

THE WYOMING ARCHAEOLOGIST



VOLUME 34 (3-4)
FALL 1991

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VOLUME 34 (3-4), FALL 1991

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ANNOUNCEMENTS

WYOMING ARCHAEOLOGICAL SOCIETY, INC.

SPRING 1991 MEETING MINUTES

Bitterroot Room, Holiday Inn, Billings, Montana

Friday, April 12, 1991

PRESIDING: Susan Carlson, President Pro Tem

CALL TO ORDER: 7:00 P.M.

CERTIFICATION OF DELEGATES: Secretary/ Treasurer Carolyn Buff certified the voting delegates: Absaroka, Milford Hanson; Casper, Carl Belz and John Albanese; Cheyenne, Susan Adams; Fremont, Lucille Adams; High Plains, Geri McIver and Dewey Baars; Rawlins, George Brox and Bonnie Johnson; and Sheridan, Don Zettle. Roll call showed seven chapters represented: Absaroka, Casper, Cheyenne, Fremont, High Plains, Rawlins, and Sheridan. Not represented at the meeting were Cherokee Trail, Platte County, and Sweetwater.

MINUTES OF LAST ANNUAL MEETING, APRIL 28, 1990: Motion by Bonnie Johnson, second by Susan Adams to approve the minutes as published in the Fall 1990 issue of *The Wyoming Archaeologist*. Carried.

TREASURER'S REPORT: Secretary/Treasurer Carolyn Buff gave the Treasurer's report, showing a total net worth as of March 31, 1991 of \$19,931.86, an increase of \$1,746.75. Motion by Carl Belz, second by Bonnie Johnson to file the treasurer's report for audit. Carried.

AUDITOR'S REPORT: Ron Cadwell certified that the treasurer's report was in order.

EDITOR'S REPORT: Bonnie Johnson, editor, reported a balance of \$518.05 in the bulk mail account at the Rawlins post office, and a balance of \$16.94 in the editor's petty cash account. Motion by Bonnie Johnson, second by George Brox, that in-stock back issues be billed at \$5.00 per copy and \$0.15 per page for those needing to be copied. Carried.

LIBRARIAN'S REPORT: Danny Walker, Librarian, reported that we currently exchange publications with Colorado Archaeological Society, Arkansas Archaeological Society,

Montana Historical Society, Society For American Archaeology, and Denver Chapter, Colorado Archaeological Society, as well as a couple of others on an irregular basis. The publications are on file at the Department of Anthropology, University of Wyoming. A master list of what is on file and available for use is being compiled.

SCHOLARSHIP COMMITTEE: Carolyn Buff, chair, reported that the two scholarship recipients would be announced at the banquet.

CHAPTER REPORTS: Were given by all chapters present.

FOUNDATION: George Brox announced that the annual meeting of the Wyoming Archaeological Foundation would be held at 7:00 A.M., Saturday.

OLD BUSINESS: BYLAWS REVISIONS: Motion by Don Zettle, second by Terry Korell to approve the changes recommended by the committee, the consistency changes recommended by Carl Belz and to make any other changes appropriate at this time. Carried.

Motion by Carl Belz, second by Bonnie Johnson, to add to Article II, section 4 that the Executive Secretary/Treasurer be responsible for renewing the corporation permit on an annual basis with the Secretary of State. Carried.

Motion by John Albanese, second by Alan Korell to delete a, b, c, and g of Article VII, section 1. Vote = Aye-5, Nay-3. Carried.

NEW BUSINESS: Motion by John Albanese, second by Bonnie Johnson, to grant honorary memberships to Joseph Cramer and Alex G. Nason. Carried.

A list of Archaeological Support Fund recipients and projects will be published in *The Wyoming Archaeologist*.

Motion by Dewey Baars, second by Bonnie Johnson, to write to the Society for American Archaeology requesting a copy of their bylaws. Vote = Aye-3, Nay-4, Abstain-2. Failed.

Motion by John Albanese, second by Milford Hanson to apply for membership in the Society for American Archaeology. Carried.

ELECTION OF OFFICERS: Chair Milford Hanson announced the slate of nominations as follows: President, Susan Carlson, First Vice President, Joe Bozovich, Second Vice President, Ron Cadwell, and Foundation Representative, Sandra Hansen. Motion by John Albanese,

second by Geri McIver, to close the nominations and cast a unanimous ballot. Carried.

SITE OF 1991 SUMMER MEETING: Motion by John Albanese, second by Carl Belz to dispense with a summer meeting. Carried.

SELECTION OF SITE FOR 1991 ANNUAL SPRING MEETING OF THE SOCIETY AND FOUNDATION: Motion by Susan Adams, second by Bonnie Johnson, that the Society accept the invitation from Dewey Baars of the High Plains Chapter to host the 1992 Spring Meeting. Carried.

APPOINTMENT OF NOMINATING COMMITTEE FOR 1992: Named to the 1992 Nominating Committee were Milford Hanson, chair, Danny Walker, and Chuck Reher.

OTHER ANNOUNCEMENTS: President Carlson announced that the deadline for applications for grants from the Archaeological Support Fund is May 1, with announcements of recipients May 15.

ADJOURN: 9:30 P.M.

BANQUET:

GOLDEN TROWEL AWARD: Dr. Charles Reher, University of Wyoming, and Dr. William Scoggin, Rawlins.

BANQUET SPEAKER: Dr. Richard Morlan, *Current Perspectives on the Earliest People of the Americas*.

SCHOLARSHIP RECIPIENTS: Don P. Davis, Mulloy Scholarship and Kristina McMahan, Frison Scholarship; each in the amount of \$350.00.

/s/ Carolyn M. Buff

Carolyn M. Buff
Executive Secretary/Treasurer

/s/ Susan Carlson

Susan Carlson
President

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WYOMING ARCHAEOLOGICAL SOCIETY, INC., SCHOLARSHIP COMMITTEE MINUTES

PRESIDING: Carolyn Buff, chair.

PRESENT: Carolyn Buff, George Brox, Susan Carlson, Mark Miller, Ron Cadwell, and Bonnie Johnson.

Motion by Bonnie Johnson, second by George Brox, to award the Frison Scholarship to Kristina McMahan, and the Mulloy Scholarship to Don Davis, and that the awards be \$350.00 each. Carried.

/s/ Carolyn M. Buff

Carolyn M. Buff
Scholarship Committee Chair

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WYOMING ARCHAEOLOGICAL FOUNDATION MINUTES

SPRING 1991 MEETING

APRIL 13, 1991

The Wyoming Archaeological Foundation met in Recipes Restaurant in the Billings Holiday Inn, Billings, Montana, at 7:00 a.m.

Board President George Brox made a motion that the minutes of the board meeting of November 17, 1990, be approved as printed. Seconded by Susan Carlson. Carried.

Treasurer John Albanese reported the foundation's expenditures and income since May 16, 1990. Total Expenditures: \$14,422.84; Total Income: \$22,027.31; Total Assets: \$57,496.16. Motion by Susan Carlson, second by Alan Korell, to file the treasurer's report for audit. Carried. Motion by George Brox, second by Alan Korell, to reimburse John Albanese for postage expenses.

OLD BUSINESS: Mark Miller reported on the by-laws revisions recommended by the committee comprised of Mark Miller, Julie Francis and Bill Scoggin. Officers will receive copies of the proposed changes and will vote on such changes at the next regular meeting of the board.

Alan Korell reported that the surveying of the Hell Gap property is in progress. He and Sandra Hansen compiled an update on Hell Gap

for the Nason Foundation. He reported that there were no results so far on the Peterson property lease. There is the probability of an existing mortgage on the property.

NEW BUSINESS: Alan Korell proposed a summer weekend clean-up project at Hell Gap for W.A.S. members. The area needs trash pickup and new fencing. The High Plains Chapter will sponsor the project for June 8 and 9. Motion by John Albanese, second by Susan Carlson, authorizing expenses for the purchase of wooden fence posts for the project. Carried.

Motion by John Albanese, second by Susan Carlson, to have Foundation stationery printed and distributed to all board members. Carried.

Expenses were submitted by Sandra Hansen on behalf of George Zeimens for travel expenses to the University of Wisconsin to pick up Hell Gap faunal materials.

A proposal was read by Sandra Hansen to authorize \$2,500 for the curation and cataloging of Hell Gap faunal materials which are now at Eastern Wyoming College. Expenses would include preservatives and other supplies and salaries to students under the supervision of George Zeimens. John Albanese suggested that the fiscal agent be Eastern Wyoming College. No action taken.

Mark Miller noted that the distribution of the Hell Gap collection between Eastern Wyoming College and University of Wyoming needs to be clarified. Artifacts, slides, film, boxes of bagged lithics and faunal collections are presently housed by both institutions. The board will await results in the negotiations ongoing between the two institutions.

George Brox was commended for his years served on the Foundation Board.

ELECTION OF OFFICERS: John Albanese nominated Sandra Hansen, the newly elected member of the Board, as president. Second by Alan Korell. Susan Carlson offered to serve as secretary to the board, and John Albanese offered to continue as treasurer. Motion made by Alan Korell to accept the nominations, second by Susan Carlson. Carried. New Officers of the Wyoming Archaeological Foundation are Sandra Hansen, President; John Albanese, Treasurer; Susan Carlson, Secretary.

Board members present were: Mark Miller, George Brox, Alan Korell, Sandra Hansen, Susan Carlson, John Albanese. Ten Wyoming Archaeological Society members also attended.

