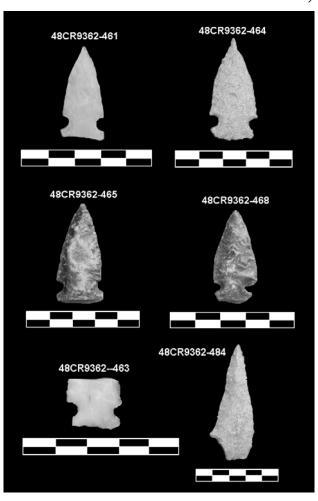
THE WYOMING Archaeologist

VOLUME 64; NUMBER 1; 2020



ISSN: 0043-9665
[THIS ISSUE PUBLISHED November, 2022]



THE WYOMIN Archaeologist

WYOMING ARCHAEOLOGICAL SOCIETY, INC.

John Laughlin, President
304 W 5th Ave
Cheyenne WY 82001-1248
Email john.laughlin@wyo.gov

Rachael Shimik, 1st Vice President 1115 E Gibbon Laramie WY 82072-7018 Email raeleashimek@gmail.com

Sarah Allaun, 2nd Vice President 1000 E University Blvd Dept 3431 Laramie WY 82071-2001 Email sallaun@uwyo.edu

Carolyn M Buff, Executive Secretary/Treasurer 1617 Westridge Terrace Casper 82604-3305 Email jcbuff@bresnan.net

Dr. Danny Walker, Editor 1687 Coughlin St Laramie WY 82072 Email dnwalker@uwyo.edu

Chase Mahan, Librarian 1067 N 9th St Laramie WY 82072-2706 Email cmahan@uwyo.edu

THE WYOMING ARCHAEOLOGIST is published semiannually by the Wyoming Archaeological Society, Inc. Address manuscripts and news items for publication to: Dr Danny Walker, Editor, The Wyoming Archaeologist, 1687 Coughlin St, Laramie WY 82072.

INFORMATION FOR CONTRIBUTORS

The Wyoming Archaeologist accepts papers from professional archaeologists, students, and avocational archaeologists. Subjects published in The Wyoming Archaeologist include, but are not limited to, archaeological reports on sites in Wyoming and adjacent areas, descriptive project summaries, preliminary results of

On the Cover:

Projectile points from 48CR9362, Jack Sparrow Site. See Goodrich, this volume.

significant studies, archaeological method and theory, ethnographic studies, regional history, and book reviews. Submissions by professional archaeologists will be sent for peer review before acceptance.

Authors submitting manuscripts for consideration should follow the style guidelines of the journal *AMERICAN ANTIQUITY* as revised in June 2017 and updated in July 2018. These guidelines can be found at www.SAA.org. Complete instructions for authors were published in *THE WYOMING ARCHAEOLOGIST*, Volume 62(1), 2018, and can also be found on the inside back cover of this issue. Deadline for submission of copy for spring issues is January 1 and for fall issues is July 1. Reports and articles received by the Editor after those dates will be held for a following issue.

The society membership period is from January 1 through December 31. All subscriptions expire with the Fall issue and renewals are due January 1 of each year. Continuing members whose dues are not paid by March 31 of the new year will receive back issues only upon payment of \$5.00 per issue. If you have a change of address, please notify the Executive Secretary/Treasurer. Your WYOMING ARCHAEOLOGIST will not be forwarded unless payment is received for return and forwarding postage. Back issues in print can be purchased for \$5.00 each, plus postage. Back issues out of print are available at \$0.25 per page plus postage.

Checks for chapter subscriptions and renewals should be sent to the chapter secretary involved. All other checks, subscriptions, and renewals should be addressed to the Executive Secretary/Treasurer. Correspondence and orders for back issues should be addressed to the Executive Secretary/Treasurer.

A list of chapters and their officers can be found at: http://www.wyomingarchaeology.org/was-chapters.html

Society yearly subscription rates are as follows: Individual Associate Member - \$20.00 Institutional Member - \$30.00 Canada and Other Foreign - \$34.00

Other memberships may be available. Contact the Executive Secretary/Treasurer for information. Local chapter dues are in addition to state society dues. The Wyoming Archaeological Society is a Nonprofit Organization.

The Wyoming Archaeological Society, Inc. and its local chapters do not discriminate on the basis of age, gender, sexual orientation, gender identity, gender expression, ethnicity, disability, national origin, political affiliation, or religious belief.

Neither the State of Wyoming, the Wyoming Department of State Parks and Cultural Resources, the Office of the Wyoming State Archaeologist, the Wyoming Archaeological Society, Inc, nor their employees or appointed or elected officials can be held responsible for any comment or viewpoint expressed in any issue of *The Wyoming Archaeologist*. The author(s) of each article or issue are totally responsible for the content and views expressed in their paper(s).

