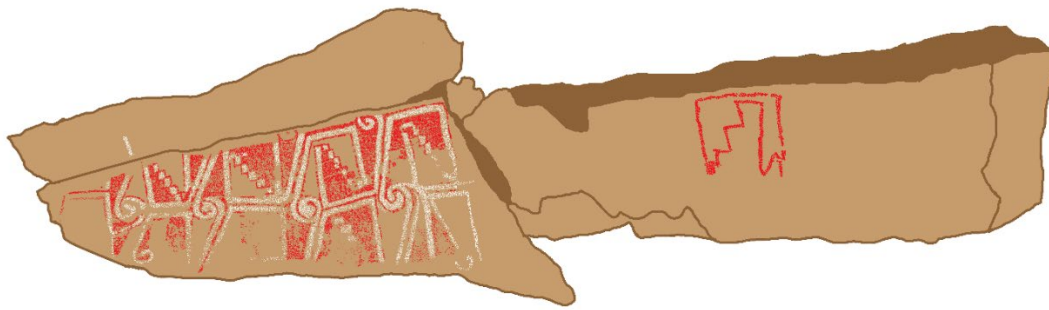


Sacred Sites Research, Inc
2022 Annual Report

Although Sacred Sites Research, Inc. (SSR) lost money in 2022, we had a fairly good year with several successful projects. Foremost was the recording of four sites on the White Sands Missile Range. Working with Versar, Inc. archaeologists, SSR completed the fieldwork for recording the Painted Walls, Bird, Roadside, and High sites. Two of these were large with more than 30 panels of paintings. After leaving the field, SSR personnel finished the panel drawings. A draft report is expected to be submitted soon.



Amanda Castañeda examining a rock art panel that is buried about a meter below the surface of the rockshelter. The panel is on the back wall of the shelter in what may have been a ceremonial area. A painted wall is also found on the rock above Amanda and at many other places on the site.



LA72165
Painted Walls
Panel 15b
10-29-22
D.Kaiser

 **Red**
 **White**
 **Natural**

Drawing of the intricate abstract design that Amanda is recording in the photograph above. These step and scroll designs are also found on regional polychrome ceramics.



LA182420
Bird Site
Panel 31A
4-21-22
D. Kaiser

 **Red**
 **Orange**
 **Natural**

Drawing of a parrot at the Bird Site. It is recognizable as a parrot because it has intricately drawn zygodactyl foot. The figure was radiocarbon dated to about AD 900.

Another project was to study the makeup of the paint pigments in a multi-colored panel of pictographs at Brownstone Canyon west of Las Vegas, Nevada. After obtaining a permit from the Bureau of Land Management, Chris Loendorf and Brian Medchill from the Gila River Indian Community Cultural Resource Management Program brought a portable X-ray Fluorescence instrument to the field for the project. Working with Lawrence Loendorf, SSR, the paint was analyzed to learn its ingredients.

The project was only partially successful, partly because there are so many available pigments in the immediate area of the rock art panels, it was difficult to sort them out. We were capable of deciphering that the black paint was charcoal based instead of manganese. This is important for the second phase of the project which is to date the panel and charcoal pigment works well for the procedure.



Brian Medchill works on the computer while Chris Loendorf does the sampling with pXRF instrument at the Brownstone site, near Las Vegas, Nevada.

In June, SSR assisted with the recording of the Greybull South site in Wyoming near the town of the same name. The project was initiated by Charles Koenig and Amanda Castañeda who obtained grants from the Wyoming Archaeological Society and the George C. Frison Institute to support the work. The project was fortunate to have representatives from the Crow Tribe, the Eastern Shoshone and the Northern Arapaho work with us through the recording effort.

A newly discovered site in the Pryor Mountains, Montana, was recorded by Cobe Chatwood and Lawrence Loendorf. The small site has a single panel with human figure types that are not found at other sites in Montana. A stenciled handprint in red paint is important because this variety of handprint is exceptionally rare on northern Plains sites.