ADJOURNMENT: 8:20 a.m.

Respectfully submitted,

/s/ Susan Carlson

Susan Carlson, Secretary

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WYOMING ARCHAEOLOGICAL FOUNDATION MINUTES

TELECONFERENCE MEETING

MAY 25, 1991

Participating: Sandra Hansen, president; John Albanese, treasurer; Alan Korell, immediate past president, Wyoming Archaeological Society; Debbie Chastain, member.

Absent: Susan Carlson, secretary.

Minutes of the past meeting and treasurer's report were dispensed with, and the agenda was reviewed for this meeting. Included for discussion are: liability insurance on Hell Gap Site; proposed funds for curation of Hell Gap collection now located at Eastern Wyoming College; stationary to be ordered by John Albanese; reminders on Hell Gap cleanup June 8 & 9; proposed bylaws changes; names for Hell Gap advisory board; proposal to hire part-time director for Hell Gap project; any other business to come before the board.

1. Liability insurance for the Hell Gap Site has been proposed at a cost of \$1,102 per year. This is through the Wise Agency in Rawlins, Wyo.

Discussion: Sandra Hansen reported she had consulted a Goshen County insurance agent who said the policy costs were well within reason. John Albanese moved the insurance be purchased. Motion seconded by Debbie Chastain. Carried.

2. Funds for curation of Hell Gap materials now at Eastern Wyoming College.

Discussion: A proposal from George Zeimens was made to the W.A.F. at the annual meeting in Billings, Montana, this spring to provide \$2,500 for salaries and supplies to curate the Hell Gap materials returned from the University of Wisconsin. Confusion arose when results of the action were not recorded in the official minutes. Several people in attendance thought the motion made by Sandra Hansen had

carried, however it wasn't recorded. Consequently, the proposal is again brought before the Foundation. John Albanese stated his concern that the Hell Gap collection, which has been secured by Dr. George Frison on personal loan to himself from various locations, is not housed in one location. He stated he would like to see it located at the University of Wyoming eventually. There being no objection to the Foundation funding this curation project as proposed, John Albanese moved that the funds be granted and that disposition of the collection be discussed again by the Foundation at a later date. Motion seconded by Alan Korell. Carried.

3. Advisory board for Hell Gap.

Discussion: Some discussion was held on the feasibility of a consulting group for the Hell Gap development project. Sandra Hansen reported that in discussions with Dr. Frison, he has favored the idea. She also noted that in past meetings, names for such a board have been suggested, but to date no action has been taken on forming this group. John Albanese said he was concerned that such a board needs to be one that will work and not just be a board in name. Further discussion will be held after the archaeological symposium which is scheduled for mid-June in Denver, at which time some of the possible board members may be contacted by Dr. Frison and others interested in the Hell Gap advisory board.

4. Hell Gap cleanup for June 8 and 9 announced.

Discussion: Debbie Chastain said she probably wouldn't be able to make it, though she would make an extra effort if it was going to be an official Foundation meeting. Sandra Hansen said it was not. John Albanese asked for details, as he had not received any notification. Announcements for the cleanup were sent to chapter presidents around the state following the Spring W.A.S. meeting in Billings, hoping to generate interest among all society members in the Hell Gap Site. There is a slight possibility that the visiting Russian archaeologists may get to stop at Hell Gap, and the W.A.F. and High Plains Chapter of W.A.S. want to make a good impression. Cleanup, tour of the site, and inspection of the building and property are on the two-day agenda. Members will meet at Crazy Tony's in Guernsey at 10 a.m., June 8 for the drive to the site. Everyone is to bring a sack lunch. If there is enough interest, a hamburger fry will be held that evening. Cleanup will continue on Sunday. There will be an

opportunity to enjoy yourselves as well as work.

5. Hell Gap Survey.

Discussion: John Albanese asked about progress of the survey on the Hell Gap property. Alan Korell said some field work has been done, but he didn't have an updated report. He said he would contact Bob Taylor, who is doing the survey, as soon as possible.

6. Sandra Hansen requested that John send minutes of past W.A.F. meetings to Susan Carlson, the new secretary.

7. Catherine MacPherson, Rawlins attorney, who has been acting on behalf of the W.A.F., has withdrawn here services. John Albanese suggested an attorney be hired, rather than relying on donated services. The subject will be looked into by Sandra Hansen.

8. Negotiations have come to a standstill regarding acquisition of the Peterson property which adjoins the W.A.F. Hell Gap property. All were in agreement that it is critical that the property be acquired.

9. Discussion was held regarding a master plan for the Hell Gap Site. Costs, priorities, an advisory board to help set a direction, hiring a part time director to handle day-to-day business, and hiring a professional fund raiser were brought up. Debbie Chastain reported that Mrs. Nason had recently died and noted that there may be the possibility of a bequest for Hell Gap in the will.

10. Sandra Hansen reminded the group that bylaws changes should be voted on at the next regular meeting of the W.A.F. Also, John Albanese reported that he has gotten new W.A.F. stationary and will send some to Sandra Hansen.

11. Sandra Hansen requested that the W.A.F. approve the conference call bill that she will submit to John Albanese for payment. Motion by John Albanese. Second by Debbie Chastain. Carried.

12. Due to a lightning and thunderstorm in the Torrington area, Sandra Hansen called for a motion to adjourn. Motion to adjourn by John Albanese. Second by Alan Korell. Carried.

Respectfully submitted,

/s/ Sandra Hansen

Sandra Hansen, Acting Secretary

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**WYOMING ARCHAEOLOGY SUPPORT
FUND, 1990 PROJECTS**

1. 1990 Cornwell/Espy Site Field Excavations (James Truesdale, National Park Service; Rawlins Chapter) (\$800).
2. Sommers Site Excavation (George Zeimens, Eastern Wyoming College; High Plains Chapter) (\$1710).
3. Archaeological Investigations at 48SW5176 (Steven Creasman, Western Wyoming College; Sweetwater Chapter) (\$665).
4. Additional Radiocarbon Dating at 48SW5176 (Steven Creasman, Western Wyoming College; Sweetwater Chapter) \$210).
5. Carbon County Museum Display on Wyoming Archaeology (Mark Miller, Wyoming State Archaeologist Office; Rawlins Chapter) (\$500; \$250 match from Chapter Funds).
6. Analysis of the Flock Family Lower Rawhide Site Projectile Point Collection (George Zeimens, Eastern Wyoming College; High Plains Chapter) (\$430).
7. AMS Dating of Residue Adhering to a Steatite Vessel (Richard Adams, George Frison, University of Wyoming; Rawlins Chapter) (\$600).

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WYOMING ARCHAEOLOGICAL SOCIETY
 TREASURER'S REPORT
 For Year Ending March 31, 1991

CHECKING ACCOUNT

Beginning Balance	\$2,922.42
Deposits	2,540.17
Interest Earned	75.89
TOTAL INCOME	\$5,538.48

Withdrawals

Rawlins Chapter-Canadian Postage	\$ 10.32
Trowels	25.47
Horizon Stationery-Copies	266.11
Engraving	20.00
WAF - Quarterly Payment	441.00
Cheyenne Chapter-J. Meyer Banquet Ticket	9.00
Cynthia Webb-Scholarship	300.00
Ruth Shephard-Scholarship	300.00
Laura Scheiber-Scholarship	300.00
Gary Haines-Honorarium	200.00
Gary Haines-Airfare	301.00
Hitching Post Inn-Haines Lodging	72.08
High Plains Chapter-Dues Overpayment	56.00
Bonnie Johnson-Editor Expenses	50.00
Casper College-Postage	54.00
Susan Carlson-Mailing	33.12
Secretary of State-Corporate Dues	3.00
TOTAL WITHDRAWALS	\$2,441.10

ENDING BALANCE \$3,097.38

SAVINGS ACCOUNT

Beginning Balance	\$3,738.90
Deposits	570.50
Interest	98.00
Withdrawal to CD	2,500.00
TOTAL	\$1,907.40

ENDING BALANCE \$1,907.40

CERTIFICATE OF DEPOSIT

Beginning Balance	\$11,496.64
Interest	922.33
Deposit from Savings and convert to 12-month	2,500.00
TOTAL	\$14,918.97

ENDING BALANCE \$14,918.97

PETTY CASH

Beginning Balance	\$ 17.15
Withdrawals - Postage	9.04
TOTAL	\$ 8.11

ENDING BALANCE \$ 8.11

TOTAL NET WORTH AS OF MARCH 31, 1990 \$19,931.86

 NET INCREASE \$ 1,746.75

SCHOLARSHIP ACCOUNT

Beginning Balance	(\$236.00)
Deposits - Donations:	
Julie Francis	125.00
TOTAL	(\$111.00)

Withdrawals	
Cynthia Webb	\$300.00
Ruth Shephard	300.00
Laura Scheiber	300.00
TOTAL	\$900.00

ENDING BALANCE (\$1,011.00)

COMPUTER/PRINTER ACCOUNT

Beginning Balance	\$269.00
TOTAL	\$269.00

ENDING BALANCE \$269.00

/s/ Carolyn M. Buff

Carolyn M. Buff
Executive Secretary/Treasurer

We do hereby certify that we have examined the accounts and receipts of the secretary/treasurer, and find them correct; and that the balance in her hands is \$ 19,931.86. Date 4/12/91.