THE WYOMING ARCHAEOLOGIST VOLUME 64(1), FALL 2020

Table of Contents

WYOMING ARCHAEOLOGICAL SOCIETY FINANCIAL DONATION FORM	2
WYOMING ARCHAEOLOGICAL FOUNDATION FINANCIAL DONATION FORM	2
ARCHAEOLOGICAL EXCAVATION AT THE JACK SPARROW SITE: A MULTICOMPONENT SITE LOCATED IN THE WASHAKIE BASIN OF SOUTHERN WYOMING by Brent A. Buenger	3
CRAZY WOMAN CAVE, NORTHERN WYOMING: ABRADED GROOVES AND THE POTENTIAL FOR PREHISTORIC ROCK ART AMONG MODERN GRAFFITI by John Greer and Mavis Greer	32
by John Oleer and Mayis Oleer	JZ



"Publication of this issue of *The Wyoming Archaeologist* is supported in part by a grant from the Wyoming Cultural Trust Fund, a program of the Department of State Parks and Cultural Resources."

THIS ISSUE PUBLISHED NOVEMBER 2022

CRAZY WOMAN CAVE, NORTHERN WYOMING: ABRADED GROOVES AND THE POTENTIAL FOR PREHISTORIC ROCK ART AMONG MODERN GRAFFITI

By John Greer and Mavis Greer

ABSTRACT

An open cave in an active tourist area on the east side of the Bighorn Mountains is covered with intensive graffiti obscuring the original wall surface. However, inspection of the cave walls revealed earlier Native American grooves among and beneath modern incisions and paint. These figures are part of a common rock art theme dating back at least to the Late Archaic and continues into the Historic period, with grooves at this site probably made during the Late Prehistoric period. Although many archeologists originally thought grooves mostly resulted from tool sharpening, a set of distinctive characteristics recognized by previous researchers demonstrate some, like those here, have a non-secular function on the Northern Plains. They were apparently made in association with ritual abrading activities. This cave also shows vandalized sites should not be written off or ignored without intensive inspection, especially when the setting is typical for prehistoric rock art.

INTRODUCTION

Crazy Woman Canyon is advertised on the Internet as one of the more popular tourist attractions in Wyoming. It is also listed as one of the two top places for tourists to visit near Buffalo. The North Fork of Crazy Woman Creek runs through the canyon along the well-improved Crazy Woman Canyon Road (48JO769) originally constructed about 1936 by CCC crews

(SHPO 2020) and now maintained as a major attraction for recreationalists and hunters. One can enter the canyon from an upland highway in the Big Horn Mountains and proceed eastward down the gravel road following the creek through Bighorn National Forest as the canyon narrows toward its lower end into essentially sheer sandstone walls lined with trees and barely wide enough at the bottom for one vehicle. The year-round creek becomes fuller and is a favorite place to fish. The county road leaves the National Forest and enters private land toward its lower end, with seasonally used cabins and walking bridges across the creek.

Crazy Woman Cave (48JO4523) is on the north side of the creek just at a slightly widened area inside the last narrow constriction of the sheer walls. It is just west of where the canyon widens only slightly before exiting the east escarpment of the Big Horn Mountains (Figure 1), where the creek continues onto the rolling plains. The road continues east across private lands with scattered ranches and an intricate county road system. This eastern edge of the mountains is a steep face covered with exposed sandstone fins ("flatirons") and with high cliffs cut into by several short rocky canyons. To the north, these formations are known collectively as Crazy Woman Mountain.

THE CAVE

The cave is in the bottom of the canyon, just up a short colluvial slope above the road run-

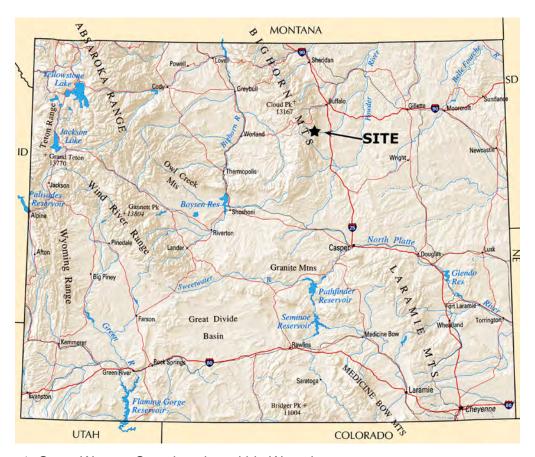


Figure 1: Crazy Woman Cave location within Wyoming.

