

WYOMING
ARCHAEOLOGICAL
SOCIETY

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EDITOR'S NOTES

Seems that we need more clarification on photographs to be published in the Archaeologist. We cannot use colored photographs or slide sized negatives. We must have a black and white glossy photo approximately 4" x 5" or 5" x 7" . If we can get the 4" x 5" size then two pictures with captions will fit on the 8 1/2" x 11" page, and we should have an even number. The larger 5" x 7" will have to be mounted sideways on a single page.

Before you snap the picture be sure that cardboard boxes, water jugs and tools are out of sight and that backfill piles are three feet back from grid. A painted scale should be evident in most pictures, and even grass roots should not show. Captions should be penciled on the back of each photo and written carefully so as to orient any observer.

Descriptions of artifacts needs much standardization of terms. Features such as a hearth, is either lined, unlined or rock filled and should not be a "fine pot" or "pit". We, amateurs, tend to be overwhelmed with point typology, but there are many worse sins, and only by trying and observing can we learn.

It seems that the December Membership List somehow failed to include Casper Chapter -- you know -- those people always wanting to move the state Capitol complex!

PRESIDENT'S LETTER

Dear Fellow Member:

The annual state meeting of the Wyoming Archaeological Society will be held in Casper at 9:30 A. M., on Saturday, April 3rd, at the Holiday Inn. As is our custom, an informed business meeting open to all members will be held on Friday night, April 2nd, at 8:00 P. M. This meeting will also be held at the Holiday Inn. You can inquire at the desk for the room locations.

The main meeting on Saturday will include the regular business of the Society and election of officers, plus papers on archaeological subjects. We will hold a banquet on Saturday evening, and our guest speaker will be Dr. Leslie Davis of Montana State University.

Would chapter presidents please see that the chapter's voting delegates have a letter of certification, as these must be submitted to the credentials committee.

An organization meeting of the Wyoming Archaeological Foundation will be held on Sunday morning, April 4th, at 9:00 A. M., also at the Holiday Inn. Mr. Lou Steege, your secretary, has written to all chapters requesting that each chapter choose representatives to serve on the Foundation Board of Directors.

We hope to have a state meeting equal to those of the past, and we urge all of you to attend. Don't forget to bring any artifacts that you may wish to display. See you in Casper!

Best Wishes

John Albanese

CHAPTER NEWS

FLINTSTONE CHAPTER - FREMONT COUNTY

The following is a list of officers elected to serve Fremont County Chapter of the Wyoming Archaeological Society for 1971:

President:	Myron Lembke
Vice-President:	Jim Adams
Secretary:	Roberta Krassin
Treasurer:	LaVerda Mann

MEETINGS: Second Wednesday of each month, alternating between Lander and Riverton.

1970 was an interesting and very educational year for our Chapter. Throughout this year, we had some stimulating and fascinating programs. In January and February, the programs were both on bead work. Many varieties of beads were shown with a discussion on origin and usage.

Don Calhoun, representative of the BLM, gave our March program with slides on South Pass City and surrounding area. The BLM are trying to preserve this area as a historical site and use as a recreational center.

A film on the Mayan Culture was presented for the April meeting.

Clifford Merithew from Central Wyoming College presented an outstanding talk and slides on the Pueblo Indians of the southwest in May. His knowledgeable talk, mixed with humor, was thoroughly enjoyed by all.

The program in June consisted of articles made by porcupine quills and hair. Johnny Dick gave a demonstration on how to make dance costumes and head dresses.

Mr. and Mrs. Artie E. Lookingbill from Africa were special guests at the September and October meetings. Mr. Lookingbill gave an interesting program on ostrich egg shell beads made by the Africa bushmen and showed samples of these. We also had many slides of petroglyphs which are in Fremont County.

The year ended with a Christmas carry-in dinner for the families. The meal was delicious and we exchanged gifts.

Roberta Krassin
Secretary

CHAPTER NEWS

The CHEYENNE CHAPTER Activity Report for 1970:

JANUARY: Two films from the Colorado Archaeological Society were shown on "Pre-historic Man" and "Indians of the High Plains".

FEBRUARY: Paul Westedt, Director, Wyoming Recreation Commission, presented the program. His topic was "The Relationship of Archaeology to Outdoor Recreation". He said that guidelines for future developments of historic and prehistoric sites under the National Historic Preservation Act, are necessary and the Outdoor Recreation Commission needs the assistance of the Archaeological Society for these guidelines.

MARCH: Neal Miller, Director of the State Archives and Historical Department, stressed the need for good archaeological material in the museum for study and display purposes. He also emphasized the need of a modern facility designed for a museum with temperature and humidity control in which to preserve various collections. He also stated that a place was needed where researchers could study under the supervision of trained personnel.

APRIL: The movie, "The First Road West", was filmed by Randall Wagner for the Wyoming Recreation Commission was shown. It is the story of the Oregon Trail through Wyoming. "The First Road West" attempts to bring all these trail remnants together to present a pioneer's view and impression of the Wyoming of 1843-1868.

MAY: A joint meeting with the Cheyenne Gem and Mineral Society was held at Petersen's Buffet. Wyoming's First Lady, Mrs. Hathaway's topic was, "Wyoming Indian Heritage". She showed a collection of pictures of the Indian Reservation in northwest Wyoming, showing the Arapahoes and Shoshonis engaged in their arts and crafts work. She also showed a display of typical bead work done by the two tribes.

JUNE: A field trip to the Lindenmeier site, the first folsom site in Colorado.

SEPTEMBER: Charles Reher, a graduate student at the University of Wyoming, presented a program on Indian Pottery of southeast Wyoming where he had been conducting a survey of archaeological sites which contained pottery.

OCTOBER: Summer Findings was the title of the October Meeting with participation from the various members of their bragging material.

NOVEMBER: Mrs. Paula Durnford, a retired teacher from the Cheyenne Public Schools, gave a slide program on the "Numerous Neighbors of the Mesa Verde People".

DECEMBER: All members and guests were invited to show colored slides on various archaeological sites that they had either visited or taken part in during the past year.

CHAPTER NEWS

SHERIDAN CHAPTER

The Sheridan Chapter is beginning its 18th year of existence with much accomplished in the past years and looking forward with enthusiasm to the coming year. A concentrated effort in the first two months to get renewal and new memberships has resulted in twenty family and twelve single memberships paid. Attendance has been good at the meetings with everyone looking forward to a banquet April 24th with Dr. William Mulloy as guest speaker.

JANUARY: New officers were elected at the January meeting held at the home of Mrs. Mildred Denson. Zane Hilman was elected president, Ivan Daniels - vice president, Mrs. Margaret (Charles) Catron - secretary, and Mrs. Grace (Frank) Eads - treasurer. Past president Ken Heuermann showed movies of several digs including the summer meeting at Cody which brought back pleasant memories.

FEBRUARY: Using the knowledge learned at the November state meeting, the members tackled buffalo bones from several Sheridan Chapter digs. Meeting in the basement at the home of Mildred Denson, the dust was soon flying thick as members brushed dirt from bones. To their delight butchering cut marks were found on quite a few bones.

MARCH: A pot-luck dinner honoring past members was held at the YMCA. These members included past secretaries, directors and a state officer. After the meeting several rejoined as members.

The program was an interesting talk on fossils presented by Prescott Underwood, the geology instructor at Sheridan College. He illustrated his talk by a display of fossils and by transparencies.

The chapter presented Mr. Underwood with a copy of the booklet "Fossils of Wyoming", published by the GS Department of the University of Wyoming.

The following were elected for 1971:

President:	Zane R. Hilman
Vice President:	Ivan Daniel
Secretary:	Mrs. Charles Catron
Treasurer:	Mrs. Frank Eads.

