

Bighorn Canyon Archeology Field School Project

Bob Kelly, University of Wyoming, Judson B. Finley, Northwest College, and Laura L. Scheiber, Indiana University, worked on this project with the archeologist at Bighorn Canyon NRA (BICA), Chris Finley.

The project, which involved five educational institutions and 53 students from across the country, is an outstanding example of cooperative efforts and collaboration. Through this project, students and faculty in the RM-CESU and other universities worked to update the Archeological Sites Management Information System (ASMIS) and other cultural resource information for Bighorn Canyon NRA. To accomplish this work, students and faculty carried out magnetic field gradient surveys on four historic ranches located in the park. The objective of the survey was to locate and map potential buried archaeological features to provide a reliable database concerning the actual footprint and historic use of the cultural landscape of each ranch for management and interpretive purposes. Of particular interest will be the identification of anomalous magnetic fields created by buried fire-altered features to determine prehistoric use of the landscape prior to settlement of the sites by early homesteaders and ranchers.

Field school participants also surveyed stone circle sites, commonly referred to as "tipi rings," one of the few forms of prehistoric domestic architecture known on the northern

High Plains, where Plains Indians used stones as tipi weights. Once moved, stones often stayed in place preserving, to some extent, the superstructure characteristics of the lodge. Today stone



Field school students map tipi ring at the Two Eagles site, Bighorn Canyon NRA, overlooking Bighorn Mountains to the southeast.



Judson Finley and Maureen Boyle (in back) record artifact locations with the GPS while Ashley Howder (in front) collects attribute data for each flake and tool.

circle studies remain important to archaeological research because they allow researchers to focus on social and economic organization, use of space, ideology, and daily practice. More than 120 stone circle sites were documented at BICA and the surrounding landscape. The primary goal of ongoing research at Bighorn Canyon NRA is to develop and implement a research design that efficiently and effectively collect data from stone circle sites using student field camps. The fieldwork uses a three-stage strategy that includes surface mapping, remote sensing, and excavations.

Integrated GPS and GIS methodology provided data that creates an accurate digital model of stone circle distributions in BICA. The 4th season of the field school was completed in FY 2008, and consisted of 2 professors, 3 graduate students and 16 undergraduate students. The 2008 field school was publicized by a front-page article in The Billings Gazette, and the story received state wide coverage in Montana and Wyoming newspapers. TCT Public Television did a 30-minute program that aired in the Bighorn Basin several times over a two-week period. The widespread publicity drew over 200 visitors to the site during the course of the project.