/s/ Ron Cadwell, Susan Adams, Alan Korell

Total membership as of March 31, 1991: 325 (down from 428 in 1990)

Absaroka = 25
State Archaeologist = 2
Associate = 36
Casper = 32
Cheyenne = 24
Cherokee Trail = 19
Exchange = 10
Fremont County = 15

Honorary = 10
High Plains = 23
Institutional = 47
Platte County = 19
Rawlins = 32
Sheridan = none paid currently
Sweetwater County = 19
Wyo Rec Commission = 9

Of Chapters: Single = 121
 Family = 84

WYOMING ARCHAEOLOGICAL SOCIETY, INCORPORATED

CONSTITUTION

ARTICLE I - NAME

The name of this Society shall be the Wyoming Archaeological Society, Incorporated (the Society).

ARTICLE II - TERM

The term of existence of the Society shall be perpetual.

ARTICLE III - MEMBERSHIP

Membership shall be open to any person, persons, societies, or institutions upon payment of specified dues, and who subscribes to the purposes and abides by the rules of the Society, and to all duly organized Chapters in the State.

ARTICLE IV - PURPOSES

1. To encourage the preservation of archaeological materials and sites.
2. To promote scientific research and cooperation with scientific organizations to further archaeological studies.
3. To disseminate archaeological information.
4. To receive, maintain and hold, by bequest, devise, gift or otherwise either real or personal, any fund or funds without limitation as to amounts or values; and to convey such property and to invest and reinvest any principal or interest; and to direct, manage, and expand the income and principal of the association, and administer any special funds for various purposes as agreed upon by the Executive Committee of the Society, and for purposes and uses herein set forth; to buy, lease, hold, and exercise all privileges of ownership over such real or personal property as may be deemed necessary for the conduct and operation of the business of this Society or incidental thereto.
4. To promote scientific research and cooperation with scientific organizations to further archaeological studies.

ARTICLE V - OFFICERS

The management of this Society shall be vested in the duly elected and appointive officers of the Wyoming Archaeological Society, Inc., and their duly elected successors. Elective officers shall include a President, First Vice President, and Second Vice President. Appointive officers shall include an Executive Secretary/Treasurer, Editor, and Librarian, who shall be appointed by the President, First Vice President, and Second Vice President and shall serve at the discretion of the elected officers. All State officers, elected and appointed, shall be members in good standing. The elective State officers shall be elected at each annual meeting by a majority vote of the qualified delegates.

ARTICLE VI - BOARD OF DIRECTORS

1. The governing body of the Wyoming Archaeological Society, Inc. shall be a Board of Directors consisting of the Executive Committee, and two (2) voting delegates from each attendant Chapter; such delegates to be elected by the Chapter which he/she represents from the paid-up active membership of said Chapter.
2. Other members of the Board shall be the elected State officers together with the Executive Secretary/Treasurer and the immediate past President of the State Society.
3. Acting in (an) advisory capacity shall be the remaining appointive State officers.

ARTICLE VII - EXECUTIVE COMMITTEE

There shall be an Executive Committee consisting of the elected and appointed State Officers. The State Archaeologist shall act in (an) advisory capacity for this Committee.

ARTICLE VIII - CHAPTER ORGANIZATION

Ten (10) or more people residing near each other may apply to the Executive Committee for a Chapter Charter, provided the aforementioned persons are paid-up members of the Society. Following Chapter application approval by the Executive Committee by a majority vote, (any such group shall be recognized as a Wyoming Archaeological Society, Incorporated local Chapter.)

ARTICLE IX - AMENDMENTS

Any proposed change in the Constitution and Bylaws of the Wyoming Archaeological Society, Inc. shall first be submitted to all Chapters at least ninety (90) days prior to the annual State meeting or any special meeting called by the Executive Committee for the purpose of amendment. An affirmative vote of two-thirds (2/3) of the legal (Chapter) delegates or their alternates present shall be required for any proposed change in the Constitution or Bylaws of this Society.

ARTICLE X - VACANCIES IN OFFICE

All State Society officer vacancies occurring by death, resignation, or failure to serve, for the duration of the term to which the officer was elected or appointed, shall be filled by appointment by the remaining members of the Executive Committee for the balance of the term, except President and First Vice President, which offices will be filled by the First Vice President and Second Vice President for the balance of the term.

ARTICLE XI - MEETINGS

The Wyoming Archaeological Society, Inc. shall hold an annual business meeting in April of each year. Other meetings may be called at such times and places as may be determined by the Executive Committee. The Executive Committee shall be responsible for the organization of the meeting. A quorum at any duly authorized meeting of the State Society shall consist of those Chapter voting delegates present at the call to order of the meeting.

ARTICLE XII - ACCOUNTING PERIOD

The annual accounting period of the Wyoming Archaeological Society, Inc. shall begin on April 1 of each year and end on March 31 of the following year.

ARTICLE XIII - RULES

The Wyoming Archaeological Society, Inc. shall be governed by the current edition of *Roberts Rules of Order*.

WYOMING ARCHAEOLOGICAL SOCIETY, INCORPORATED

BYLAWS

ARTICLE I - AUTHORITY OF OFFICERS

1. The elected and appointed officers, with the State Archaeologist in (an) advisory capacity, shall serve as the Executive Committee and shall have charge of all affairs, funds, and property of the State Society subject to the control of the State Board of Directors.
2. A (simple) majority of all members of the Executive Committee is sufficient to remove any State officer or officers for due cause.
3. The Executive Committee shall serve in (an) advisory capacity to all Chapters of the Society.
4. The Executive Committee shall not be liable for any debts, bills, or liabilities incurred by any of the Chapters or their members.
5. No officers, elective or appointive, of the Wyoming Archaeological Society, Inc., either State or Chapter, shall receive any compensation or be exempt from any dues. However, the State Executive Secretary/Treasurer shall be given a mileage rate and per diem for official business travel at a rate set by the Executive Committee.
6. All libraries, equipment and monies of a disbanded Chapter shall be turned over to the Executive Committee for disposition.
7. The President, First Vice President, and Second Vice President shall appoint an Executive Secretary/Treasurer, a State Editor, and a State Librarian. These officers shall be appointed from the present paid-up membership and shall serve at the discretion of the elected officers.
8. The Executive Committee may specify a permanent Society mailing address. The permanent mailing address shall be one convenient to the Executive Committee, the Executive Secretary/Treasurer, the Chapters, and to any members of the Society who shall have occasion to contact this Society on any matter of archaeological interest or routine Society Business.
9. The Executive Committee shall designate an official State Repository. Said repository shall contain all records of the Executive Committee, which the Executive Secretary/Treasurer shall maintain in a current and accessible condition, so that they shall be available during all reasonable business hours for inspection by any member of the Society. The repository shall also serve as the Society's official repository for all archaeological material which is now, or may hereafter become, the property of the State Society. The Executive Secretary/Treasurer shall serve as custodian thereof. The Executive Secretary/Treasurer shall limit access to site reports, archaeological surveys, and collections, when such action is deemed necessary and reasonable to preserve archaeological sites.

ARTICLE II - DUTIES OF OFFICERS

1. The President shall preside at the annual meeting of the State Society and at the meetings of the Executive Committee, and at any special meetings. He/She shall perform such duties as usually pertain to that office, including the naming of a Nominating Committee, Legislative Committee, and other standing and select committees. He/She shall designate prior to the annual State meeting that the Executive Secretary/Treasurer shall check the credentials of all delegates and/or alternates. The President, with the approval of the Executive Committee, shall also make any appointments necessary for the furtherance of the aims and purposes of the State Society.
2. The First Vice President shall perform all duties of the President during the absence or disability of the President. In the event of death, resignation, or removal of the President from office during the term for which he/she was elected, the First Vice President shall serve for the balance of the term.
3. The Second Vice President shall perform all the duties of the First Vice President in the absence or disability of the First Vice President. ~~and~~ In the event of death, resignation, or removal from office during the term for which the First Vice President was elected, the Second Vice President shall serve as First Vice President for the balance of the term.
4. The Executive Secretary/Treasurer shall maintain the Society repository and shall serve as custodian for any and all archaeological materials and records contained in the repository. He/She shall assist the elected officers in the conduct of Society business, and shall keep records of such business. He/She shall assist the Chapters and coordinate activities between the Chapters, and shall keep the Chapters informed on all Society business. The State Secretary/Treasurer shall keep and maintain all financial records of the Society for the Executive Committee. He/She shall collect State dues and issue memberships and certificates as appropriate for Associate, Active State, Institutional, and Honorary memberships. He/She shall establish and maintain Society checking and savings accounts as needed, with arrangements for the signing of all checks and/or savings account withdrawals by either the Secretary/Treasurer or the President's appointee. He/She shall present a financial report at the annual State meeting and shall keep the Executive Committee apprised of the Society's financial position. The Executive Secretary/Treasurer shall be bonded at the discretion and expense of the State Society. The Executive Secretary/Treasurer shall be responsible for renewing the annual corporate dues with the Secretary of State.
5. The State Editor shall be responsible for the production and distribution of all Society publications as per the published deadlines.
6. The State Librarian shall have charge of all library materials including the exchange publications. He/She shall keep a list of all publications and books available for loan to members. Rules and regulations pertaining to the loan of publications to members must be approved by the Executive Committee.

ARTICLE III - ELECTION AND TERMS OF OFFICE

The State President, First Vice President and Second Vice President shall be elected by a simple majority of a delegation consisting of two (2) delegates from each of the affiliated Chapters. The officers shall be elected from the present paid-up memberships of the Society. Election of State officers shall take place annually at the regular annual meeting. Elected officers shall serve for a term of one (1) year. A member cannot serve in one (1) elective office for more than two (2) consecutive years.