Supplemental Membership List - Casper Chapter

Dave L. Hawks	2906 Saratoga Road	Casper, Wyoming	82601
B. A. Garling family	1500 Garden Creek Road	Casper, Wyoming	82601
John Albanese family	3511 Carmel Drive	Casper, Wyoming	82601
Bob Barber	P.O. Box 96	Glenrock, Wyoming	82637
Florence Coates	P.O. Box 598	Glenrock, Wyoming	82637
Wayne Hazlett	3768 South 89th St.	Milwaukee, Wis.	53228
Gean Royce	245 South Elk	Casper, Wyoming	82601
Chuck Shaffer family	1105 North Jackson	Casper, Wyoming	82601
Mrs. Justin Switzer	510 South Zillah	Kennewick, Wash.	99336
Jean A. Thorby	2108 St. Francis Dr, F-45	Ann Arbor, Mich.	48104
Helen J. White	851 Payne Avenue	Casper, Wyoming	82601
George E. & Helen B. Spiva	P.O. Box 122	Mills, Wyoming	82644
Bart & Liz Rea	5200 Yesness Lane	Casper, Wyoming	82601
Robert & Naomi Hauke	636 South Jackson	Casper, Wyoming	82601
Mr. & Mrs. John L. Shriner	P.O. Box 786	Riverton, Wyoming	82501
Leon H. Campbell	P.O. Box 402	Midwest, Wyoming	82643
Walter B. Watson family	2664 East 7th St.	Casper, Wyoming	82601
Bill Judge family	14 Stewart	Casper, Wyoming	82601
Juanita Hinthorn	521 South 6th	Casper, Wyoming	82601
John J. Schulte family	3411 Brookview Drive	Casper, Wyoming	82601
Mr. & Mrs. Henry E. Jensen	1022 South Willow	Casper, Wyoming	82601
C. W. Belz	11937 East Colfax	Aurora, Colorado	80010
Helen Bryant	P.O. Box 1166	Casper, Wyoming	82601
Mr. & Mrs. Tom Dunn	1342 South Poplar	Casper, Wyoming	82601
Carl Klaenhammer	1335 South Walcott	Casper, Wyoming	82601
Buddy Taylor	5100 Yesness Lane	Casper, Wyoming	82601
R. I. Yeamans	1115 East 10th	Casper, Wyoming	82601
Sherrie Nelson	P.O. Box 578	Mills, Wyoming	82644
David Baskett	1544 Bellaire Drive	Casper, Wyoming	82601
Wendell Hill	P.O. Box 311	Edgerton, Wyoming	82635
Grover Phelan	1502 Jim Bridger	Casper, Wyoming	82601
Carol L. Brown	1100 Hazelwood	Casper, Wyoming	82601
R. D. Olson	943 East 13th	Casper, Wyoming	82601
Fred Poestkoke	431 South Beech	Casper, Wyoming	82601
Jim Rudd	1705 South Lennox	Casper, Wyoming	82601
Joe P. Snowden	126 North Jackson	Casper, Wyoming	82601
T. R. Spraker	1830 South Lennox	Casper, Wyoming	82601
Howard Shaw	2914 Meadow Drive	Casper, Wyoming	82601
Charlie N. Ellis	1634 Westridge Drive	Casper, Wyoming	82601
Philip Hagan	115 Dahlia	Casper, Wyoming	82601
A. M. Burton	943 South Spruce	Casper, Wyoming	82601
Donald Spiker	Masonic Temple Bldg.	Riverton, Wyoming	82501
Mrs. Ruth Beebe & Mrs. Ellen McIntosh	--Lander Route--	Rawlins, Wyoming	82301
Mr. & Mrs. George Baier	3218 Monte Vista Drive	Casper, Wyoming	82601

BY-LAWS
OF
WYOMING ARCHAEOLOGICAL FOUNDATION

ARTICLE I

OFFICES

Section 1. The principal office of the Foundation shall be located at such place as shall be determined by the Board of Directors from time to time.

Section 2. The Foundation may have such other offices within the State of Wyoming and at such places as shall be determined from time to time by the Board of Directors.

ARTICLE II

SEAL

Section 1. The Board of Directors shall provide a suitable seal for the Foundation which shall be in charge of the President.

ARTICLE III

FISCAL YEAR

Section 1. The fiscal year of the Foundation shall correspond to that of the State of Wyoming.

ARTICLE IV

MEMBERS

Section 1. The members of this Foundation shall consist of the Directors named in the Certificate of Incorporation and their successors, elected as hereinafter provided.

ARTICLE V

BOARD OF DIRECTORS

Section 1. General Powers. The affairs and business of the Foundation shall be managed by the Board of Directors.

Section 2. Membership. The first Board of Directors of the Foundation shall consist of the Directors named in the Certificate of Incorporation, any vacancies in the Board of Directors occasioned by reason of death, resignation or any other cause, may be filled by the Board of Directors at any regular meeting or any special meeting called for the purpose thereof, by a vote of a majority of all of the Directors then serving. The term of office of such Directors shall be until the next election.

Section 3. Meetings. Regular meetings of the Board of Directors shall be held at least semi-annually. If no other date for the regular meeting is set at the adjournment of the previous meeting or by notice from the Secretary, approved by the President, it shall be held on the second Monday in September and at the time of the State Archaeological Society Convention in April. This date may be altered by the resolution of the Board. Special meetings of the Board of Directors may be called at any time by the President or by any five members of the Board of Directors.

Section 4. Quorum. At all meetings of the Board of Directors one third of the whole Board shall constitute a quorum for the transaction of any and all business.

Section 5. Committees. The Board of Directors may create and the President shall then appoint such special and standing committees as it may deem advisable.

Section 6. Resignation. Any Director may resign at any time by giving written notice to the Board of Directors or to the President. Such resignation shall take effect on the day specified in such notice.

ARTICLE VI

OFFICERS

Section 1. Number. The officers of the Foundation shall be a President, Vice-President, Secretary, Treasurer, and such other officers as may, from time to time, be appointed by the Board of Directors.

Section 2. Election and Removal. The officers shall be chosen from among the members of the Board of Directors. The officers shall be elected by the Board of Directors and shall hold office for the term of one year or until their successors are elected and take office. Officers so elected may be removed from office with or without cause by a majority vote of the entire Board of Directors. Vacancies in any office shall be filled by the Board of Directors for the balance of the term.

Section 3. Resignation and Vacancies. Any officer may resign at any time by giving written notice to the Board of Directors or to the President. Such resignation shall take effect on the date specified in such notice.

Section 4. Salaries. No Director shall be paid any compensation.

Section 5. Duties of Officers. The duties of the officers shall be such duties as usually attach to such offices and, in addition thereto, such further duties as may be designated and assigned from time to time by the Board of Directors.

Section 6. The Treasurer shall be bonded for fidelity sum fixed by the Board.

ARTICLE VII

CONTRACTS, CHECKS, AND MISCELLANEOUS

Section 1. Contracts. The Board of Directors may authorize any officer, agent or employee of the Foundation to enter into any contract or execute and deliver any instrument in the name of the Foundation, and no officer, agent or employee shall have any power or authority to bind the Foundation by any contract or engagement or to pledge its credit or to render it liable pecuniarily for any amount, without such authorization, except in the ordinary course of business and within the ordinary scope of his authority.

Section 2. Funds. All funds of the Foundation shall be deposited to the credit thereof under such conditions and in such depositories as the Board of Directors may designate, and for the purpose of such deposit any person or persons to whom such power is designated may endorse, assign and deposit checks, drafts and other orders for payment of funds payable to the order of the Foundation. All checks, drafts or other orders for the payment of money issued by the Foundation shall be signed by the Treasurer and by such person or persons as may, from time to time, be designated by the Board of Directors.

The Board of Directors shall have sole discretion and authority to disburse the funds, properties or any other assets of the Foundation. No monies, grants, properties or other valuables may be disbursed by the Foundation without the expressed and written consent of the Board of Directors. The Board of Directors may grant permission to the Treasurer to disburse funds required for the ordinary course of business, however the Treasurer may not exceed the ordinary scope of his authority, without the consent of the Board of Directors.

ARTICLE VIII

AMENDMENTS AND GENERAL PROVISION

Section 1. Notices. Whenever any notice is required to be given by these By-Laws or otherwise for any meeting of the Board of Directors, such notice shall be deemed to have been waived by any Director attending such meeting in person, and any meeting of the Board of Directors shall be a valid and legal meeting, without any notice thereof, if all of the members of the Board of Directors shall be present thereat or shall at or after such meeting sign the minutes thereof.

Section 2. Amendments. These By-Laws may be amended, altered or repealed, in whole or in part, by vote of a majority of all the members of the Board of Directors at any regular meeting or at any special meeting, provided the notice of such special meeting sets forth the proposed amendment, but said amendment shall not be effective until ratified by the annual meeting of the Corporation.

ARTICLES OF INCORPORATION
OF
WYOMING ARCHAEOLOGICAL FOUNDATION

We, the undersigned, natural persons of the age of 21 years or more, acting as incorporators of a corporation under the laws of the State of Wyoming pertaining to non-profit corporations, adopt the following Articles of Incorporation for such non-profit corporation:

I

The name of the corporation is WYOMING ARCHAEOLOGICAL FOUNDATION.

II

The term of its existence is perpetual.

III

The purposes for which the corporation is organized are:

(a) To foster and encourage the preservation of all manner of things having archaeological or historical value or interest within the State of Wyoming; to own manage and control facilities therefore.

