Casper has some 65 members, Sheridan 72 and Cody 33 at the time of writing. Sounds as if the Society is going places. Let's hope we can keep growing in quality of work as well as membership.
Mr. Richard Forbis of the Glenbow Foundation has donated ten dollars toward the production of the forthcoming memoir, which, by the way, is nearing publication date.

Art Randall and Don Grey, in discussing the problem of financing the memoir have come up with an idea, namely, writing reports on each dig and publishing them as single reports as soon as the material is ready, and then combining these single reports into a memoir at intervals when sufficient material accumulates. In this way, the cost of production is spread out over a time of a few years rather than falling all at one time. The individual reports would be sold at cost to members, or might be used to take the place of the major portion of the monthly Wyoming Archaeologist. Some of the reports would have to occupy parts of several issues because of their length.

A one-hundred dollar scholarship to the University of Wyoming, or one of the colleges in the state, was awarded by the Wyoming Archaeological Society to Gene Smith of Cody for his outstanding work as an amateur archaeologist. Gene is going to major in anthropology. A scholarship fund has been set up and contributions are welcome. It is hoped that the Society may be able to furnish scholarships to deserving students in the anthropological fields from time to time as the fund permits. Art Randall and Don Grey have each contributed ten dollars to the fund as of this writing. Dr. Humphrey, President of the University of Wyoming, has written a letter praising the Society for its award, and adds that it is the first scholarship offered at the University for work in the field of anthropology.

Polish the rust off those trowels and tape measures, and get ready folks, the season is almost here. Casper is opening the Lee site on May 7, and Sheridan is returning to the field of last year's operations on July 15. A big batch of record forms has been run off, so that everything can be recorded to the finest detail. The paper work may not be as much fun as the digging in the summer time, but when a finished report is at hand, with all the details set forth in compact form, the studies complete and the dates in place, it gives a view of ancient man that no shovel work will ever tell. Reserve some time for the field work, and prepare to lend a hand. There's a lot of dirt to be brushed away in Wyoming.

EMBERS OUT