ARTICLE IV - CHAPTER ORGANIZATION

1. Each Chapter must choose a name for itself and must adopt its own Constitution and Bylaws which shall not be in conflict with the State Society Constitution and Bylaws.
2. Local Chapters may designate the time and place of their meetings, but it is recommended that Chapters meet at least once a month.
3. Each Chapter has complete self-determination in the election of its officers, business, and projects, as long as it does not violate the policies of the Society as a whole.
4. It shall be the function of each Chapter to issue all memberships and collect dues.
5. Each Chapter shall have full custody of, and determined disposition of, archaeological material recovered by the Chapter.

6. Each Chapter shall have as a minimum the following officers as its Executive Board: President, Vice President, and Secretary-Treasurer. The President, Vice President, and Secretary-Treasurer shall serve one- (1-) year terms. A vacancy in any Chapter office shall be filled by appointment by the Chapter President until the next regular election.
7. The annual election of regular Chapter officers shall be held in January of each year, following which the State Executive Secretary/Treasurer shall be notified of those names within thirty (30) days.
8. Each Chapter shall set its own membership fees which shall include the State fees for each active individual or family membership.

ARTICLE V - CHAPTER RELATIONSHIP WITH THE STATE SOCIETY

1. Each Chapter shall remit to the State Secretary/Treasurer by March 31 of each year that amount as set by the Executive Committee for each active individual or family membership effective with each calendar year beginning January 1. Society publication(s) will be mailed to all paid members when published.
2. Each Chapter shall submit to the Annual meeting of the State Society a complete report of its activities during the previous year.
3. Each duly organized Chapter shall be entitled to two (2) delegates to the Annual meeting. Each delegate must be certified by the Secretary of each Chapter of which he or she is a member.

ARTICLE VI - MEMBERSHIPS

1. Individual Associate Membership.
Such members shall be members of the State Society only, shall not be affiliated with any Chapter, and shall not have any voting privileges. Such members shall be issued an Associate Membership Certificate by the State Secretary/Treasurer. Associate members shall be entitled to receive the all publication(s) of the Society as issued.
2. Institutional Membership.
Any institution, such as colleges, universities, libraries, museums, other archaeological societies, etc. shall be members of the State Society only. Institutional members shall not have any voting privileges. Such members shall be entitled to receive the publication(s) of the Society as issued.
3. Active Membership.
 - a. Any individual who affiliates with a local Chapter and takes active interest in the work of such Chapter, shall be issued an Active Membership card by the Chapter Secretary. This shall entitle such members to Active Membership in the Chapter with full voting rights in the Chapter, but with Family Membership limited to a maximum of two (2) votes. All Active Memberships shall be members of the State Society also, and shall be entitled to receive the publication(s) of the Society as issued, but family memberships shall include only one copy of each publication.
 - b. Individuals residing out-of-state or in areas remote from a local Chapter may apply to the State Secretary/Treasurer or to a Chapter Secretary for an Active Membership, either individual or family. These members shall have no voting rights, but shall be entitled to receive the publication(s) of the Society as issued, and shall be allowed to participate in the State Society's activities.
4. Honorary Memberships.
Candidates for Honorary Memberships may be nominated by a local Chapter for reasons based upon significant service to archaeology in Wyoming. Nominations must be voted upon by a majority at the annual meeting of the State Society and such membership shall be granted in an open session of the annual meeting. The State Secretary/Treasurer shall issue one (1) Honorary Membership Certificate and an Honorary Membership card to each Honorary member. Honorary members who were Active members prior to their election as Honorary members may retain their active status and voting rights. No institution can qualify for an Honorary Membership.
5. Renewals.
All renewals of memberships in each Chapter or State Society shall be made on or before March 15 31 of each calendar year or the membership and all Society privileges shall be terminated.

ARTICLE VII - RULES OF CONDUCT

1. The Executive Committee shall, for reasons of conduct inappropriate to an archaeologist, revoke the membership of any member of the Wyoming Archaeological Society, Inc. Such reasons may include:
 - a. Misrepresentation of membership in, or official relation to, any archaeological organization.
 - b. The sale of artifacts from or information about, any archaeological site for personal gain.
 - c. Aiding or abetting, by word or action, any persons who loot or destroy any archaeological site for any reason whatsoever.

ARTICLE VIII - ORDER OF BUSINESS OF THE ANNUAL STATE MEETING

1. Call to order by the President.
2. Report of the Executive Secretary/Treasurer to verify Voting Delegates' credentials.
3. Roll Call of the Delegates.
4. Reading of the minutes of the previous meeting by the Executive Secretary/Treasurer.
5. Treasurer's Report.
6. Editor's Report.
7. Librarian's Report.
8. Committee Reports (standing and select committees).
9. Old or unfinished business.
10. New business.
11. Election of officers.
12. Selection of site for the Summer meeting.
Selection of site for the Annual meeting.
13. Comments and introduction of new officers who take office at this time.
14. Any other business to come before the body.
15. Adjournment.

NEWS REPORTS

HELL GAP SITE CLEANUP

The High Plains Chapter of the Wyoming Archaeological Society hosted a "cleanup" weekend at the Hell Gap site on June 8 and 9, 1991. Participation was excellent. Seventeen strong backs and weak minds showed up from across the state to fix fence, pick up trash and enjoy the scenery. The cleanup group was joined by the Eastern Wyoming College archaeology field school for an extended tour of area sites on Saturday. The remaining cleanup crew fixed more fence, gathered trash and rushed off before another rainstorm Sunday afternoon. Business was delayed for awhile on Saturday when Dr. George Frison conducted a walking tour of the Hell Gap site itself for the participants. The weekend was sponsored by the Wyoming Archaeological Foundation and the High Plains Chapter to encourage more society members to become acquainted and get involved in their Hell Gap project.

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FISHER SITE OFFERS YOUTH ALTERNATIVES

(from Torrington Telegram,
July 26, 1991)

A project which gives young people the opportunity to work at and learn archaeology at the Fisher site, Goshen County, is successful, according to George Zeimens.

Zeimens, director of archaeology at Eastern Wyoming College, is one of several people involved in the program funded by a \$21,099 Juvenile Justice and Delinquency Prevention grant similar to one received by the Goshen County Youth Alternatives program.

Young people of high school age who have faced trouble with the law receive minimum wage while working two weeks at the site participating in the archaeological digging.

Selection of youths for the program is based on recommendations made by the Goshen County Attorney.

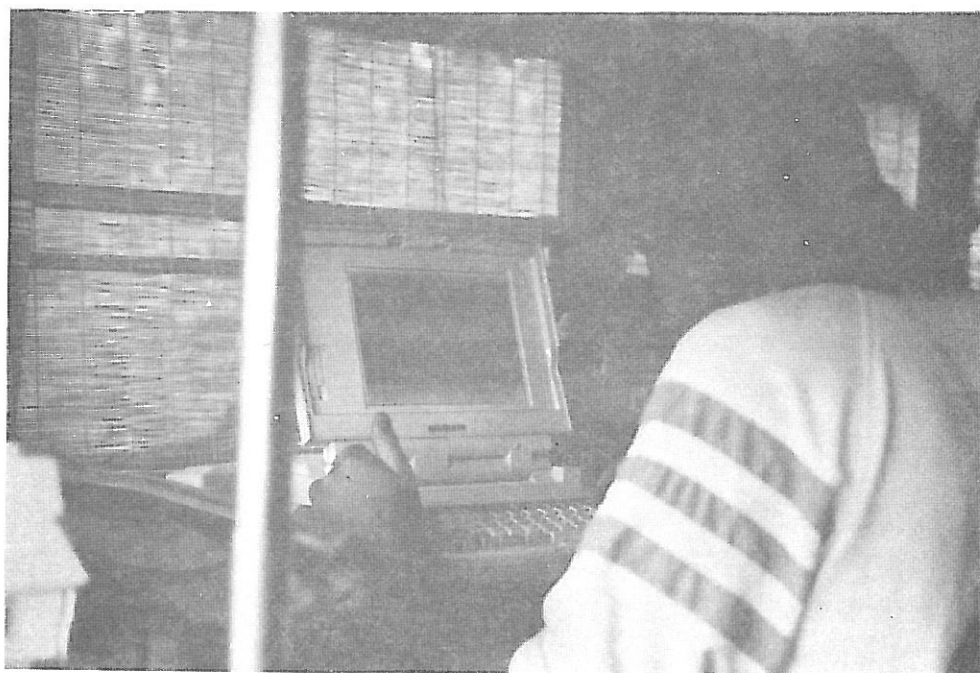
"Some of these kids have never had a job before," Zeimens said. He said many of the kids are getting the first money they've ever earned.



Dr. George Frison conducting the walking tour at one of the Hell Gap site localities.



Dr. George Frison showing participants in the Hell Gap cleanup project another site location. Present are WAS members and Eastern Wyoming Field School students.



Youth Alternatives student inputting computer data at the Fisher site, August, 1991.

They stay out for two weeks, living in tents and doing eight hours of work daily at the site. They also read and get classroom education.

The program not only provides job and educational opportunities for the young people, but some historic preservation is done. Ten young people were at the site in July, with another 10 scheduled for August.

Geri McIver of the Department of Family Services, one of the agencies involved in the program, has been one of the full-time supervisors at the site.

She said the Fisher site program is more diversional in nature, allowing youth work alternative service rather than jail time. She also felt the program has gone well.