(b) To discover, restore, preserve, maintain, repair, construct, equip or otherwise place in condition sites, properties, areas, buildings, fixtures and other improvements and personal property having archaeological or historical interest or value;

(c) To receive, hold, invest, administer, solicit, pay out and distribute all manner of funds, money, property and things of value made, donated, contributed, delivered, devised, bequeathed or otherwise transferred or communicated to the corporation;

(d) To do all manner of things required or necessary in order to accomplish the foregoing purposes, but not for the purpose of direct gain to any individual. The corporation will not carry on propoganda, or attempt to influence legislation or participate in any political campaign.

This corporation shall have no capital stock. Its membership shall consist of members in good standing of the Wyoming Archaeological Society, Inc. A Board of Directors shall control the internal affairs of the corporation. The Board of Directors shall consist of a maximum of eighteen members, and the incumbent President and the immediate past President of the Wyoming Archaeological Society, Inc., shall be two of them. Each chapter of the Wyoming Archaeological Society, Inc. shall elect one member to the Board of Directors. These elected board members, plus the incumbent President and the immediate past President of the Wyoming Archaeological Society, Inc., shall have the option to appoint members to the Board of Directors who are not members of the Wyoming Archaeological Society, Inc. In the event of a vacancy of an elected board member, the Board of Directors shall request the chapter that originally elected the board member to nominate a replacement member to fill the term of office. In the event of the vacancy of an appointed board member, the Board of Directors may fill the vacancy at its own discretion. The affairs of the corporation shall be managed and governed by such Board of Directors. The officers of the corporation shall be chosen by the Board of Directors from the board of directors, and they shall be the following:

President
Vice President
Secretary
Treasurer

and the offices of Secretary and Treasurer may be combined and held by one person. The corporation shall be governed by its By-Laws and the Board of Directors shall be and is hereby authorized to adopt By-Laws and thereafter to amend, alter or repeal the same from time to time, but in no event shall By-Laws be amended or repealed unless a quorum of six members of the Board of Directors be present. The By-Laws may provide that funds of the corporation may be invested and re-invested in municipal and United States bonds; also, that its records will be available for examination annually by the State Examiner of Wyoming.

V

In the event that this corporation should be dissolved for any reason, then upon dissolution any debts and obligations of the corporation shall be first paid, and thereupon the remaining or net assets shall be distributed, transferred, delivered and paid over to the Wyoming Archaeological Society, Inc.

VI

The address of its initial registered office and its initial registered agent at such address are as follows:

3511 Carmel Drive
Casper, Wyoming 82601
John Albanese

The names and addresses of the initial directors are as follows:

Dr. George Frison	Laramie, Wyoming
Lou Steege	Cheyenne, Wyoming
David Baskett	Casper, Wyoming
George Berger	Saratoga, Wyoming
Mrs. R. L. Chastain	Saratoga, Wyoming
Robert Edgar	Cody, Wyoming
Milford Hanson	Cody, Wyoming
Henry Jensen	Casper, Wyoming
Bayard D. Rea	Casper, Wyoming
John Albanese, President of the Wyoming Archaeological Society, Inc.	Casper, Wyoming

The incumbent and each succeeding president of the Wyoming Archaeological Society, Inc. shall be a member of the Board of Directors of this corporation during the time he is such president. The immediate past President of the Wyoming Archaeological Society, Inc. shall also be a member of the Board of Directors of this corporation for the period coinciding with the term of office of the incumbent President of the Wyoming Archaeological Society, Inc. All the above directors shall serve for the first two years; that is, the remainder of this year and one full year following, and shall be eligible for re-election if a vacancy exists. During that time they shall divide themselves into three classes: two to serve this and three full years in all; two, this and two full years; and two for only the remainder of this and one year following. Succeeding board members shall serve for a term of three years and may be re-elected or appointed at the end of any given term.

This corporation shall have no capital stock, nor shall dividend or other distribution of any kind be made to the members, directors or officers of the corporation, except distribution upon termination and liquidation as herein authorized. No officer or director of this corporation shall be paid for any services rendered to the corporation, nor shall any officer or director be paid or receive, directly or indirectly, any profit or pecuniary advantage by reason of his membership or office in the corporation. The corporation will not commence business until consideration of at least \$500.00 has been received by donations or otherwise. Participation in the affairs of the corporation shall not subject any person to any assessment of any type.

IN WITNESS WHEREOF, these Articles of Incorporation have been executed by the incorporators, subscribing their names below and acknowledged and verified at Casper, Wyoming, this 30th day of December, 1970.

(s) David Baskett

(s) Bayard D. Rea

(s) John Albanese

Incorporators

STATE OF WYOMING)
) ss
COUNTY OF Natrona)

David S. Baskett, Bayard D. Rea and

John Albanese, of lawful age, each being first duly sworn, on oath depose and state: that each of the said persons is one of the incorporators above named; that each has read the within and foregoing Articles of Incorporation of Wyoming Archaeological Foundation, knows the contents thereof, and that the matters and things therein stated are true.

(s) David S. Baskett

(s) Bayard D. Rea

(s) John Albanese

Subscribed in my presence and sworn to before me this 30th day of December,

1970. My Commission Expires: 2/20/74 (s) Virginia L. Salzman
Notary Public

PRELIMINARY REPORT
FOSS THOMAS SITE

In the summer of 1969, several members of the Sheridan Chapter went to investigate a site found by Linda Thomas on the Clarence Foss Ranch just north of the Wyoming State line. Several test grids were dug, turning up several side notch projectile points, some flakes and a considerable amount of bone. From the amount of bone found, in the test grids and on the surface, it appeared that the site was quite likely a Bison kill of some type. Plans were then made to do a more extensive test of the site later in the fall.

In late August, while he was in the area doing work on another site, Dr. George Frison helped the Sheridan Chapter in laying out the grid. Work was then done off and on through September, whenever time and opportunity permitted.

At this time the writer, in behalf of the Sheridan Chapter, wishes to thank the many people who contributed their time and energy to help with this dig. Special thanks to the Foss family for their assistance and cooperation.

As previously mentioned, this site is located just north of the Wyoming State line in Montana. It lies at the end of a long ridge, sloping gently from north to south, and ending on the benchland overlooking the Tongue River. The site is at the foot of a sandstone ledge which is about twenty feet high and roughly two hundred yards long, running east and west. Tongue River is about one quarter of a mile to the south.

Being good grass country, this area was undoubtedly very abundantly supplied with game of all kinds. Sites of many kinds, Tipi rings, rock structures, campsites, chip-ping grounds, quarries and kill sites are numerous in the surrounding country.

There is a fairly good approach to the ledge from above and there are slight traces of a drive line still visible there. Most of the excavation was done in the kill area. Although some testing was done, the actual campsite was not found. Approximately three hundred twenty-five square feet of the site were excavated. The average depth of the main bone layer was about two feet. The soil is very sandy and fairly easy to dig. Bone preservation was poor, due probably to the light soil, shallow depth and the fact that it is a good spot for snow and rain to accumulate. Two skulls were recovered, one with the frontal portion crushed in to allow access to the brain cavity. The skulls were in bad shape and required a lot of glue and work to remove them intact. There were practically no articulated bones in the area excavated. There had been a fire in one area containing large amounts of charred bones and stones. However no pattern was evident in the position of the stones.

There were one hundred seventeen artifacts numbered from the site. Of these, ninety-seven were projectile points, one awl, three butchering tools, and some bone and questionable material. The points are basically a late period side notch. the longest is about two inches, the shortest three quarters of an inch. Width varies from seven

sixteenths to three quarters of an inch. The artifacts were made mostly from quartzite, metamorphic shale, agate, obsidian, mudstone and chert. Some of the points have a base notch. One point or blank is un-notched. Workmanship runs from very good to poor, some points being no more than worked flakes. One projectile point center section was recovered that would probably have been larger than any of the others had it been complete.

Figure #1 shows a good example of the projectile points from the site. Figure #2 shows the tools and a few more points. The awl in Figure #2 was not found in the kill area. It was found 155' to the west while hunting for the camp area. Three five by five grids were dug at this spot, but very little was found. Figure #3 shows the grids dug in the kill area. The shaded spot is the fired area mentioned earlier. Plate #1 shows the ledge above the kill area. Plate #3 and #4 are two more views of the area.

A rough estimate of the date on this site would be about 800 years before present.

More work is planned for this summer, and after the material is studied by Dr. Frison, a more complete report can then be made.