ning along the lower terrace and not far above the creek. The open cave room faces southwest, somewhat upstream, and is easily recognized and beckons visitors, especially from traffic going east, downstream. The high triangular opening is about 6.1 m wide across the mouth and about 6.4 m high at the pointed ceiling (Figures 2-5). The left wall (facing in) is nearly vertical, and the right wall slopes outward from the pointed ceiling down to the floor at the widest part of the cave, forming somewhat of a right triangle in frontal view. The cave tapers about 9.1 m back to the narrow rear of the open room and has an amply wide nearly flat floor with a modern rounded-boulder retaining wall across the front edge of the south half of the floor (Figure 6). Just below this is a large modern fireplace bordered with similar boulders.

The entire rock surface around both sides of the cave mouth and back into the cave has been extensively and intensively covered with painted and incised graffiti (Figures 3, 6-9). There are thousands of initials, names, dates, additional drawings or symbols (Figure 10), and words and sayings carved, scratched, and cut into the rock walls. Most painted additions are sprayed, but there are also some done in brushed-on liquid paint and various marking pens. Dates range from at least the early 1940s to September 2020. It appears all graffiti was done by Euroamerican visitors, probably mostly young people. The cave is commonly used as a party location at least for local teenagers and is easily accessed from the east by the county road system which passes by at least two main fishing lakes.

ROCK ART

On the few patches of original wall not covered with graffiti, the rock surfaces inside

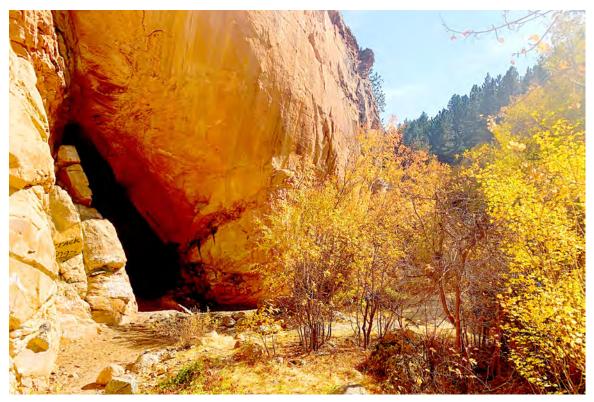


Figure 2: General view of cave mouth, looking southeast.

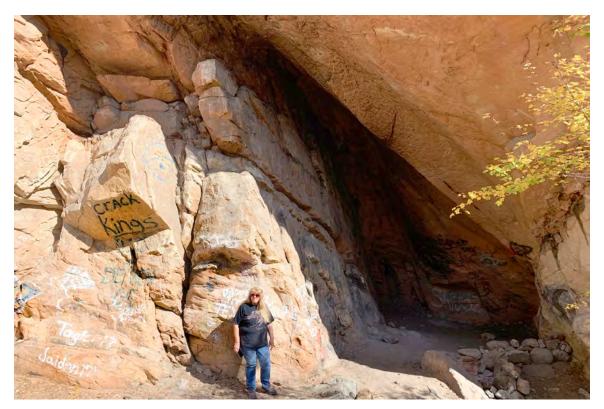


Figure 3: Mavis at mouth of the cave, looking east.

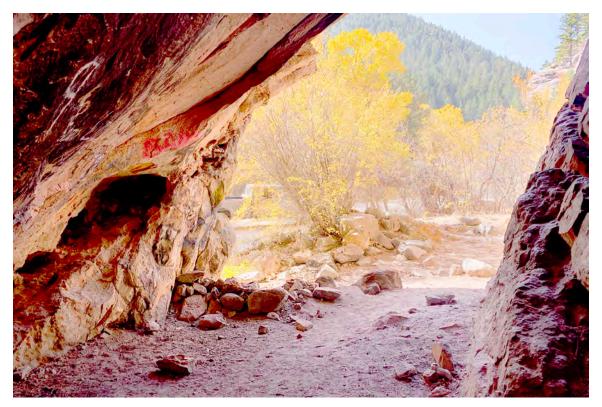


Figure 4: View out the cave mouth from the back wall, looking southwest.

the cave and extending outside the mouth are a medium brown patina. In the interior, small patches of nearly black, thick patina from the original surface remain. It is on those brown and black patches where we first recognized the Native American abraded depressions and narrower grooves. They are placed on the north wall, and on a large sloping boulder forming the northwest edge of a large firepit just on the south side of the cave mouth and in front of the rock retaining wall (Figure 5). Only modern graffiti was observed on the south wall.