"We've learned a lot and the kids have learned too," McIver said.

The youths learn about working and about rules that go along with such work. In addition, the supervisors have been trying to set examples for the young people.

"We try to teach them about responsibility and respect for other peoples property," McIver said.

Because of what the supervisors have learned about the program, both McIver and Zeimens said they would do it differently next time.

If they get the opportunity to try it again next year, they said they would make the program summer-long, rather than two weeks in length.

This would give the young people more chance to earn money, more time to learn from the work, and would benefit the archaeological work being done at the site.

They would also ask for more help, Zeimens said.

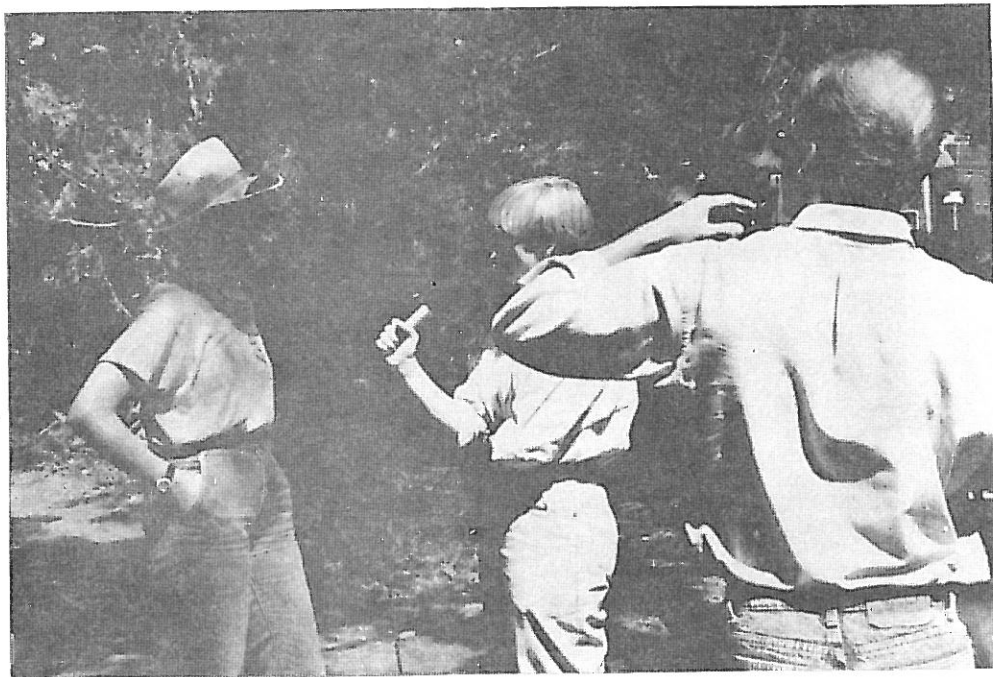
The program is successful now because of the large number of people in Goshen County who have volunteered time to help supervise the young people and to cook for them, he said.

However, for the time frame involved, the program has been a "positive experience," he said.

Part of the reason for the success is the interagency help the program has received from the Western Plains Historical Preservation Society, Department of Family Services, Eastern Wyoming College, the Wyoming National Guard, the Goshen County School District, the Goshen County Attorney, volunteers and land-owners.

The young people also said they found the program worthwhile.

"It's been a lot of fun. I liked finding artifacts like bones and flakes. I learned a lot of



Geri McIver, Department of Family Services, and co-coordinator of Youth Alternatives Program at the Fisher site, being interviewed by local TV crew, August, 1991.



Eastern Wyoming College Field School, August 1991. Left to right, George Zeimens, instructor; Mark Hoover, Madison, WI; Hugo Pena (standing), Albuquerque, NM; Myra Pena, Albuquerque, NM; Sandy Stahl, Lewiston, MT; Carolyn Miller, Washington, PA.



Mobile field laboratory, Eastern Wyoming College Field School, Fisher site, August 1991.

history about these hills," one said.

"I think they should have it again," said one of the youths.

Others also enjoyed it, but hoped that the supervisors would give the next young people more to do in the evenings. There are no televisions, radios or video games at the site.

There is electricity, thanks to a generator bought through a \$,1000 Burlington Northern grant.

1991 EXCAVATIONS AT 48FR308, THE HELEN LOOKINGBILL SITE: A PRELIMINARY REPORT

by
Mary Lou Larson

ABSTRACT

The Helen Lookingbill site (48FR308) is a high altitude stratified archaeological site best known for its Early Plains Archaic and Paleoindian deposits. Amateur and professional crews under the direction of George C. Frison have conducted archaeological investigations at the site located north-northeast of Dubois, Wyoming since 1972. The excavations during the summer of 1991 are the first in a multiple year project made possible through funding from the National Science Foundation. This summer's excavations are beginning to yield answers to questions about the site and about prehistoric occupation of high altitude regions.

INTRODUCTION

The Helen Lookingbill site is a multi-layer occupation site located on the southern edge of the Absaroka plateau in northwestern Wyoming. Cultural deposits at the site range in age from Paleoindian to Late Prehistoric periods. Faunal remains from these layers contain mountain sheep, deer, bison, and small rodents (Frison 1983). Research at the site is beginning to provide insight into the nature of prehistoric occupation of the Central Rocky Mountains. This preliminary report provides an overview and discussion of the research topics addressed by work at the Helen Lookingbill site. These topics include cultural chronology, high altitude subsistence-settlement strategies, and hunter-gatherer technological organization. Also included are summaries of past excavation results, a discussion of preliminary results from the 1991 excavations, and an explanation of the field recording methods employed in the 1988 to present excavations. At approximately 8600

feet (2620 meters) ASL, the Helen Lookingbill site is in a protected mountain meadow that contains a drainage fed by a perennial spring (Figure 1). The site sits on the southern edge of the modern spring-fed creek that flows westward through a broad, grassy meadow containing verdant wildflowers and aspen (*Populus tremuloides*) with white bark pine (*Pinus albicaulis*) on the edges. Vegetation near the site currently includes a wide variety of edible plant resources including arrowleaf balsamroot (*Balsamorhiza sagittata*), sago lily (*Calochortus nuttalli*), columbine (*Aquilegia* spp.), white bark pine and wild onion (*Allium* spp.). Immediately to the south of the site area is a colluvial slope covered with sagebrush (*Artemisia* sp.) and small trees. The spring has been active throughout the past 10,000 years and it appears that the meadow setting has also existed throughout this time.

The Helen Lookingbill site area provided a rich although somewhat harsh habitat for its inhabitants. The countryside around the Helen Lookingbill site is rough, mountainous terrain that supports other vegetation communities. Within a two mile radius, elevation varies from 7400 to 9400 feet (2258 - 2865 meters) ASL. The steepness of slope produces differences in the timing of the flowering and fruiting of vegetation. For example, one can follow the flowering of arrowleaf balsamroot and sago lilies up the mountain slope over a period of several weeks. Mountain sheep (*Ovis canadensis*), deer (*Odocoileus* spp.), elk (*Cervus elaphus*), moose (*Alces alces*), grizzly bear (*Ursus arctos*), coyote (*Canis latrans*), and other smaller members of the extant mammalian fauna also currently live near the site. These plant and animal species have likely inhabited this area since the begin-

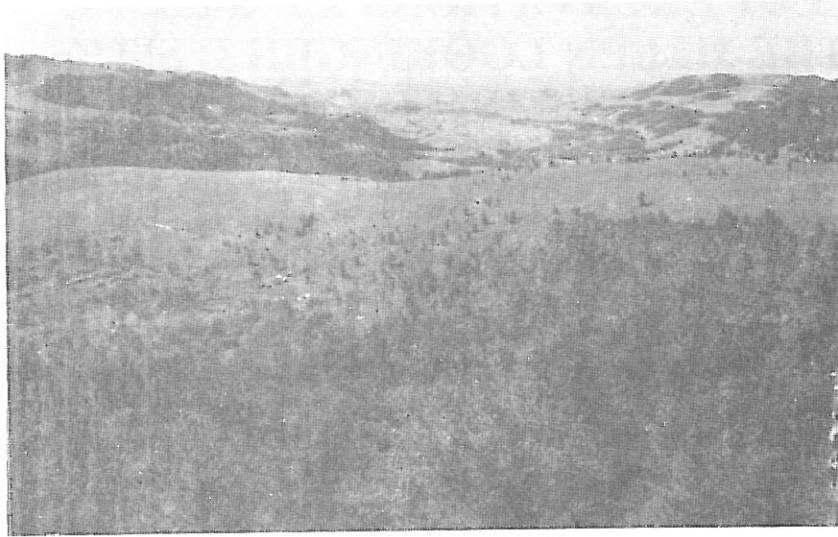


Figure 1: View of Helen Lookingbill site (48FR308) looking south. Site is located in small valley, just left of photograph center near vehicles.

ning of the Holocene.