Gary R. Fry

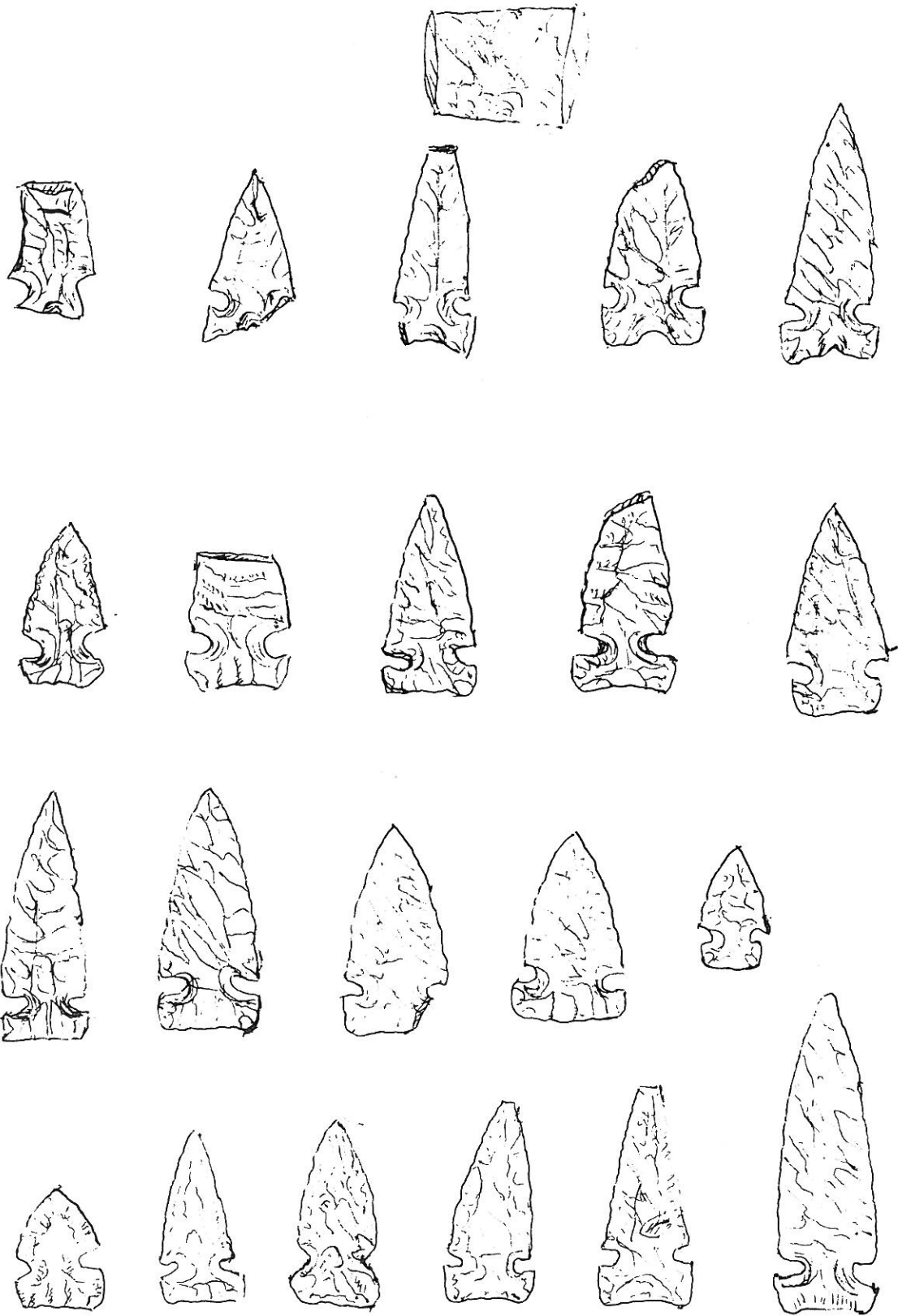


FIGURE 1.

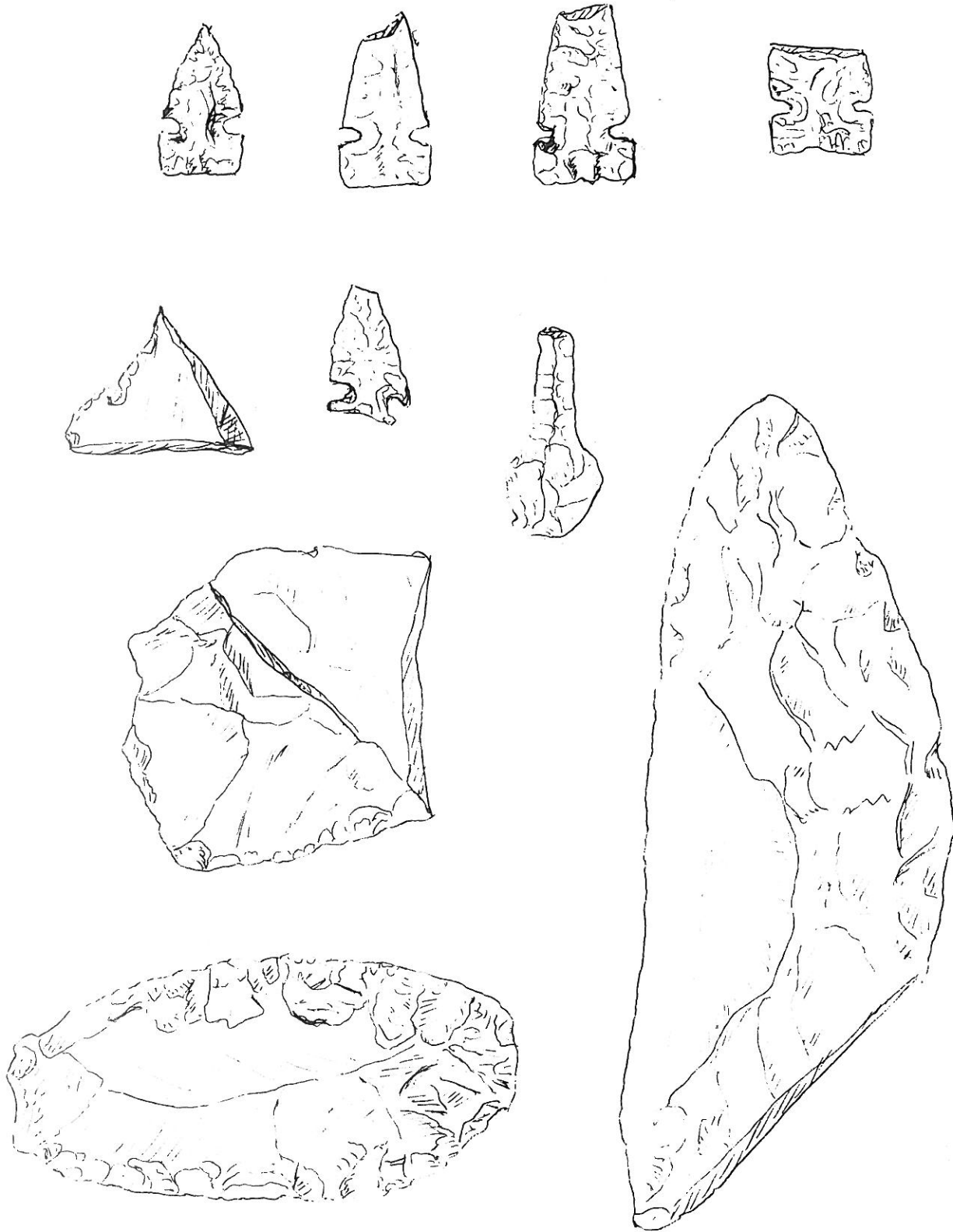
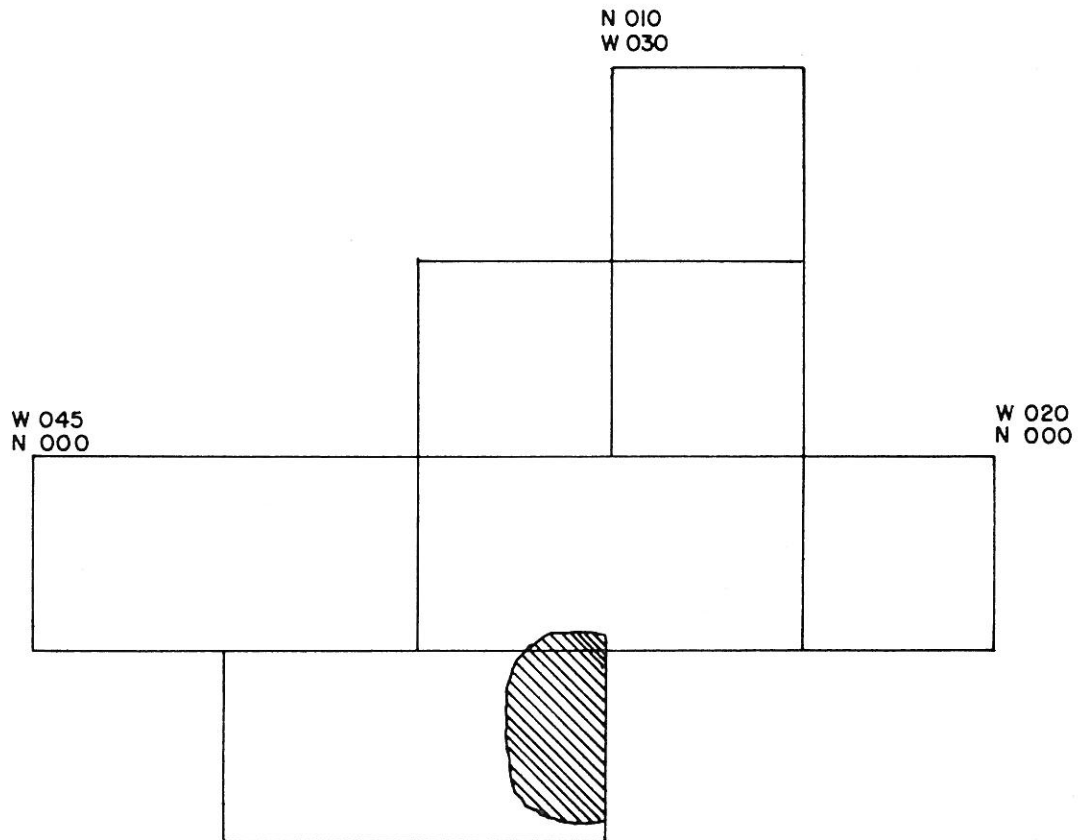