NORTH WALL

A few remnant pieces of original surface are widely scattered along the left wall (facing into the cave). Near the rear of the cave are two wide oval depressions, Grooves 1-2. In front of these, nearer to the middle of the cave, are two vertical abrasions, Grooves 3-4 positioned one above the other. Just outside the mouth of the cave is a slightly larger circular depression, Groove 5. The rest of the wall is densely covered with

incised graffiti and painted figures, names, and dates. The abraded features are numbered from the rear of the cave to the front/mouth.

Groove 1 is an abraded oval depression 15 cm vertical by 7 cm horizontal and about 2 cm deep (Figures 6 and 11-13). In outline, it is rounded at the top and tapers at the bottom. The interior is slightly indented and evenly ground smooth. It is near the rear of the cave, about 1.4 m above the natural floor, and is cut into the thick dark gray patina which also partially fills the depression.

Groove 2 is also an abraded oval depression 16 cm vertical by 9 cm horizontal and 3 cm deep (Figures 11, 12, and 14). It is also near the rear of the cave, at a height about 1.4 m above the floor, and just out from Groove 1 (Figures 11 and 12). On the smoothly ground depressed interior is a limited group of small chopping marks (probably modern) and lightly incised modern graffiti (Figure 14). The depression is abraded into an orange surface formed when a large portion of the early dark gray patinated

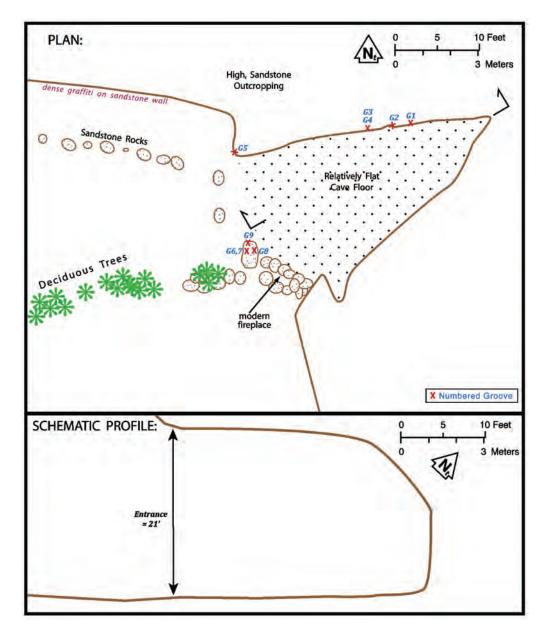


Figure 5: Plan and profile of Crazy Woman Cave showing locations of the images.

surface spalled off the cliff. The well-worn depression is clearly much older than surrounding incised graffiti.

Grooves 3 and 4 are vertical narrow abraded grooves about halfway along the north/left wall, about 0.6 m west (to the cave mouth) of Groove 2 and slightly higher (Figure 15). The two are arranged vertically, with #3 above #4, and are ground vertically into the rock. The upper Groove 3 is 11 cm vertical, and the lower Groove 4 is 8 cm vertical. Both are about 1-1.5 cm wide, taper at the upper and lower ends,

and have a wide rounded interior bottom. As such they are more like "banana grooves" with broadly ground bottoms than conventional "tool grooves" with V-shaped bottoms. Groove 4 is about 1.8 m above the floor, on a sloping ledge.

Groove 5 is a larger abraded depression, circular in outline, and about 17.5 cm tall by 15 cm wide (Figure 16). The main depressed interior is about 15 cm tall by 12.5 cm wide, with a widely indented smooth bottom only about 2 cm deep. This depression is within and covered by the dark gray original patina. Modern incised

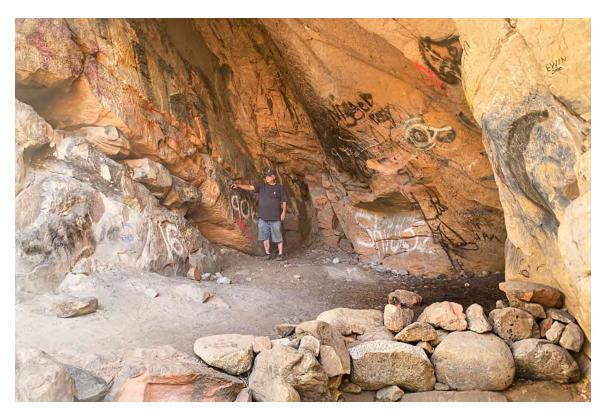


Figure 6: Cave interior showing the entrance rock retaining wall, looking northeast. John is at the back of the cave pointing to the Groove 1 depression.

