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USDA-UNL Artifacts Roadshow: The Development of a 2D Archive of Great Plains Projectile Points

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The Archaeological Survey is primarily concentrated through Federal and State lands. Nebraska like much of the Great Plains is overwhelmingly privately owned. As a consequence less than 1% of the state has been subject to professional survey.

Private land owners, however, know of many archaeological sites that have not been documented. Engagement with the public about sites and about collected artifacts thus has the potential to greatly increase knowledge of the past.

Over the past three years the University of Nebraska and the USDA Forest Service have conducted “Artifacts Roadshows” to talk with land owners about private artifact collections. These events seek to educate about archaeological site documentation, preservation, stewardship, and best practices for maintaining collections. Part of these efforts concern documenting collections for the completion of a digital archive.

This project describes the digitization of artifacts and their display on a website hosted by the Center for Great Plains Studies. The purpose of this project is to display the wide variation of projectile points that are representative of the differing flaking techniques used by different populations who have inhabited Nebraska.

Images for this project were created through the use of a flatbed scanner. Using the flatbed scanner with a DPI of 1200 to 1400 allowed for higher resolution for a larger number of artifacts. A ruler was aligned with the scanner to allow for later scaling of each point in Image J. This method was a drastic improvement compared to previous attempts to create an archive. Prior to this, photographs taken from the UNL Field School were edited, cropped, and scaled using Gimp and Image J. Using the flatbed scanner decreased the amount of human error in accuracy and was much more time efficient.

This project demonstrates the benefits of using a flatbed scanner as compared to traditional photography in the use of digitizing projectile points. Images were produced at a higher quality with a decrease in the amount of user error. The flatbed scanner makes it possible to digitize artifacts while on a roadshow because of its portability and ease of use. This form of preservation of artifacts has a role in encouraging citizens to bring their artifacts to roadshows for identification and archival preservation.

Using the flatbed scanner is much more effective than photography and has allowed for an extensive digital archive to emerge here at the University of Nebraska. A careful examination of the higher resolution images demonstrates that the integrity of the artifacts has been maintained while the archive makes them available to the maximum number of scholars and students. This improved method will be used in formal roadshow events for every grass land for the next few years.

Project Description
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Methods
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Results
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Conclusions
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