HISTORY OF EXCAVATIONS

Found by Helen Lookingbill in 1968, crews from the University of Wyoming under the direction of George C. Frison began investigations at the site in 1972. These investigations have continued intermittently since then with a major break between 1982 and 1988. The excavation history at the Helen Lookingbill site and the data recovery methods parallel the changes seen in American archaeological field methods during the 20 years spanned by the site excavations (see Meltzer et al. 1986). The research questions addressed at the site have remained similar during the past 20 years. However, the methods used to answer these questions have become more refined and detailed. At the Helen Lookingbill site, each succeeding excavation season used a finer-scaled recovery method than the preceding season. Starting in 1988, excavation teams from the University of Wyoming pursued a field methodology designed to understand the formation of, and therefore the occupations at, the Helen Lookingbill site through use of detailed on-site

recording methods developed in the mid-1980s (e.g., Rapson 1990). Before the 1991 field season, most excavations were conducted with help of vocational archaeologists (including many members of the Wyoming Archeological Society) and professional volunteers, the Wyoming State Archaeologist's Office, and University of Wyoming archaeological field schools (Osborne 1975). Excavations this July and August consisted of three ten-day sessions with a paid professional crew from the University of Wyoming and vocational and professional volunteers.

CURRENT RESEARCH

Current research at the Helen Lookingbill site addresses four related topics: cultural chronology, high altitude subsistence-settlement strategies, paleoenvironmental change, and hunter-gatherer technological organization. Our excavations at the site and laboratory analysis of previously excavated materials addresses these topics.

Cultural chronology: Broad chronological topics addressed by the Helen Lookingbill site research include the nature of Paleoindian/Early

Plains Archaic transition in high altitudes of the Central Rocky Mountains and the nature of Paleoindian occupation of the site. Of particular interest to the Paleoindian/Early Plains Archaic transition is the presence of a series of Paleoindian projectile points found at the site that are characteristic of high altitude regions of the Central Rocky Mountains occurring with "classic" side-notched Early Plains Archaic projectile points. The late Paleoindian deposits at the site contain fish-tailed projectile points indirectly dated to approximately 8,000 years before present (Figure 2, upper right). Associated with these points are other lanceolate projectile points (Figure 2). The Early Plains Archaic levels at the Helen Lookingbill site contain the "classic" side-notched projectile points associated with this time period (Figure 2). The nature of these different projectile point styles and their presence within the deposits at the Helen Lookingbill site is one aspect of the research being conducted on materials from the site. The Helen Lookingbill site chipped stone assemblage contains what appear to be similar tools and debris (bifaces, cores, tools, and debitage) from both the Late Paleoindian and Early Plains Archaic deposits (Frison 1983:9).

A 10,405 year old stratum (Beta-28877) associated with chipped stone was identified in a 1988 backhoe trench. During 1991, excavators encountered this stratum at opposite ends of two contiguous one by one meter squares and verified the separation of this early deposit from the overlying Late Paleoindian/Early Plains Archaic deposits by 25 to 35 centimeters of sediment. Field observations of the material within this deposit suggest the level contains dense accumulations of flakes and bone, much like the Late Paleoindian and Early Plains Archaic levels. Most of the lithic material is locally available and are either large biface reduction flakes or blades. There appears to be a difference in the formation of this deposit, as more of the artifacts appear to be flat-lying than what is seen in the overlying levels.

At this point, unanswered questions exist about this stratum. No diagnostic artifacts were found during this summer's excavations, so the

cultural affiliation of these remains is uncertain. Further excavations of this stratum must solve problems associated with a spring-like flow of water beginning approximately 15 centimeters above the earliest known deposits. Also, the nature of this early high-altitude occupation raises intriguing questions about Northwestern Plains prehistory. There are few, if any, archaeological sites found at such altitudes that date to this early time period. No in-depth analysis of the nature of human adaptation at these altitudes has been completed for this area of the west. Comparison of the material in the upper levels with this lower stratum should contribute to our understanding of the nature of human settlement and subsistence in the central Rocky Mountains during the Paleoindian period. Since bison kills are the common 10,000 year old archaeological site on the Plains, the potential exists at the Helen Lookingbill site to obtain information from intact deposits about an early time and human adaptation that we know very little about.

High altitude subsistence-settlement strategies: Linked with the cultural chronology at the Helen Lookingbill site is the nature of settlement and subsistence for the groups occupying the site at various times in prehistory. Based on remains from the Helen Lookingbill site and from other high altitude sites in the region, mountain Paleoindian groups apparently focused on a broad range of fauna. The primary faunal remains from the Helen Lookingbill site consist of medium-sized animals such as deer and mountain sheep (Frison 1983). Although these remains have yet to be completely analyzed, deer constitute most of the fauna found in the 1988-1991 excavations.

Prehistoric hunter-gatherer settlement that focused on a broad range of faunal and floral resources probably involved short-term stays at particular locations. The Helen Lookingbill site represents a particularly favorable location for such short-term camps. The perennial spring provided a predictable water source. A variety of animal and plant foods were available in the area at different seasons of the year. Raw materials for chipped and ground stone tools

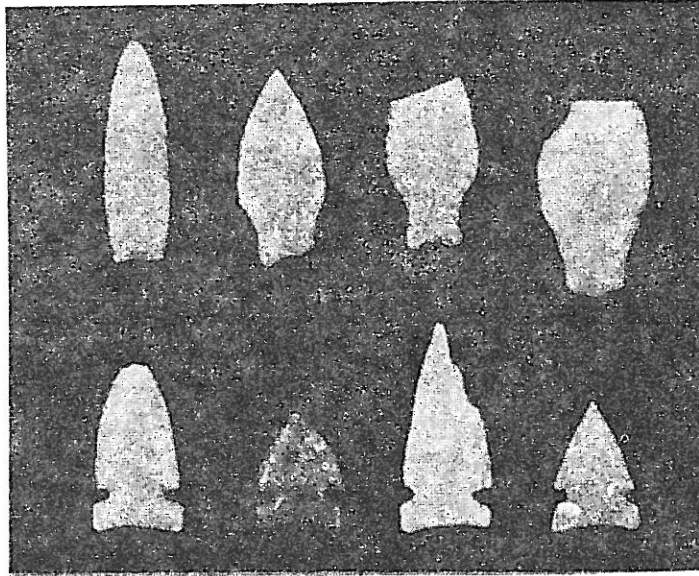


Figure 2: Projectile points from Helen Lookingbill site. Top row: Late Paleoindian projectile points. Bottom row: Early Plains Archaic projectile points. Projectile point in upper right hand corner is 55.6 mm long and 16.4 mm wide.

were abundant in the region.

The Helen Lookingbill site is unique among Paleoindian sites on the Northwestern Plains in that manos have been found in direct association with Paleoindian deposits. Both manos and metates have been found in the Early Plains Archaic deposits. The presence of ground stone in the deposits at the Helen Lookingbill site, beginning at least as early as the late Paleoindian occupations, suggests that inhabitants of the site manipulated their high altitude environment to further process the food obtained in the area (either seed, nut, or animal products). To date, no pollen washes or residue analyses of the ground stone have been completed to test hypotheses concerning the nature of ground stone use at the site.

Paleoenvironmental change: Most research on paleoenvironmental conditions during the past 10,000 years on the Northwestern High Plains has focused on basin regions and not on mountain areas (e.g., Beiswenger 1987; Markgraff and Lennon 1986). Research at the Helen Lookingbill site is designed to address questions about the nature of Holocene environmental

change in such a high altitude region. Geomorphological work this summer revealed a long-term sequence of alluvial deposits throughout the Holocene (10,000 - present). The stratigraphy at the site is complex, with different aged alluvial and colluvial deposits lying side-by-side rather than above one another. While faced with complex stratigraphy, the fine-scaled archaeological techniques used allow the analytical separation of these deposits.

Any broad environmental changes in the region appear to have been mediated by the constant flow of the spring at the Helen Lookingbill site. The site location may have been chosen because it allowed the inhabitants to use its predictable water supplies and natural resources. Analyses of pollen remains from hill slope deposits are pending. When completed, they should provide a clearer perspective on the nature of Holocene environments in the region beyond the site.

Hunter-gatherer technological organization: Analysis of the chipped stone remains from the Helen Lookingbill site provides information on the production activities occurring at the site. In

addition, chipped stone analysis contributes information on the activities of groups before they entered the site. The types of raw materials and tools brought into the site and discarded indicate where groups came from and what they were doing prior to occupying the site. Also, the production debris of tools that were manufactured and removed from the site provides information about future events anticipated by the inhabitants.

At the Helen Lookingbill site, the predominant raw materials for tools are locally available cherts and quartzites. These materials are easily obtained within a quarter mile of the site. The presence of a reworked obsidian Paleoindian projectile point from Obsidian Cliff in Yellowstone National Park and obsidian from other sources to the west suggests that groups moved into the site from the west at various times (x-ray fluorescence, Ray Kunselman, personal communication, 1991).

Production activities on the site appear to have been directed toward the manufacture of bifaces and projectile points and several different flake tool types (Frison 1983). There are many broken and heavily reworked projectile points and drills manufactured out of projectile point bases within the chipped stone assemblage. This, in turn, suggests projectile point replacement and resharpening may have been one activity conducted at the site. Further analysis of the chipped stone remains (using minimum nodule analysis - see below in Field Methods section) will provide more in-depth information about the nature of production activities at the site.

Ground stone (both manos and metates) from the site's deposits were manufactured from locally available materials; igneous rocks for manos and sandstone for metates (Jim Miller and Ruth Shepherd, personal communication, 1991). Ruth Shepherd, a University of Wyoming graduate student, is currently completing an analysis of the ground stone from the Helen Lookingbill site.

FIELD METHODS

Excavations at the Helen Lookingbill site

during the past four years incorporated a field methodology based on the detailed, fine-grained recording of in-field, in-ground information. These methods are designed to answer questions about how the archaeological record was formed. This is necessary before many questions posed by research into the four broad topics discussed above can be answered.