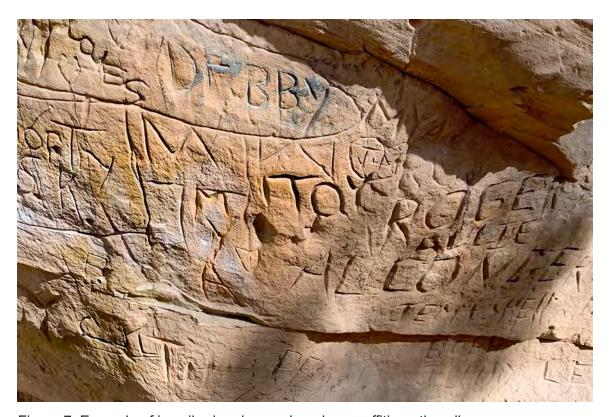


Figure 7: Example of inscribed and carved modern graffiti, north wall.

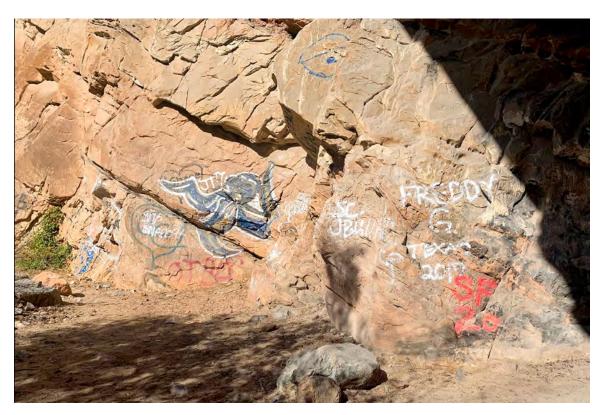


Figure 8: Example of painted modern graffiti, north wall.

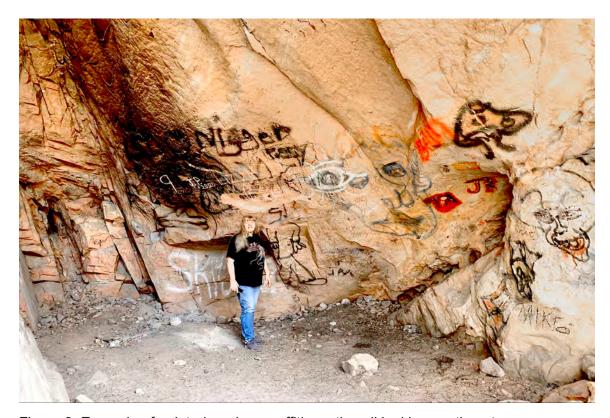


Figure 9: Example of painted modern graffiti, south wall looking southeast.



Figure 10: Modern graffiti symbol of rayed circle, north wall.



Figure 11: Mavis pointing at Groove 1 depression at back of the cave; Groove 2 depression to the left; looking northeast.



Figure 12: Position of Groove 1 depression (right) and Groove 2 depression (left).



Figure 13: Detail of Groove 1 depression with centimeter scale.



Figure 14: Detail of Groove 2 depression with centimeter scale.

graffiti is also within and all around the depression. Groove 5 is about 0.9 m above the floor. **BOULDER**

Four narrow grooves are located on the upper surface of a pyramid-shaped sloping boulder on the south side of the cave mouth (Figures 5 and 17). This large natural rock is west of several smaller rocks which have fallen near the entrance, several of which have been moved to form a modern firepit between the boulder and the cave wall. In addition to the abraded grooves the rest of the boulder is covered with modern incised graffiti. The four grooves were numbered left-to-right and then the top abrasion.

Grooves 6 and 7 are similar abraded parallel grooves in the middle of the sloping boulder face (Figure 18). Groove 6 (left) is 10.5 cm tall by 3 cm wide, and Groove 7 (right) is 9.5 cm tall by 2.2 cm wide. Both taper to the upper and lower ends, are shallow, and have a widely smoothed bottom, about the width of a finger. These vertical grooves are aligned down the sloping surface of the rock and are cut into and

through the thick black patina.

Groove 8 is an abraded groove to the right, near the edge of the boulder, and again is vertical and aligned down the sloping surface of the rock (Figure 19). The groove measures 11.5 cm tall by 3 cm wide and about 1.5 cm deep with a smooth rounded bottom. It is incorporated into the thick black patina and appears to be older than Grooves 6 and 7.

Groove 9 is a curved, irregular groove about 20.5 cm long and 2-2.5 cm wide beginning at the top of the boulder and angling to the left (Figures 18 and 19). It is somewhat incorporated into the grayish patina and does not appear to be modern.