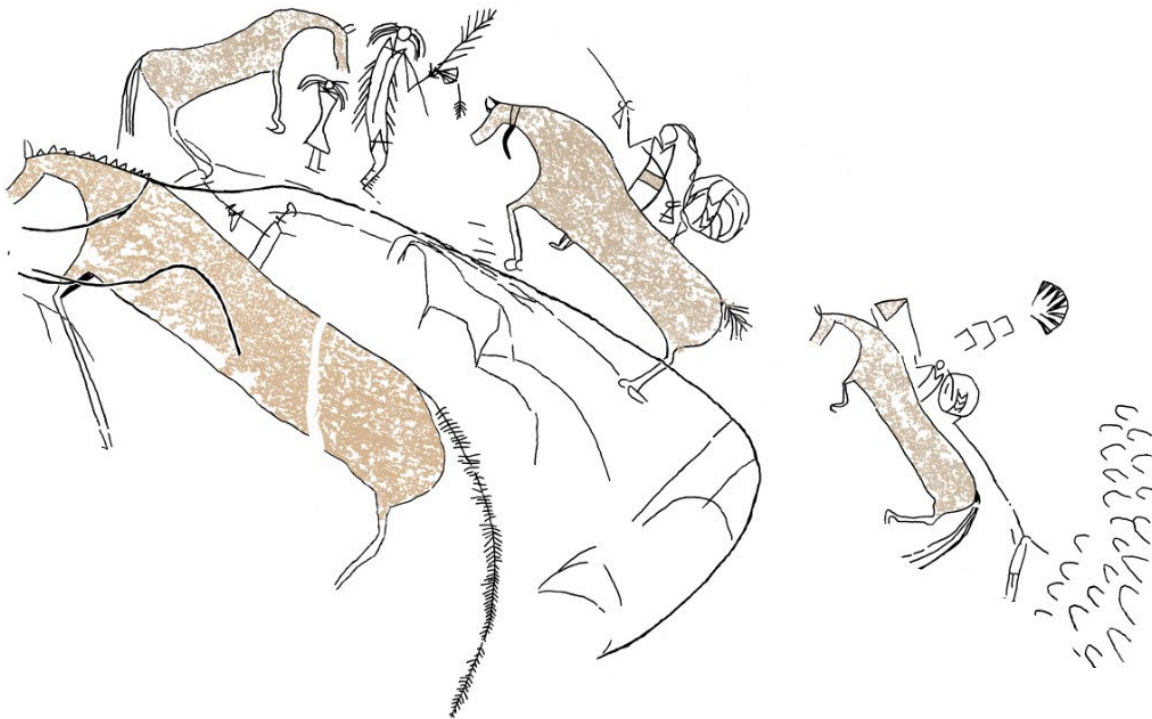
The field crew at Greybull South site.



The painted figures at Site 144. The stenciled hand and tall liner figures are found in Archaic-age context at the Wold sites in Wyoming.

A project of interest was to accompany Mark Willis to the Vissotzky Site (24FH1583) near Olney, Montana. The primary goal for the visit was for Willis to fly a LiDAR-equipped drone across the site. The Vissotzky site has petroglyphs on the flat rock surface, facing upward, where vegetation can obscure parts of the site. The LiDAR imagery offers photographs that see through the vegetation, making it an ideal tool for sites partially obscured by plants.

The laboratory work for the South Ryegate site was completed during the year. Four or five panels at the site are high quality examples of Plains Biographic rock art. Laurie White Amanda Castañeda, and David Kaiser completed the panel drawings with some fascinating discoveries. The site may have images done by the Kiowa in combination with the Crow.



A biographic scene from the South Ryegate site. The figures represent a returning war party. The rear horse rider shows that he counted coup on the enemy and captured a war bonnet. The trailing horse tracks illustrate the number of horses the party captured in the raid. The woman in the center of the scene may have sanctioned the raid. Based on the style of horses, the raid was likely undertaken by Crow warriors.

Throughout the year, SSR personnel have tried to learn more about a proposed motorized trail bike system in the Weatherman Draw area, Carbon County,, Montana. We learned that a cultural resource survey had been done in preparation for the project but suspected the individuals who undertook the project would have overlooked rock art sites. Cobe Chatwood and Lawrence Loendorf spent several days re-searching areas along the proposed off road bike trails and found

three rock art sites which were missed in the official survey. The Bureau of Land Management who is proposing the project was made aware of the sites and the need for cultural resource survey that is more capable of finding rock art sites.

During August, SSR personnel learned that David Eckroth, Billings avocational archaeologist, and Patty Molinaro, Director of the Carbon County Museum found ceramics on the surface of the Valley of the Shields site, Carbon County, Montana. Ceramic finds are not common at Montana archaeological sites, so Lawrence Loendorf visited the site with Eckroth and Molinaro to recover about 30 pottery sherds. Subsequent analysis of the sherds indicates they are a Fremont Culture greyware which are normally found in Utah. SSR is currently in the process of trying to learn more about this anomaly.

SSR offered monetary support for a Master's Thesis by Jerod Roberts at Texas State University. Roberts needed money to pay for radiocarbon dates on Red Linear Style rock art, and SSR contributed \$5000.00 to the project.