The excavation methods at the Helen Lookingbill site have changed over the past 20 years with changing perspectives on archaeological theory and method. One major difference in the approach to the archaeological record that is evident at the Helen Lookingbill site is the integration of interdisciplinary studies (e.g., pollen, geology, and geomorphology) into the archaeological research program.

In combination with an increasing emphasis on the use of interdisciplinary studies to aid archaeological decision making, perspectives on the nature of the archaeological record have changed drastically in the past 20 years (e.g., Binford 1977, 1978, 1980; Schiffer 1976, 1987). Archaeological sites are no longer considered fossilized bits of past human behavior. Few archaeological sites are now known to be "undisturbed" in the sense that they appear as they did when first deposited. Instead, archaeological sites as they are excavated have been disturbed by many processes (both cultural and natural) that have influenced what the excavated remains look like when they are removed from the ground. As archaeologists changed their understanding of the nature of the archaeological record, the techniques used to derive information about the past changed as well. The artifacts as found in the ground no longer "speak" to the archaeologist with clear and obvious answers about how they were used. Artifacts found in an archaeological site are at the end of their use-life and were either discarded, lost, or intentionally buried by their users. The archaeological record viewed by an archaeologist must be put through many "filters" to ultimately understand the behavior of the humans that deposited the artifacts in the first place.

One way of introducing the "filters" necessary for interpreting the archaeological remains

is through detailed fine-scaled recording of information about the location and the context of the artifacts in the ground. This information can then be incorporated with other aspects about the context of the archaeological site (geology, palynology, geomorphology, cultural chronology, and local raw material sources) to understand the nature of human occupation at the site. Detailed recording of contextual information has been applied to site structural studies using faunal remains (e.g., Rapson 1990; Todd 1990; Todd and Rapson 1988), attribute and spatial analysis of artifacts (Larson and Ingbar i.p.), and historic remains (Kornfeld et al. 1989). The Helen Lookingbill site provides the opportunity to apply this type of detailed recording to an archaeological site where chipped stone artifacts predominate, and yet where there are faunal remains as well. In addition, the Helen Lookingbill site also represents an opportunity to apply the methods used previously on single-layer sites to a site with multiple layers of deposition. Use of these field techniques provides a means of in-depth analysis of the nature of the archaeological deposits. For example, a preliminary analysis of the Helen Lookingbill site deposits suggests that slope wash has differentially affected the levels at the site, causing some movement of materials out of their original location of deposit (Jim Miller, personal communication, 1991). However, the nature and extent of this movement is not yet completely understood.

The field recording methods applied at the Helen Lookingbill site use a variety of techniques designed to gather information about the artifact and its context before it ever leaves the ground (Appendix 1). Each artifact found *in situ* receives a unique number, which consisting of the unit number and a sequential number assigned to each artifact in this unit (assigning the first artifact found in the unit with the number 1). Excavators record information on the provenience and orientation of the artifact (Figure 3), relationship of this artifact to other artifacts and strata (AC, Strat/Cntx), describe the artifact (class, genus, element, maxlen, count). Although following biological divisions, the terms

"class, genus, and element" are applied to all artifacts on the coding form used at the Helen Lookingbill site (see Appendix 1). These variables are hierarchical divisions, with each category providing more information about the artifact.

During the initial recovery process, the excavator marks the location of the provenience point to be taken by the measuring instrument (Figure 4). This is so later laboratory analyses may verify and gather further information on the location of the artifact in the ground and therefore aid in understanding formation of the archaeological deposit. The three-dimensional provenience of the artifact is taken using an EDM (Electronic Distance Measure) Theodolite and a reflecting prism (Figure 5 and 6). This theodolite is tied into the grid system of the site and measures to the nearest millimeter. Excavations during the summer of 1991 used the best of modern technology. A laptop computer and printer were added to provide the excavators with an immediate printout of provenience information and to store this information as it was taken in the field (Figure 7). While the "wonders of modern technology" provide the information recorded at the Helen Lookingbill site quickly and efficiently, such methods may be applied using much simpler mapping equipment (e.g., transit or builder's level and tape measure).

Once the material is removed from the ground, it is placed in small plastic bags with the unit name (the northing and easting) and unique artifact number on it for transport to the field laboratory (Figure 7). Here, the artifact is washed minimally and cataloged using the standard format from the Wyoming State Archaeologists Office (University of Wyoming and Office of Wyoming State Archaeologist 1990).

All chipped stone is further separated into nodules of similar color, cortex, and inclusions for use in refitting and minimum nodule analysis (Figure 8 and 9; Ingbar et al. 1989; Larson 1990). Refitting involves trying to fit the flakes back together again, much like a jigsaw puzzle, to reconstruct the production activities occurring at the site. When refitting is unsuccessful



Figure 3: Excavator using Brunton compass to determine orientation of artifact in ground.



Figure 4: Flakes found *in situ* with "pro-points." Small black dots (made with marker) on flakes mark surface where provenience information will be taken. Provenience is measured from underneath artifact.

(which is often the case) and because it is very time consuming, minimum nodule analysis may

be used to answer similar questions about prehistoric technological activities. Each minimum

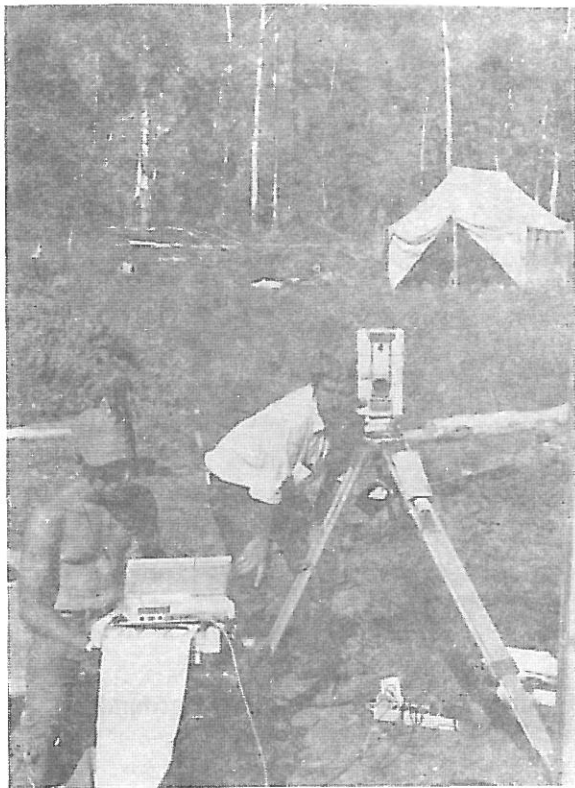


Figure 5: View of mapping equipment used at Helen Lookingbill site, including EDM, laptop computer, and printer.

nodule of chipped stone represents the closest approximation to a single nodule that was introduced and reduced at the site. Studying these minimum nodules allows a finer-grained perspective on flintknapping activities at a site. Since the minimum nodule represents that debris left behind by the tool-maker, we also can use minimum nodule analysis to determine what tools were produced at the site, even though the tools themselves may have been removed to other locations. To date, the Helen Lookingbill site chipped stone material has been separated into minimum nodules, which will be subject to refitting and detailed attribute analysis this winter.

CONCLUSIONS

This past summer's excavations at the Helen Lookingbill site represent only a small portion of what has become a 20 year project. By gathering together the wisdom of the past two decades and taking advantage of the knowledge and changes in archaeological field and analytical techniques, the results from further analyses and excavation should contribute greatly to our understanding of the prehistory of the Northwestern High Plains and Northwestern Wyo-



Figure 6: Excavator holding EDM reflecting prism. Each small plastic bag in unit marks a mapped artifact.

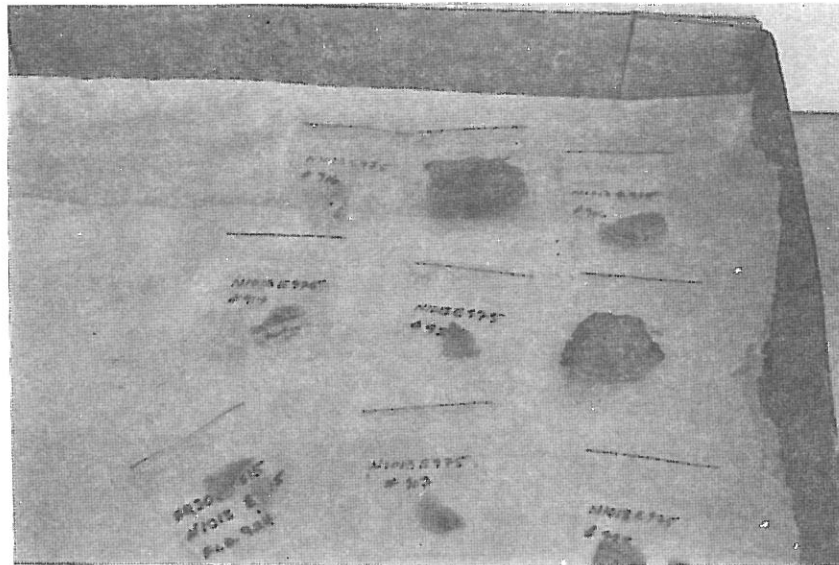


Figure 7: Cataloged artifacts and artifact bags in laboratory. Each artifact bag has unit designation (e.g., N1014 E975) and unique number, called field number, for each artifact.