HISTORY OF GROOVE TERMINOLOGY

The observed depressions and grooves all fall within the old established category of "tool grooves," which are found across the world, including most of western North America (Feyhl 1980:28; Loendorf and Willis 2020:167). Forty

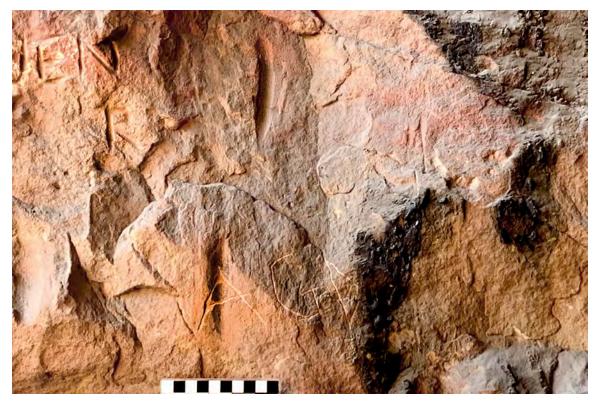


Figure 15: Groove 3 (top) and Groove 4 (bottom) on north wall with scale.

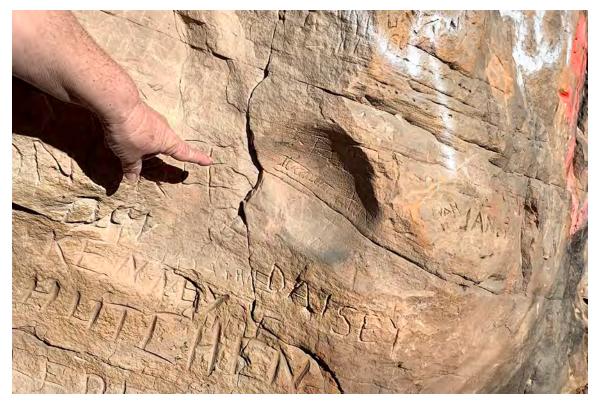


Figure 16: Detail of Groove 5 depression at cave mouth (hand for scale), looking northeast.



Figure 17: General view of sloping boulder inside cave entrance, looking northeast. John holding centimeter scale beside Grooves 6-7.



Figure 18: Detail of Grooves 6 (left) and 7 (right) on sloping boulder, with centimeter scale. Curved Groove 9 on upper-left.

The Wyoming Archaeologist

years ago, the encompassing term was used for all groove features having a range of sizes and shapes from narrow V-shaped forms to wide, elongated ellipses referred to as "banana grooves" (Feyhl 1980:3). As people began looking more closely at grooves in general, there was more attention given to interior attributes—the overall width:depth ratio, detailed profile, shapes of the sides, degree of constriction of the bottom of the groove, sharpness or roundness of the rim, and details of the ends. It became obvious grooves were, at best, a loose *class* category, and to begin understanding function and use, it is necessary to look more thoroughly at detailed attributes of the groove.

While most international discussions of groove attributes have dealt primarily with petroglyphs (e.g., Consens et al. 1989; Sujo 1975; Urbani 1998), the attention of these researchers to detail pertains to linear, "banana," and boat-shaped grooves and depressions, such as discussed here. For instance, a narrow

V-shaped groove with pointed bottom and usually a sharp angular rim probably represents an anvil function for cutting, such as trimming succulent leaves (like yucca or lechuguilla) or cutting hide or bark into strips. A slightly wider V-shaped groove with a narrow, rounded bottom and slightly rounded lateral rim could have served to form or sharpen bone awls or other narrow tools or ornaments. Wide, parallelsided, dish-shaped grooves with vertical sides, evenly smoothed bottoms, and gentle slopes up to each end are for shaping and sharpening celts and axes. Shallow, widely oval to circular grooves or depressions with wider bottoms and rounded rims, like those at Crazy Woman, probably served some other, nonutilitarian function not associated with shaping a potential tool or specific object. The class category of grooves is considerably diverse and with its undefined use is comparable to terms like biface or uniface.

On the Northern Plains, V-shaped grooves with a narrow or knife-like bottom are shown



Figure 19: Detail of boulder surface. Parallel Grooves 6-7 left, centimeter scale below Groove 8 (right), and curved Groove 9 at top.

by experiment to result from sharpening tools or serving as anvils (Feyhl 1980:21-26). Other shapes have long been recognized as functioning differently from V-shapes and clearly are not the result of sharpening or shaping anything. More recently, Keyser and Klassen (2001:295) continue to use the term "tool grooves" in their overview of Plains rock art, but they too acknowledge many are not associated with tool sharpening or shaping. They note, based on experimental and ethnographic data as well as placement and groupings, grooves were made in association with ritual activities and had symbolic importance. They reference a Piegan tribal member in Alberta who remembered a large rock with abraded grooves as marking a burial ground. The informant proposed "each group of grooves marks the location where an elder was laid to rest" (Keyser and Klassen 2001:295). They do not propose other non-utilitarian origin or use for grooves in general, but they recognize grooves deserve much more formal study before assigning function to a general class of features. Also by that time, researchers were beginning to recognize and record rock art consisting of interacting grooves forming designs and patterns, and grooves forming parts of figurative art, such as human images. It was obvious the old term for these features was inadequate and often simply wrong.

