MONTANA PALEOINDIAN ARTIFACT RECORDING PROJECT: A CALL FOR DATA

David G. Anderson and Ruthann Knudson

Introduction

Please help us to systematically record information about Montana Paleoindian artifacts, to contribute to a continent-wide database. Such projects are underway in many states, provinces, and parishes throughout the United States, Canada, and Mexico (Anderson 1990a, Anderson et al. 2009), and are an extremely important source of information about the early human settlement of the Americas. We need to get Montana on the map!

Paleoindian materials are those that date from before about 8,000 radiocarbon years ago (9000 calendar years before present [cal BP]; Reimer 2004) in the Americas. The basic source for information about Montana-related tools is still Marie Wormington’s 1957 Ancient Man in North America, supplemented by George Frison’s second edition of Prehistoric Hunters of the High Plains and Jeb Taylor’s Projectile Points of the High Plains. However, none of these deals with Montana materials very well because the authors didn’t know much about Montana—which we’d like to remedy. Wormington and Dick Forbis’ An Introduction to the Archaeology of Alberta, Canada is a useful comparative book, as is Roy Carlson and Martin Magne’s Projectile Point Sequences in Northwestern North America, and you should also check out information from the Columbia Plateau and Idaho’s Snake River Plain. If you know of a handy general reference for those areas, please let us know. We don’t know what pre-13,200 cal BP points (pre-Clovis) or associated tools look like, though Les Davis has found pre-Folsom artifacts from the MacHaffie site—but if you think you know of some, please let us know.

The first Paleoindian projectile point surveys in the country were started by Marie Wormington in Colorado and Ben C. McCary in Virginia in the 1940s. There has been minimal systematic survey done in Montana. Until we can collect Montana Paleoindian information, most of which is in the heads and collections of avocational archaeologists, we won’t know what is out on the landscape and in collections. Please help us compile information about Montana Paleoindians, whether you’re an avocational collector, member of a museum or cultural resource management firm, or academician.

Why is a Paleoindian Point Survey Needed?

At present, comparatively little is known about Paleoindian occupations in most parts of the country. A few well known sites have been excavated here and there in Montana, such as Anzick, Barton Gulch, Black Bear Gulch, MacHaffie, Mill Iron, Myers-Hindman, and South Everson Creek (Mammoth Meadow). Sites and artifacts are found from time to time in ongoing

---

1 David Anderson is Associate Professor and Associate Head, Department of Anthropology, The University of Tennessee, dander19@utk.edu. Ruthann Knudson is Principal, Knudson Associates (3021 4th Ave. S., Great Falls, MT 59405-3329, ph. 406.216.2676; Executive Director, Friends of the Museum of the Plains Indian; and Adjunct Instructor, Montana State University, Great Falls; paleoknute@3rivers.net.
excavation projects, occasionally with spectacular results, but more typically there are only a small number of Paleoindian tools in most organized projects.

In the late 1980s, Leslie Davis compiled data on 64 Montana Clovis and Folsom projectile points, which have been entered into the on-line Paleoindian Database of the Americas (PIDBA, http://pidba.utk.edu; Anderson et al. 2005). Unfortunately, no one since has followed up on this initial effort, and primary data on these artifacts (i.e., detailed measurements and photographs) are either scattered in a number of publications or remains unpublished. Putting all this information in one place, and making it easily accessible to an international audience, would be a valuable service.

When primary archaeological data are compiled, and available for inspection, they can tell us new and previously unrecognized things about the past. Fluted and other lanceolate projectile points and associated tools are unambiguous diagnostic indicators of early occupations. Information about their occurrence is thus the only way, short of excavation and absolute dating procedures, that we can recognize where early peoples were on the landscape. By recording information about these artifacts it may be possible to recognize and understand variation within these forms, something not well understood anywhere in the country at present. Equally important, we may come to better recognize landform types or specific sites where undisturbed assemblages may occur.

The quality and quantity of our information continues to get better and better, and with it the things we can do with that information. In 1982 Louis Brennan and members of the Eastern States Archaeological Federation gathered information on 5820 Paleoindian projectile points (mostly fluted points) from 17 states and two Canadian provinces located primarily along the Atlantic seaboard (Brennan 1982). In the late 1980s and early 1990s David Anderson (1990) began compiling fluted point data from across Eastern North America, which was used to develop models of Clovis colonization and settlement in that region. The survey has expanded markedly in the two decades since it started and now encompasses the Americas. It is the work of many contributors.