Lawrence Loendorf led a tour for the Meeteetse Museum in August 2022. Two groups of 10 individuals were shown the Legend Rock site.

Lawrence Loendorf led another tour for the Buffalo Bill Center for the West in August 2022. The participants travelled by caravan to the Greybull South site.

Lawrence Loendorf presented a lecture to the Carbon County Museum in September. The topic was DStretch and Regional Rock Art sites.

--Site reports in 2022.

Loendorf, Lawrence, David Kaiser and Amanda Castañeda
2022 The South Ryegate Petroglyph Site. Sacred Sites Research, Inc. Albuquerque, New Mexico.

Loendorf, Lawrence, Amanda Castañeda, Charles Koenig, David Kaiser, Laurie White and Mark Willis
2022 The Painted Canyon Rock Art Sites Little Belt Mountains, Montana. Sacred Sites Research, Albuquerque, New Mexico.

--Publications by SSR Board members in 2022

Francis, Julie, **Mark Willis and Lawrence Loendorf**
2022 The Black Rock Site: Ancient Pecked Rock Art in Southwest Wyoming. American Indian Rock Art. Edited by Amy Gilreath, Ken Hedges and Ann McConnel. Volume 48:53-60. American Rock Art Research Association.

Fritz, Carole, Gilles Tosello, **Mark Willis** and Laura Louman
2022 Grotte de Marsoulas (Haute-Garonne) Etude, et Releves d'Art Parietal Paleolithique, Rapport 2021. Maison des Sciences de l'Homme de Toulouse, CREAP Cartailhac.

Koenig, Charles W., J. David Kilby, Christopher J. Jurgens, Lorena Becerra-Valdivia, Christopher W. Ringstaff, J. Kevin Hanselka, Leslie L. Bush, Charles D. Frederick, Stephen L. Black, **Amanda M. Castañeda**, Ken L. Lawrence, Madeline E. Mackie, and Jim I. Mead

2022 A Newly Identified Younger Dryas Component from Eagle Cave, Texas. *American Antiquity*, 87(2):377-388. <https://doi.org/10.1017/aaq.2021.126>

Kowlessar, Jarrad, Ian Moffat, Daryl Wesley, Tristen Jones, Maxime Aubert, **Mark Willis**, Alfred Nayinggul and the Njanjma Aboriginal Corporation

2022 Applications of 3D Modelling of Rock Art Sites Using Ground-Based Photogrammetry: A Case Study from the Greater Red Lily Lagoon Area, Western Arnhem Land, Northern Australian in *Digital Approaches in Heritage Science* by Jarrad Kowlessar, Ian Moffat, Daryl Wesley, Tristen Jones, Maxime Aubert, Mark Willis, Alfred Nayinggul and the Njanjma Aboriginal Corporation. Springer Publishing. 1128 Springer Nature Switzerland

Loendorf, Lawrence, David Kaiser and Karen Steelman

2022 Under the Alcove: Radiocarbon dates for V-neck Anthropomorphs. *American Indian Rock Art*. Edited by Amy Gilreath, Ken Hedges and Ann McConnel. Volume 48:21-40. American Rock Art Research Association.

Loendorf, Lawrence

2022 Stuart W. Conner 1922-2022 Obituary. *Archaeology in Montana* 63(1):17-22.

Willis, Mark and Joseph Nigro

2022 Further Reconnaissance in the Middle Reaches: A Drone and Pedestrian Survey. BREA Project. University of New Hampshire.

--Presentations by SSR Board members

Castañeda, Amanda M., Aaron Brien, and Lawrence Loendorf

2022 Traditions Set in Stone: Exploring Apsáalooke Connections to Rock Art on the Fork of the Powder River. Paper presented at the 87th Annual Meeting of the Society for American Archaeology, Chicago, Illinois.

Mark Willis and Ellie Harrison-Buck

Revolutionizing Reconnaissance: Archaeological Survey and Mapping Using Drone-Equipped Lidar in the Lower Belize River Watershed at the 2022 Belize Archaeological Symposium (BAS) in San Ignacio, Belize.

Julie Francis, **Mark Willis**, and **Larry Loendorf**

Ancient Pecked Rock Art in Southwestern Wyoming: Black Rock at American Rock Art Association virtual conference 2022

Lawrence Loendorf

Shield-Bearing Warrior in Combat with a Bow and Arrow Warrior. American Rock Art Research Association virtual conference 2022

Lawrence Loendorf and Karen Steelman

Radiocarbon Dating Four Pictographs in Montana. Plains Anthropological Conference Oklahoma City, Oklahoma.