By 2002, researchers were searching for a term to replace "tool grooves" that would more aptly describe these features in rock art. Linea Sundstrom used the term "abraded grooves" for wider depressions and grooves (Sundstrom 2002:107; 2004:199), but she continued to use the term "tool grooves" for some of the narrower features (Sundstrom 2004:93). About the same time, Keyser referred to these features as the "Plains Grooved" tradition. He noted they were made from at least the Late Archaic into the Historic period, and their function ranged from simple counts to supernatural control (Keyser 2004:52-53). Subsequently he retreated from the "Plains Grooved" term, although not

completely abandoning it (Keyser 2009:44), and mainly reverted to the generic term "tool grooves" (Keyser and Poetschat 2005:119-120, 2009:43-44).

Sundstrom's expansive studies of grooves in the Black Hills presented ethnographic evidence to suggest narrow grooves were produced by girls and women during the production of bone tools (mainly awls) needed for their activities, making them a symbol of womanhood and continuity of life. Her explanation explicitly designates grooves of this type or form as producing women's tools. She teams them with tracks and vulva forms as part of the "Track-Vulva-Groove" rock art style, associated with women, which is characterized by "deeply ground and abraded animal tracks and human vulvas" (Sundstrom 2004:83, 90-98). She suggests the repetitive, rhythmic motion associated with abrading may have been accompanied by chanting, swaying, and prayers, which would act as a transformation experience (Sundstrom 2004:93-94). Her theory is the abraded style of "Track-Vulva-Groove" rock art expresses both the connection between women's reproductive and nurturing potential and endurance and longevity represented by the rock art and awls (Sundstrom 2004:98).

Hedges (2005) examined groups of multiple abraded grooves beside sandstone portals of Spanish churches and uses the term "Pilgrim Marks" because they are apparently the result of people rubbing on the wall to remove sand for good luck. He notes those grooves are identical to rock art forms elsewhere and reviews the distribution of similar forms in the United States, again using the term "tool grooves" (Hedges 2005:99-102). He discusses people worldwide make grooves with their hands to obtain power from sacred rocks, and this interaction reflects on the power of the landscape at that place, whether on a rock in nature or part of a constructed building now considered sacred.

Although the term "tool grooves" continues in the literature (Keyser and Poetschat

The Wyoming Archaeologist

2005:119-120, 2009:43-44; Loendorf and Willis 2020:167-168) with the few attempts to change the terminology falling short and mostly ignored, such change of the term is worthwhile and justified. We feel Sundstrom's term "abraded groove" should be adopted for this type of rock art feature as it is more encompassing of what is observed and more generically acceptable to any function for which the features were made.

AGE AND FUNCTION OF ABRADED GROOVES IN THE CAVE

At this site the three relatively broad depressions on the north wall (G1, 2, 5) have wide evenly smoothed bottoms and are fairly shallow, 1-3 cm deep. The narrower vertical grooves, two on the north wall (G3-4) and four on the boulder (G6-9), are about the width of a finger, are fairly shallow, and have the same evenly convex to somewhat rounded bottoms as the larger depressions. Those narrower grooves do not have straight sides or an edge-like V-shaped bottom such as bone awl grooves or anvil grooves. The features here do not appear to have been made to sharpen or shape tools.

This site is just one of many across Wyoming, southern Montana, and the Black Hills of South Dakota with grooves having this distinctive shallow abrading and wide smooth bottoms. Some grooves at other sites are different with wide highly curved outlines and constricted (but rounded) ends. Also, there are sites with grooves connected to other incised figures for enhancement of the original figure (including humans, such as at Talking Rocks, 48AB303, in central Wyoming) or are arranged into various geometric patterns and designs (such as at Cedar Canyon, 48SW943, in southwestern Wyoming).

The lack of figurative art in this cave means an age estimate must be based on other clues. The presence of modern incised graffiti within some of the ground depressions indicates they pre-date modern use of the cave. There appears to be a lack of associated post-horse imagery,

suggesting the grooves are earlier than the Protohistoric period and likely date to the Late Prehistoric period. There is no indication of pecked Archaic petroglyphs, and the mostly somewhat limited patination within the grooves suggests they may not be as old as known Archaic age rock art in the region.