As of 2009, the PIDBA web site provides locational data on almost 30,000 projectile points from Canada, the United States, and Mexico (64 of which are from Montana), together with attribute/measurement data for over 15,000 artifacts. A new development is the inclusion of images of artifacts, some 6000 of which have now been posted. PIDBA thus provides an increasingly robust sample for researchers interested in exploring variability in early assemblages. PIDBA also has on-line files of radiocarbon dates and bibliographic references, as well as numerous links to other Paleoindian web sites. PIDBA serves as a repository for the data in state level surveys, but it is only as useful as the data donated to it. For it to succeed, surveys such as that being started in Montana need to be actively conducted and any data collected be made available to an international audience.

PIDBA point locational data have been used to produce maps of fluted point incidence across North America (Figure 1). The concentrations of fluted points that have been documented in various parts of the landscape may be areas where these people first settled, and from which subregional cultural traditions emerged—or they may reflect areas of greater geological exposure, and/or higher concentrations of modern collectors. A number of fluted point
concentrations in the East have been interpreted as the territorial ranges of Paleoindian social
groups, staging areas, or the nuclei of subsequent subregional cultural traditions (Anderson
1990b, Dincauze 1993). While the data obviously remain incomplete and subject to many kinds
of bias, as the samples grow larger the patterns are likely to prove increasingly accurate.
Measurement data from individual artifacts have tremendous value as well. We still have a long
way to go before we can claim to have documented the frequency and distribution of major
stylistic and technological variants of Paleoindian points. Analyses are, however, starting to
appear that are directed to resolving variations in Paleoindian projectile point styles and forms.
As more and better measurement data on early points are compiled, we will be able to resolve
important patterning in the data. Data from individual state recording projects are absolutely
critical to the success of such efforts.

What, Who, and Why?

The purpose of this recording project is to compile measurements and digital photographs of the
artifacts left behind by the earliest peoples of our region. We’re interested in points or even
descriptions of complete assemblages, their material types and associated environmental data,
site locations and ownership, and whether the location in question is protected or is undergoing
looting or erosion. Data are contributed voluntarily. Specific locations and private collection
owner’s names, while recorded, are made public only with owner’s permission. If the collections
are made from private lands with owner permission, or from public lands with a collection
permit, we can help you record the find location if you wish.

Ruthann Knudson has agreed to coordinate this information collection effort, coordinated with
Stan Wilmoth, Montana State Historic Preservation Office (SHPO) State Archaeologist, as well
as the PIDBA. All information provided to Knudson will be transferred to both the PIDBA and
Wilmoth, for long-term public use (except as specified on the submitted forms). The artifact
record form accompanies this article and can be copied for use with as many artifacts as desired;
it is also available at the http://www.montanahistoricalsociety.org/shpo/forms.asp website. If you
would like help, contact Knudson—she, Wilmoth, and/or another professional archaeologist will
visit you and help in any way possible. Sites are recorded on Montana Cultural Resources
Information System (CRIS) forms. These are available online at the same website as (1) a
WORD document with fill-in-the-blanks and drop-down menus or (2) a printable PDF version
that can be printed, filled in, and mailed to the SHPO.

Information about projectile points in particular is collected using a standardized recording form
(attached or available online), which is comparable to forms used in many other surveys. This
ensures that at least some basic information is consistently recorded, allowing for analyses with
materials over large areas. Additional categories of data can be added as necessary to the form,
depending on local circumstances. Complete, broken, and reworked points and other tools should
all be recorded.

How To Contribute To the Survey

We ask that people interested in Montana archaeology who have or know about Paleoindian
projectile points or other artifacts fill out a copy of the attached record form for each artifact and
send it to Ruthann Knudson (contact information below). A description of the attributes and measurements being recorded is provided on the record form, adapted from the form used in the Missouri state survey (Anderson and O’Brien 1998, Martens and Lopinot 2009). Recording projects like these are easy to get started, and while the task seems daunting at first it is surprising how quickly information can be compiled.