FIGURE 2.

FOSS - THOMAS SITE
GRIDS DUG 1969



SCALE:
1" = 5'

FIGURE 3

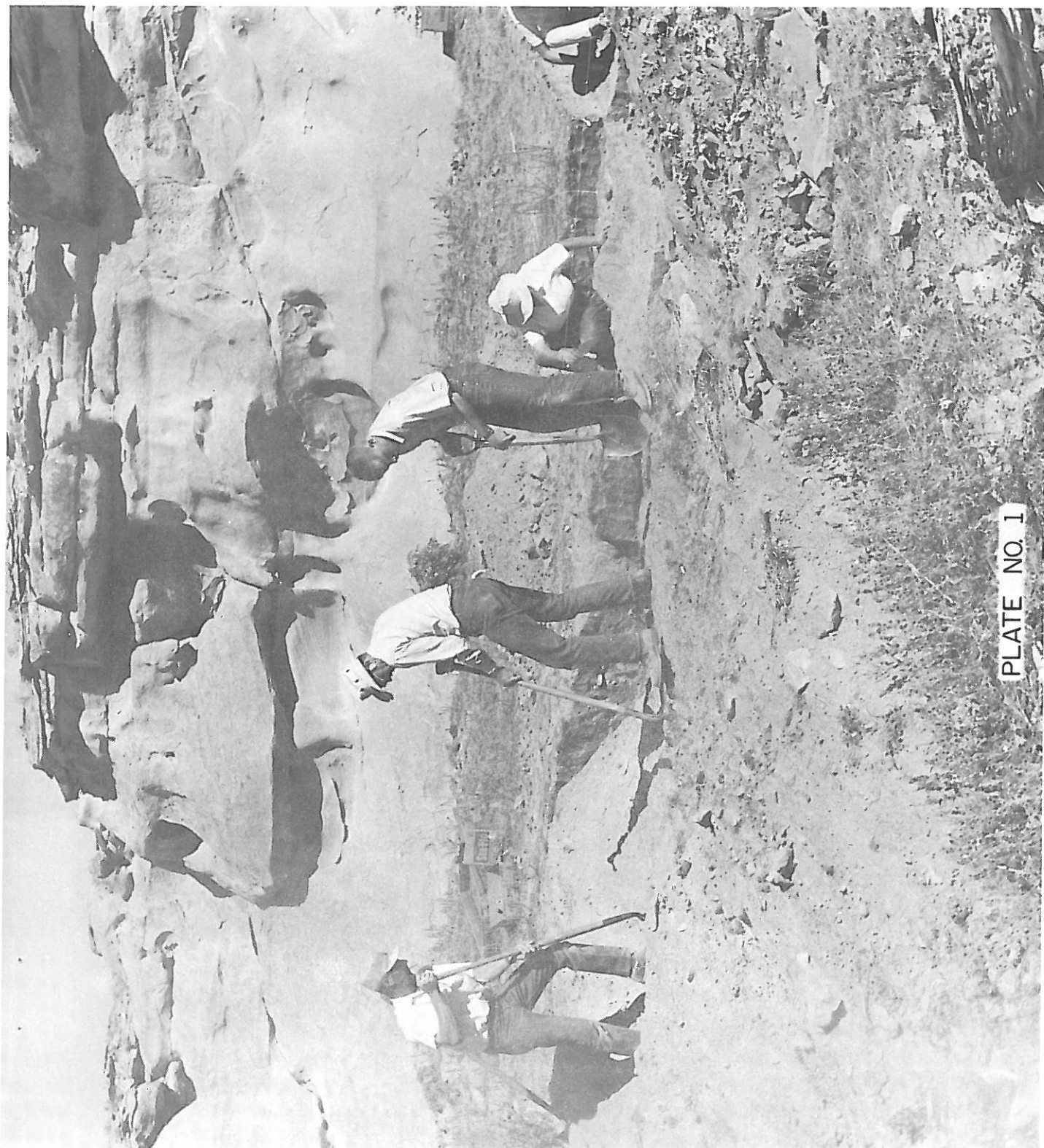


PLATE NO. 1



PLATE NO. 3



PLATE NO. 4

SURFACE HUNTING IN GOSHEN HOLE

By Grant H. Willson

ABSTRACT: The surface finds from an area in the southern part of Goshen County so far, indicate habitation from early middle prehistoric through historic times, and pottery suggests late Woodland, Intermountain, Upper Republican, and Southwestern.

INTRODUCTION: This article is an amateur's story of a favorite hunting ground and a record of findings covering a twelve year period. These finds, individually, and at the moment, did not mean much; yet when the total assemblage is put all together, in probable context, suddenly "it's a new ball game", and you experience a whole new interest in the area. Certain areas then stand out as perhaps worthy of excavation or a more detailed study. The mere existence of a published record would be of assistance to a student working on a particular phase of investigation as well as for background information in the province of our State Archaeologist. Unless each of us is willing to catalogue, tabulate results, and publish a summary, much valuable information will be lost. This is the only way to justify the making of a surface collection.

The area of our interest is a small fraction of the great Goshen Hole Escarpment (Fig. 1), which rims on all sides a great wedge shaped widening of the North Platte River Valley. The enclosed lowland is nearly 45 miles wide near Ft. Laramie and tapers to a two mile width near Lisco, Nebraska. This was caused by periods of uplift with some faulting to the west and subsequent down cutting by the North Platte River beginning in Pliocene time. Eight separate river terraces have been located and identified. Of special interest to archaeologists is the third terrace of late Pleistocene time which was the land surface inhabited by the early nomadic hunters. Here, logically, have been found Clovis and Folsom points.

The original high plains surface was a Miocene age deposit characterized by a flat or gently rolling topography underlain by permeable materials with little surface run-off. Downcutting of a thousand feet by the river and subsequent stream and wind erosion has left the nearly level table land with a rough, irregular and often abrupt margins, creating many steep walled canyons and rough talus slopes. This escarpment is still retreating due to irregular erosion along its face, resulting from the exposure of formations of differing hardness and by ground water which issues as innumerable springs and seeps along the contact zones between the different formations. Some erosional remnants of the original high plains area still persist within the lowland area, such as Wildcat Ridge, which includes historic Scotts Bluff; Sixty-six Mountain; and the Bear Creek Mountains in Goshen County. But, from anywhere on the presently exposed cretaceous surface of the lowland, the most extensive topographic feature to be seen in all directions, is the surrounding Goshen Hole Escarpment.

GEOLOGY: This escarpment is capped by channel conglomerate of the lower unit of the Arikaree Formation, consisting of fine grained tan to grey sand and silt, loose to moderately cemented. It can be cut or gouged with even a blunt instrument. This Miocene age deposit contains many fossil bones. Many delicate and poorly fossilized blue-white fragments litter the ground in the innumerable wind blown pockets.