Figure 8: Chipped stone (tools, projectile points, flakes, and pieces of shatter) separated into minimum nodules in field laboratory.

ming, in particular. The Helen Lookingbill site represents a location that was occupied intermittently throughout at least the past 10,000 years.

While never occupied on a year-round basis, the site was probably used as a deer and mountain sheep hunting camp. In addition, the location of



Figure 9: Refitting is time-consuming and requires hours of "jigsaw-puzzle" work. Here, minimum nodules have been placed on the table to check their sorting and to attempt refitting.

a stone quarry within 1/4 mile of the site, the presence of a permanent spring, and the abundant edible plants available during certain parts of the summer made this an ideal location for short term visits. More detail on the nature of these hypothesized uses of the Helen Lookingbill site must await further laboratory analyses.

The results of geomorphological work at the site bring a much clearer understanding of the nature of the deposits at site than existed previously. While this work suggests that the 10,000 years of archaeological deposits are not easily separated, the use of the detailed contextual information about artifact location collected during the past four years will allow further consideration of the nature of the human behavior that deposited the artifacts. Excavations planned for next summer at the site, with the potential for a third year's work as well, will benefit from the analyses planned for this winter in Laramie and will be directed to answering many questions about the site and the time periods discussed above.

ACKNOWLEDGEMENTS

48FR308 would never have provided the amount of information about prehistoric human occupation of high altitudes without Helen Lookingbill. Her enthusiasm throughout the years is appreciated and we hope to live up to her expectations by learning more about the site and the surrounding area. George Frison has been instrumental in maintaining the support for the work at the Helen Lookingbill site. Funding for this summer's excavations was provided by the National Science Foundation (Grant Number BNS-9105914). The U. S. Forest Service - Rocky Mountain Region and Shoshone National Forest have permitted access to the site through the years. Leslie Wildesen has been especially helpful with the permitting process. Many members of the Wyoming Archaeological Society, University of Wyoming Field Schools, and others have contributed time, energy, food, and other support making our excavations possible and pleasurable throughout the years. A list of people would no doubt contain omissions, so I hope those who have helped through the years will understand and accept my thanks. Marcel Kornfeld commented on an earlier draft of this

article. Any errors or omissions are, of course, mine alone.

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APPENDIX 1
HELEN LOOKINGBILL SITE 1991: MAPPING - CODING FORM

PART I: PROVENIENCE INFORMATION

- UNIT** Excavation unit name/number. Not all units at Lookingbill have unit names, The unit designator is ALWAYS the **SOUTHWEST** corner.
- #** Starting with the next artifact number assigned for your unit in the first row and working sequentially, number all artifacts, screen bags, and samples for that unit **ONLY**. Do not number daily artifact bags.
- ARTCON** Articulated units or conjoins. Use sequential number for each set of articulations or conjoins.
- LEVEL** Enter the starting and ending elevations of the level that all line items come from. An example of a 5 cm arbitrary level entry: 99.25-99.20. Remember to record level changes as you dig.
- NORTH** The north coordinate (northing) or the **SOUTHWEST** corner of the unit you are working in. For example N1014. This is followed by a decimal point and the internal coordinates of the center of the artifact (e.g., N1014.871 is 871 mm (87.1 cm) north of the **SOUTHWEST** corner.
- EAST** The east coordinate (easting) of the **SOUTHWEST** corner of the unit. For example E975. This is followed by a decimal point and the internal coordinates of the center of the artifact (e.g., E 975.014 is 14 mm (1.4 cm) east of the **SOUTHWEST** corner.
- ELEV** Enter the corrected elevation, for example 98.995. Under some special cases you may be instructed to enter the raw rod reading which will look like this: 1.285. In this cases be sure to enter the **IE** (Instrument elevation) in the **IE** column. **ALWAYS TAKE THE ELEVATION UNDERNEATH THE ARTIFACT AT THE LOWEST POINT.**
- STRAT/** Enter the name of the natural stratum if known.
- CONT** FF - feature fill KR - krotovina US-Unspecified
- ORINT** Enter the compass orientation (0°-180°) of the long axis of the artifact for artifacts over 2 cm maximum length.
- DIP DIR** Enter the compass orientation of the direction of dip.
- DIP DEG** Enter the degrees of dip of the artifact.
- UP** Enter the side up of the item that faces skyward when in situ. Codes are: **IN**-interior, **DR**-Dorsal **EX**-exterior, **VN**-ventral, **EG**-edge. **PUT A SHARPIE DOT ON THE SIDE UP IN THE CENTER WHERE YOU TOOK YOUR NORTHING AND EASTING MEASUREMENTS.**

Part II: DESCRIPTION OF ARTIFACTS

CLASS

AW - Awl
BE - Bead
BO - Animal bone
CE - Ceramic
CH - Charcoal
CS - Chipped stone
GS - Ground stone

GS - Gastropod
OC - Ochre
RK - Rock
SM - Sample (soil, pollen,
feature, etc.)
WO - Wood
UN - Unidentifiable

GENUS

CHIPPED STONE

ANG - Angular debris
BF - Biface
BU - Burin
CO - Core
DN - Denticulate
DR - Drill
ES - End scraper

FK - Flake
GR - Graver
OT - Other formally shaped
tool - describe in COMMENTS
PP - Projectile point
SS - Side scraper
UT - Utilized flake

GROUND STONE

GR - Ground stone

OT - Other formally shaped tool, please
fragmentdescribe IN COMMENTS
SA - Shaft Abrader

MO - Mano
ME - Metate

BONE

AC - *Antilocapra americana*
(pronghorn)
AV - Avian
BI - *Bison bison*
CV - Carnivore
CE - *Cervus elephas* (elk)
OC - *Ovis canadensis*
(mountain sheep)

OD - *Odocoileus* sp. (deer)
RO - Rodent
UD - Deer, sheep, antelope size
UL - Elk, moose, horse size
US - Unspecified

OTHER

PC - Prehistoric Ceramic
HC - Historic Ceramic
HM - Hammerstone

OH - Other Historic
WW - Worked wood
NO - None of the above (unknown)

ELEMENT

Bone

CRANIUM/TEETH

CRN - Cranium
MR - Mandible
HY - Hyoid
MMX - Maxillary molar
MMR - Mandibular molar
PMX - Premaxillary molar
HS - Horn sheath

PMR - Mandibular premolar
IC - Incisor
MUN - Unidentified molar
UN - Unidentified premolar
TRF - Tooth fragment
TTH - Unidentified tooth
ANT - Antler

AXIAL SKELETON

AT - Atlas vertebra
AX - Axis vertebra
CE - Cervical vertebra
TH - Thoracic vertebra
LM - Lumbar vertebra
SA - Sacral vertebra
CA - Caudal vertebra
SAC - Complete sacrum

CS - Costal cartilage
SN - Sternal element
ZY - Zyphoid
MN - Manubrium
RB - Rib
VT - Unidentified vertebra
or vertebra fragment

APPENDICULAR SKELETON - FORELIMB

SC - Scapula
HM - Humerus
RD - Radius
UL - Ulna
RDU - Radius-ulna
MC - Metacarpal
MCF - Fifth Metacarpal

CP - Unidentified carpal
CPU - Ulnar carpal
CPI - Intermediate carpal
CPR - Radial carpal
CPS - Fused 2nd & 3rd carpal
CPF - Fourth carpal
CPA - Accessory carpal

APPENDICULAR SKELETON - HINDLIMB

PV - Complete pelvis
IM - Innominate
FM - Femur
PT - Patella
TA - Tibia
LTM - Lateral malleolus
MTS - Second metatarsal

TR - Unidentified tarsal
CL - Calcaneus
AS - Astragalus
TRC - Fused central & 4th
TRS - Fused 2nd & 3rd tarsal
TRF - First tarsal

APPENDICULAR SKELETON - OTHER

PHF - First phalange
PHS - Second phalange
PHT - Third phalange
PH - Unid. phalange
MP - Metapodial

SEP - Proximal sesamoid
SED - Distal sesamoid
SE - Unidentified sesamoid
HF - Hoof cover

FRAGMENTS

LB - Long bone
CB - Cancellous bone

FB - Flat bone
US - Totally unidentifiable
bone fragment

Lithic raw materials:

BS - Basalt
CH - Chert
CL - Chalcedony
GR - Granite
IG - Igneous
LS - Limestone
NV - Non volcanic glass

OB - Obsidian
PW - Petrified wood
QZ - Quartzite
SS - Sandstone
SL - Shale
ST - Steatite
US - Unspecified

CONDITION (CND)

B - Burned U - Unburned W - Weathered

PROVENIENCE TYPE (PRO TYPE)

IS - In situ (point provenience)
SC - Screened material
(unit, level & quad known)
WC - Wall cleanup
NP - No provenience

NW - Northwest quad
SW - Southwest quad
SE - Southeast quad
NE - Northeast quad

PART III: MISCELLANEOUS COLUMNS AND CODES

MAX LENGTH - Maximum length of the artifact in millimeters.

CNT - Number of items included (will usually be one, except when screen artifacts are recorded).

CC - Curation code. Options are PJ - Plaster jacket, AC - Acrysol, DU - Duco OT - other, LO - lost.
Please specify in comments.

IE - Instrument elevation (it may change several times during the day).

COMMENTS - As many as will fit. Note screen bags here, 1/4", 1/8" or 1/16": WET or DRY? How was it collected? Labelled? Mapped to scale? True confessions (e.g., bone crushed in place, trowel retouch [and where], etc.) More than one piece?

CAT. NUMBER - Will be filled out in the lab.