Fill out the forms to the best of your ability. The most critical information to collect are digital color photographs of the front and back of the artifact, and a side view if possible taken by mounting the artifact on a lump of clay. Photographs should always be taken with a scale such as a ruler or a coin placed close to the artifact. Equally important is determining, as best as possible, the location where the artifact was found. In many cases only general locational data may be available, but even these are important since a few miles are unlikely to matter much in analyses conducted over a large area. Many of these artifacts were collected long ago, and while it is always best to determine the location as tightly as possible, important things can still be learned with more general data.

Don’t worry if some of the information on the form is left blank or if any drawings included are fairly crude. Just knowing an artifact exists is the first step, and after that getting complete information about it is typically just a matter of time. Recording the current owner’s name, or the collection repository where the material is stored is important, but these all too often change over time. Fortunately, good photographs of flaked stone tools are very much like fingerprints, making it possible to recognize artifacts reported previously.

In most surveys information is contributed by many people, although it is usually only a few who actually fill out most of the forms. Knudson or another professional Montana archaeologist will try to visit the owner and record the artifacts if requested, and/or encourage people to bring artifacts to meetings, county fairs, or conferences where they can be identified and more fully recorded.

A good way to draw stone tools is to photocopy or scan each side and then trace the flake scars from the copy. Even an outline, with the photocopies attached, is sufficient to begin the documentation of these artifacts. Once basic descriptive and locational information about a point exists, sooner or later the artifact can be photographed to scientific standards. Fortunately digital cameras make this task far simpler and less expensive than it was even a decade ago.

Attribute data should be compiled to the best of a person’s ability. Positions at which artifact measurements are to be taken are illustrated on the record form. Measurements should be taken to the nearest millimeter using calipers if at all possible. Answer questions about the non-metric attributes (i.e., raw material, color, presence or absence of basal grinding) as best you can. Remember that once these artifacts are recorded, it should be possible to go back and collect more detailed data about them in the future. At the present, since we know very little about the kinds of Paleoindian artifacts that occur in Montana, any information that can be provided is important.

If you are uncertain how to fill out these forms, but know about artifacts that should be recorded, let us know. Once this project gets underway, there will probably be several people around the state who can help record these artifacts.
As forms are received by Knudson, specimen numbers will be assigned. Copies will be returned to the recorder, and the numbered forms will be sent to the Montana State Historic Preservation Office site files for permanent storage (as well as copies to the PIDBA). The progress of the survey will be reported in future issues of *Archaeology in Montana*. We need your help if this project is to succeed!

**Where to Send Completed Forms**

Send completed forms, or any other information about Paleoindian points, to: Dr. Ruthann Knudson, Knudson Associates, 3021 4th Ave. S., Great Falls, MT 59405-3329 (ph. 406.216.2676). Information can also come as electronic documents to paleoknute@3rivers.net

We urge all members of the Montana Archaeological Society to participate in this project by contributing your own data or passing the request and forms along to other people who have important artifacts. Let’s really put Montana on the map!

**References Cited**

Anderson, David G.


Anderson, David G., D. Shane Miller, Derek T. Anderson, Stephen J. Yerka, J. Christopher Gillam, Erik N. Johanson, and Ashley Smallwood

Anderson, David G., D. Shane Miller, Stephen J. Yerka, and Michael K. Faught

Anderson, David G., and Michael J. O’Brien

Brennan, Louis A. (editor)
Carlson, Roy L., and Martin P. R. Magne
2008 *Projectile point sequences in Northwestern North America*. Archaeology Press, Simon Fraser University, Burnaby, BC.

Dincauze, Dena F.

Frison, George C., with contributions by Bruce A. Bradley, Julie E. Francis, George W. Gill, and James C. Miller

Martens, Richard E., and Neal H. Lopinot


Taylor, Jeb
2006 *Projectile points of the High Plains: New perspectives on typology based on examinations of original type site specimens*. Jeb Taylor Artifacts Inc., Buffalo, WY.

Wormington, H. M.

Wormington, H. M., and Richard G. Forbis
Figure 1. All reported Clovis and Clovis variant point forms, plus points designated as ‘fluted’ but not yet assigned to a specific type in the PIDBA database for North America as of 2009. Image courtesy http://pidba.utk.edu/.