I did find, however, on a sandstone pedestal, a well preserved skull of a *Desmatherus* - a plant eating, pig-like mammal with a spectacular set of dentures. It did look as if it could take a hand off clear to the shoulder in one bite.

Many springs and seeps issue from the side of the escarpment, and mark the contact with the underlying Brule formation which is softer and more easily eroded. This results in undermining of the Arikaree formation creating box canyons with overhanging vertical walls. The Brule formation contains moderately hard, brittle siltstone with localized beds of limestone, clay, and wind blown volcanic ash. In one of these Oligocene age ash beds I found a small delicate *Parahippus* lower jawbone. At Table Mountain thin beds of cherty limestone containing streaks of chalcedony and agate show evidence of quarrying activities by early tool makers. Barite crystals up to 1/2" have been found.

Immediately below the Brule formation is the thinner Chadron formation composed of green, red, or buff colored bentonitic clay and silt, only moderately cemented. This formation is generally obscured by talus slopes at the foot of the escarpment. The much thicker Lance formation shapes the floor of the Goshen Hole lowlands here in the south central part of Goshen County. It is composed of sandstone, soft shales containing distinctive ironstone concretions, thin beds of impure limestone containing oyster shells, and some cobbles and boulders of chert which were suitable for tool making. Numerous outcrops show large reptilian remains weathering rapidly into chalky fragments. With only meandering streams on this lowland surface, wind erosion is the primary factor, and several large dune areas exist, either waxing or waning as precipitation permits growth of stabilizing ground covers.

LOCATION OF SITES: Sites A-B-C are on private property and permission is increasingly difficult to obtain. A probable county road realignment, however, may make these sites too available. In 1958 I first visited Site A with the late Mr. L. C. Bishop, who was devoting his retirement years, after serving 18 years as Wyoming State Engineer, to locating historical trails and monuments throughout the state. Being an ardent conservationist, a "banty rooster" with contagious enthusiasm for preserving Wyoming's past, made him the most wonderful trail guide, if you could keep up with him. Site A held a special interest for him for on the highest point (Eagle Rock, Plate 10), lying face downward in one of the pot holes (Plate 13-14), he found the carved sandstone head (Plate 8) which, with Mr. L. R. Tyson, they carefully delivered to the State Museum. Mr. Bishop said his attention was first drawn to the site when he saw several cars with Nebraska license plates parked at the base of Eagle Rock. Upon investigation he found a group of people on the high

bench who were screening a two inch charcoal lens that covered the ledge approximately six inches below a surface of blown sand. They stated that they had recovered several hundred perfect projectile points, apparently scattered at random throughout the charcoal lens which also contained fragments of cord impressed pottery. If anyone knows where further information could be obtained concerning these salvaged artifacts, a supplementary report could be made which would add much valuable information.

SITE A (Plates 9-16): Castle Rocks are a prominent landmark on the northwest side of the Bear Mountains just south of the entrance to Lone Tree Canyon. Eagle Rock, rising almost 300 ft., forms a sheltering wall on the northwestern edge of Castle Rock formations which extend eastward for almost a mile. Towering monoliths, a natural arch, and weird, wind eroded forms stagger the imagination, and certainly would lend atmosphere for ceremonial usages. The main campsite would be in the sheltered bowl partially shown by Plate 16, where a single tree marks a seep area. Windblown sands deeply cover the site, but the cattle worn ruts often reveal charcoal lenses, burned bone, flake debitage, and occasional points, knives and scrapers. Sonic booms have accelerated erosion (see Plate 10 showing a recent slump of cliff face just below bench arrow). The high bench on Eagle Rock would have provided a sheltered lookout (Plate 11) and a much used shop site judging from the flake debitage. But why would so many perfect points have been apparently broadcast in this area approximately 100 feet wide by 50 sloping feet deep? The very top of Eagle Rock is covered with circular depressions (Plate 13-14), which I have seen nowhere duplicated. There are literally acres of this fine grained Arikaree sandstone exposed throughout the Goshen Hole Escarpment, but nowhere else have I seen similar pot holes. The basins, I believe, were accented by man for the purpose of catching rain. Angular fractures (Plate 15) shown on the side of a pot hole are normally found throughout the Arikaree formation, but I believe this distinctive rounded bowl shape resulted from human enterprise.

SITE B:* This is a campsite on a steep hillside by a perennial spring densely overgrown by Box Elder trees, approximately 1-1/2 miles east of Castle Rocks. Numerous small rock lined fire pits constantly erode from the steep hillside surrounding the spring. Here was found a single fragment of southwestern pottery. In a wind carved sandstone bowl three hundred yards east of the spring, again a fine lookout point, were found the bone and shell assemblage in Plate 6. In a small area where some fallen cliff face debris allowed windblown soil with a thin grass cover to establish a foothold over the bare rock surface, were found fire-burned rocks, fractured buffalo and antelope bones showing butchering scars, the shell beads, and the small needle shaped tips (Plate 2, n-v). Entrance to the bowl is only gained by climbing bare rock ledges and by using both hands.

SITE C: Consists of a large campsite at the mouth of narrow, steep, walled Lone Tree Canyon. This site was protected from northwest winds and open to the south and east. Served by a perennial spring, Cottonwood trees of tremendous girth mark the stream course before it sinks (Plate 12) out of reach. Charcoal lenses (Plate 18-19) are both shallow or deeply buried and only exposed in occasional washes. Windblown soil is

* This site was first shown to me by Mr. Ralph Rogers and grandson, Bobby, of Hawk Springs. Mr. Rogers has devoted years to his favorite project of marking graves and historical sites.

constantly being stripped from the strip-farmed wheat fields which pattern the high plateau above the canyon. Often when punishing winds make hunting on the plateau impossible, I have taken refuge in the quiet canyon where wild grape vines completely cover and sometime strangle the large Juniper and Box Elders. I have found large clusters of shelf mushrooms growing on decaying trees - some clusters picked in November clearly show how warm and protected is this canyon environment. The Juniper and Ponderosa, which cluster thickly every side wall seep, are a second growth replacement of trees cut for fence posts and fire wood.

Buffalo, antelope, and sage hen must have been plentiful in the past. Now if you are lucky you may see bobcat, coyote, red fox, racoon, mule deer and, of course, both cottontail and jackrabbit. Climate, more cussed than discussed, is semi-arid and land developers claim a normal rainfall of 14.36 inches. Innumerable deserted homesteads in this area show the futility of gambling in an area where the highest recorded rainfall was 20.91 inches and the lowest 7.11 inches. Or when 51% of moisture comes in April, May and June, often accompanied by strong winds and slashing hail.

SITE D: This is the only site not privately owned, being a man-made reservoir covering a warm water slough whose name was recorded by the original township surveyors as Indian Springs. It was an overnight watering stop on the old wagon road leading from Cheyenne, the rail head, to the Red Cloud Agency, first established east of Torrington and later moved into Nebraska. Here fire burned rocks and bone fragments, flakings, cutting and scraping tools, reveal traces of people not overly concerned with possible spillage on the rug or spots on the table cloth. This area has been collected from for sixty odd years, and I would like to know of any existing collections from this Hawk Springs Reservoir area which could be photographed to add to our knowledge of this area. Rumors of unusual pottery forms abound, but I would like some visible confirmation.

ARTIFACT ASSEMBLAGE: Of artifacts in Plates 1-5, agate of local origin comprises 30%; fine grained quartzite from area of the Hartville uplift, approximately fifty miles northwest, 13%; and chert and jasper from area of Spanish Diggings, approximately sixty miles north, 57%. The water clear quartz xls (Plate 2, b-c) found at Site A with many minute pressure flakes entertained for many years the hope of finding a quartz xl projectile point. While working a pottery site with Chuck Reher this summer, one perfect point did appear in a screen. Very rarely are obsidian flakings found. However, a side notched obsidian point with three deep serrations on each side was found on the bench at Eagle Rock.

DESCRIPTION OF PLATES:

Plate 1

(a-1) is an assemblage of stemmed points of varying sizes similar to Late Middle Period.

(a) is a Besant shaped point made from the local agate.

(d) is a probable blade.

- (k) is extremely thin and shows fine flaking technique on jasper.
- (m, o) possible Early Middle Period Duncan points.
- (n) a possible (McKean) Lanceolate of quartzite.

Plate 2

- (a) is a Late Period hafted blade with ground basal edges made from local seam agate - from Site D.
- (b-e) Quartz x1s showing terminated x1 ends - from Site A.
- (f) Midsection of quartz x1 point.
- (g) a fine grained light tan chert, diamond shape, four beveled blade, well worn, often associated with upper Republican assemblages - from Site A.
- (h-k) are drills.
- (l) is spokeshave with fine, worn smooth pressure retouch in groove.
- (m) a sandstone shaft smoother with shallow opposing grooves and groove on long edge.
- (n-v) extremely fine fragmentary tip sections found in association with shell beads at Site B, and do fit the fragile center holes in beads. Also found, but not pictured, was a complete side notched, concave base drill; demonstrating excellent pressure flaking, 20MM long - 6 MM at widest point. Under microscope the edges appear smoothed.
- (w-ll) extremely fine retouched flakes probably used more for cutting than scraping.
- (hh) is of fine grained quartzite, extremely thin and was probably hafted.

Plate 3

- (a-h) side notched small points, straight to concave bases; generally a Late Period form.
- (j-l) appear to be re-worked points used as drills.
- (m-v) small stemmed points with characteristic of upper Republican or Late woodland.

Plate 4

- (a) retouched flake with probable cutting edge.
- (b-c) hafted blades.
- (d) biface blade of tan quartzite from charcoal lens with red discoloration from heating on bottom half.
- (e) biface blade of deep red glass-like metamorphic stone.
- (f) fine grained quartzite graving like tool with fine pressure flaking on edge opposite a flat platform edge.
- (g-l) fine pressure flaked cutting tools.

Plate 5

- (a-x) end and side scrapers generally of chert from Spanish Diggings. One black obsidian scraper was represented.

Plate 6

Bone, shell, and antler tools found on ledge east of Site B.

- (a) rib bone flaker well worn.
- (b) smoothing on jagged point suggests some awl like use for this fractured buffalo radius.
- (c) tool use suggested by the straight cut and subsequent smoothing and rounding of the straight edge on this fragment of fresh water clam shell (*Lampsilus siliquoidea*).
- (d) shell beads photographed on colored plastic holder. Seven cupped beads apparently were cut from the edge of spiral snail shell (example on extreme left). The other three beads are flat and are from clam shell.
- (e) antler flaking tool.
- (f) a carefully fashioned, smoothed, and knocked bone, bow tip.

Plate 7

- (a) rimsherd with thickened lip with thumb nail incising, uniform grey color, grit tempered, smoothed.
 - (b) rough cord marked body sherd similar to upper Republican.
 - (c) flat bottom, base sherd of possible Intermountain tradition.
 - (d) incised rim sherd - light tan color.
 - (g) paddle smoothed body sherd.
- Not shown was fragment of dark orange pottery suggesting Southwestern ware.

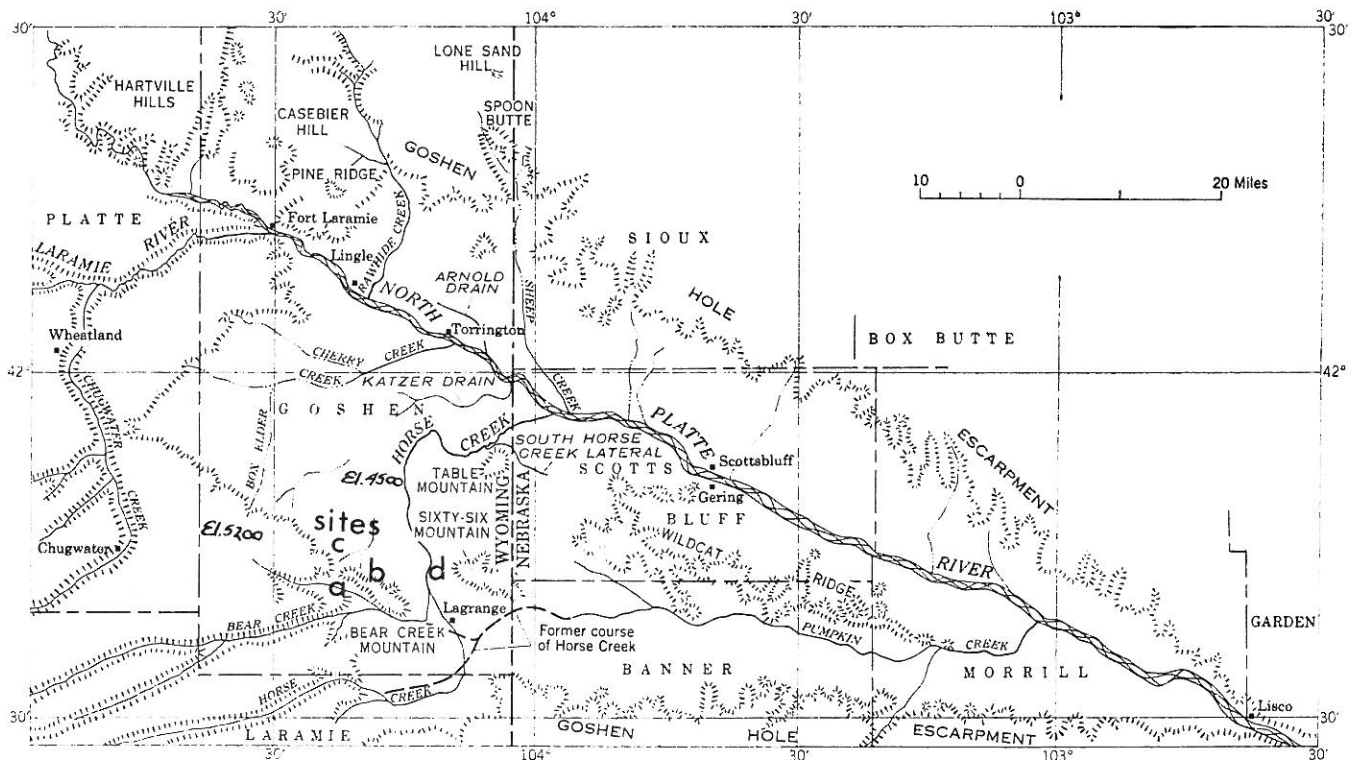


FIGURE 1.—Regional map showing the Goshen Hole lowland.



a



b



c



d



e



f



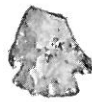
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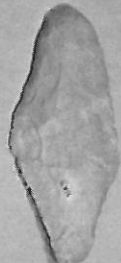
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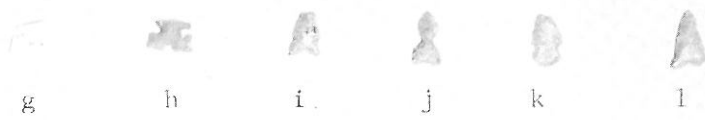
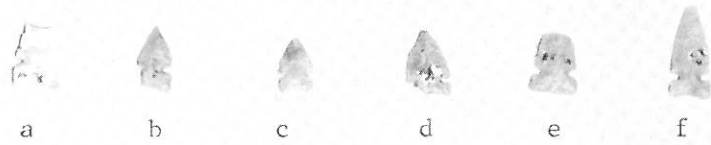


hh



ii



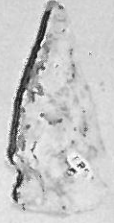




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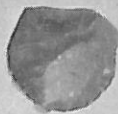


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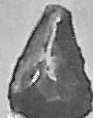
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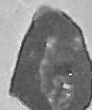
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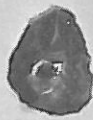
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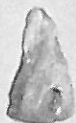
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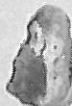
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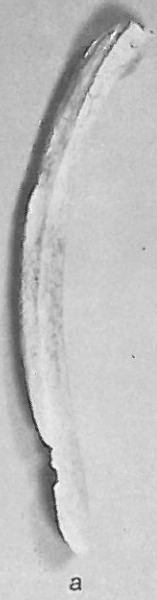


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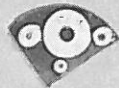
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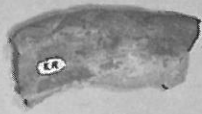
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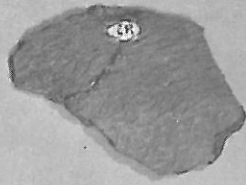
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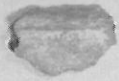
PLATE 6



a



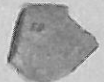
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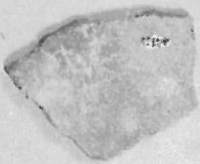
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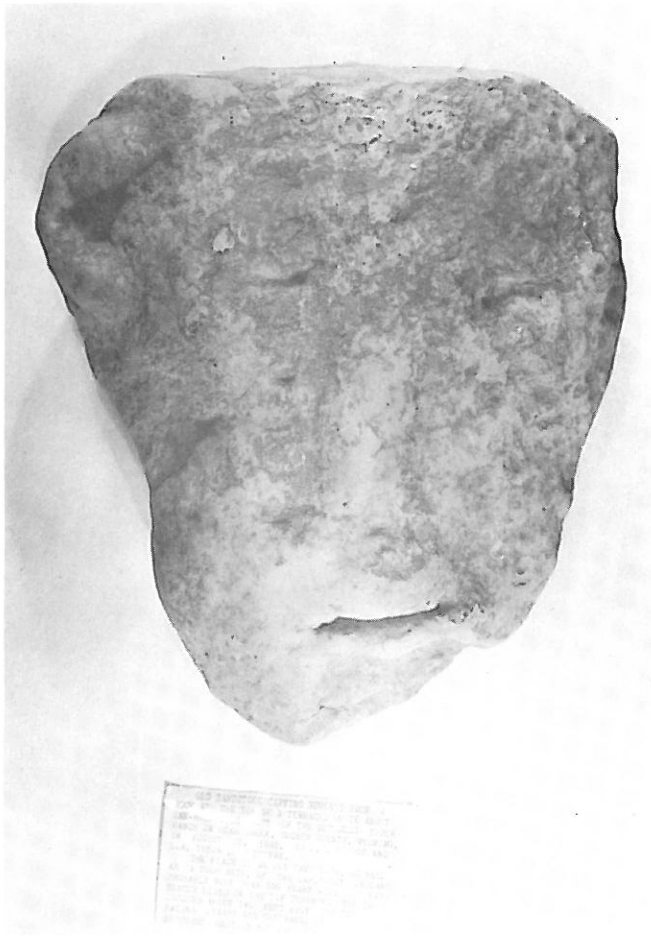


PLATE 8

Obtained through courtesy of Wyoming Archives and Historical Department. Tan colored Arikaree sandstone face found lying face down on top of Eagle Rock by L. C. Bishop and L. R. Tyson in 1940.



PLATE 9

Looking southeast over campsite in Castle Rock area. Eagle Rock out of picture on right side.

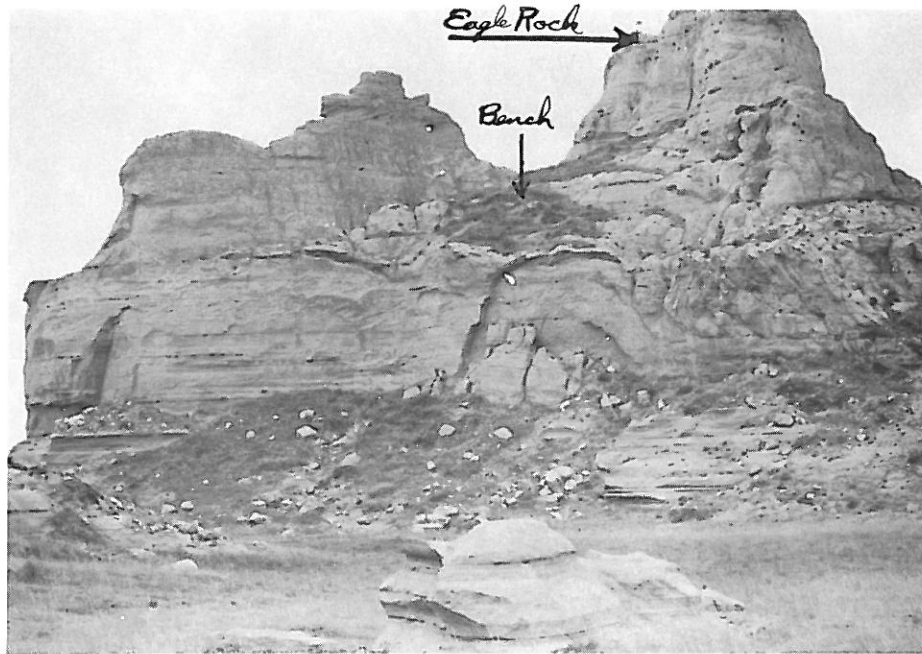


PLATE 10

Looking northwest at Eagle Rock and its lower bench.



PLATE 11

Looking northwest from bench below Eagle Rock. Trees in background mark entrance into Lone Tree Canyon.



PLATE 12

From top of Eagle Rock looking N. W. towards
Lone Tree Canyon with Cottonwoods marking the
extent of stream flow.



PLATE 19

Close up of several small pot-holes

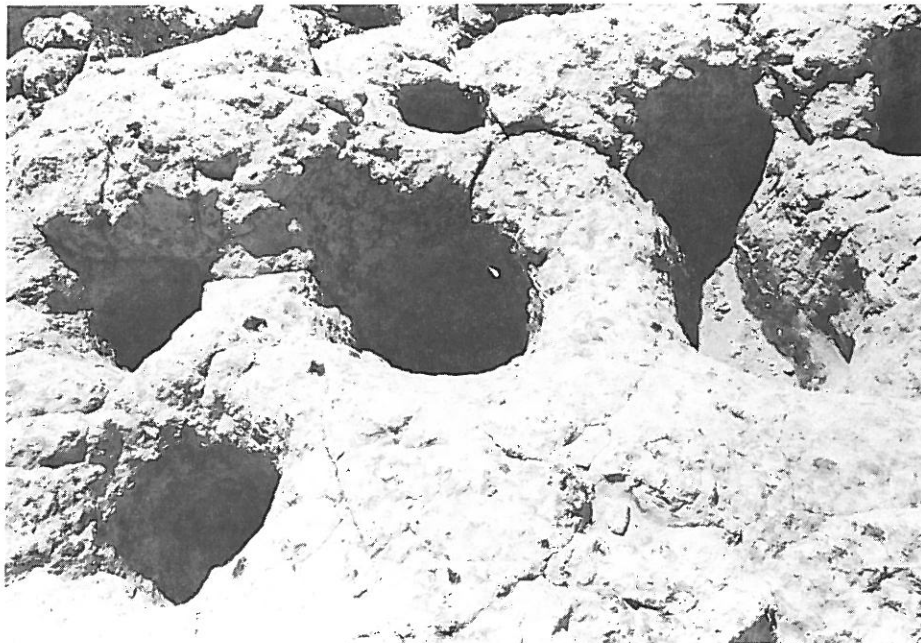


PLATE 13-14

Show pot holes in sandstone top of Eagle Rock.

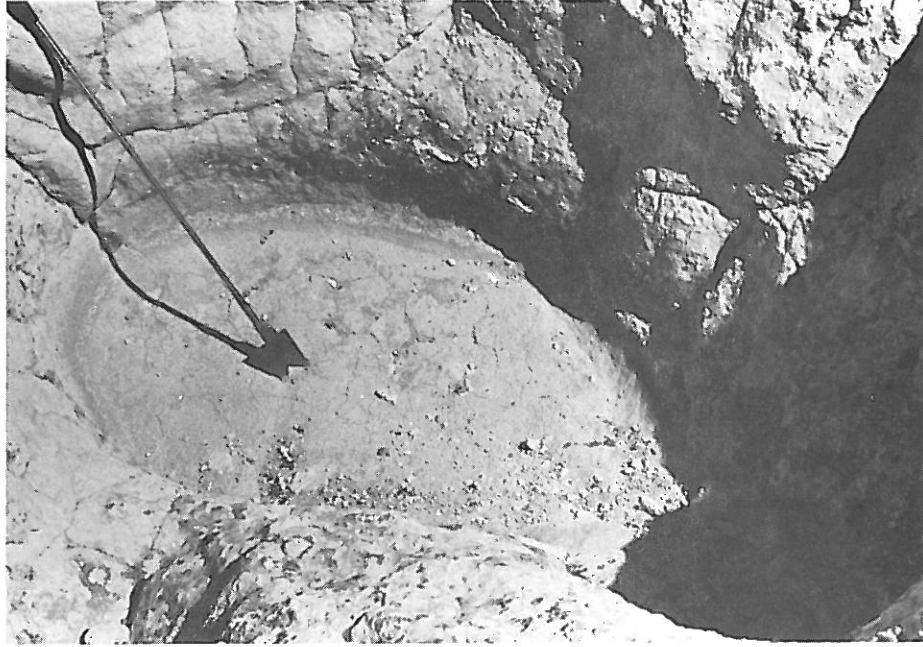


PLATE 15

Close up of pot hole. Many small pieces of pottery were found in the thin layer of fine dust in bottom of holes.



PLATE 16

Looking eastward and down on campsite from top of Eagle Rock. Cattle trails in bottom reveal flakings and charcoal lenses. Monolith in center is smooth sandstone approximately 70 feet high.



PLATE 17

Charcoal lens in a Lone Tree Canyon wash.



PLATE 18

Surface lens on edge of Lone Tree Canyon stream.