It is unlikely these features mark burials, and their shapes and sizes suggest a function probably unrelated to formal tool production. The various locations within the cave, different heights above ground, and variety of shapes suggest they were made by different people. There is no indication they were all made at the same time, but they could have been. There is no specific evidence of association with women's work, although the abrasions resemble some discussed by Sundstrom (2004) for that purpose in the Black Hills. Most likely they were done over time by people who recognized this cave as a sacred location where rituals occurred which involved making abraded grooves, possibly associated with obtaining power from the rock.

SITE RECOGNITION IN VANDALIZED LANDSCAPES

Setting is typical for prehistoric rock art in Wyoming and Montana. The cave is near the face of the mountain, not far into a deeply cut canyon, and just past the entrance fins which form the restricted canyon mouth. Because of the setting, it is assumed the site once contained more Native American rock art, probably mostly incised figures, but older pecked figures and painted pictographs also would be likely. No such earlier images now remain, and no other rock art sites are recorded further up the canyon, although the area is not known to have been surveyed for archeological remains.

This site shows the potential to recognize Native American rock art amid intense modern damage from graffiti. On such affected sites, figures or pieces of figures are occasionally discernible on remnants of the original, undisturbed rock surface, such as the grooves

reported here, confirming sometimes early figures can be identified even when covered with more recent incisions or scratches put there in prehistoric, historic, or modern times. Through careful scrutiny of shelter walls and boulders on the floor, it may be possible to discern those older figures now covered with and potentially disfigured by later intensive graffiti. It is necessary not only to look for unaffected wall space, which may be difficult to recognize before early figures become obvious, but perhaps more importantly to look for forms and shapes known to occur in rock art, then try to make out the rest of the figure. This is the same process used for the European "macaroni" scratched surfaces of Paleolithic plaques and wall incisions where elephants and rhinos are recognized by distinctive curvature lines on parts of the body, perhaps the curvature of the tusks, or the hump on top of the head, and finally other figures can be discerned (Bandi et al. 1961). On the Plains, one must look for the curved line of a shield outline or parallel lines bordering the torso of a rectangular-body or V-necked human. Horses are recognized by any of several distinctive curves or angles, such as their triangular legs or distinctive neck curve. Bears, especially grizzlies, likewise can be distinguished by their hump, open mouth with teeth, or their rounded rump. Once just one distinctive line or curve or other attribute is identified, then the observer can usually "pull out" the figure from the superimposed graffiti that otherwise obscures the older drawing.

We have done this in southwest Texas, at the Fate Bell Rockshelter (41VV74), where the unique wide angle of the stick legs of a Red Linear Style human can be identified amid and beneath a plethora of incised lines on a polished boulder surface. Incisions covering the boulder and its polished surface undoubtedly result from processing succulent plants such as lecheguilla or sotol, and the high polish could have been enhanced during processing of animal hides on the same boulder used for generalized food processing. Once the widely splayed single-line

legs of the human are found, the rest of the figure becomes recognizable, even after decades of research and thousands of visitors. This identification in turn makes possible relative dating of the later incisions as well as piecing together other aspects of the culture history of the area.

The same has occurred at a small rockshelter (48AB2882) in southeastern Wyoming where a lightly incised armored horse from the late 1700s is covered with more recent incisions across the surface of the sloping boulder within the front of the shelter. The horse's V-shaped legs and hooked feet descend from a slightly convex horizontal line and identifies this as a leather armor covering. The distinctive front and rear edges of the armor are fairly clear with close inspection. While the top of the armor is difficult to make out, detailed photos show it comes to a point with the typical rounded indentation for the rider (Main 2004). No rider or horse features are definite, but the figure is clearly identifiable by recognition of a few key lines as an armored horse, with typical leather armor cover of a distinctive shape not duplicated in any other Native American drawings. The figure is covered with scratched graffiti dating back at least to 1903. This and other nearby shelters also contain typical shallow abraded grooves, some arranged into geometric patterns. Patience and close attention to detail helped "tease out" the early important figure.

SUMMARY

Crazy Woman Cave and others like it have the potential for recognition of Native American rock art under challenging conditions and in geographic settings which often contain such images. Consistently used settings can predict locations for new sites, and careful inspection of even highly vandalized walls can sometimes reveal figures or drawings otherwise thought no longer to exist. Because of this at Crazy Woman Cave we can add to our understanding of Late Prehistoric use of Big Horn Mountain caves for abraded groove-related rituals and ceremonies.

The Wyoming Archaeologist

REFERENCES CITED

- Bandi, Hans-Georg, Henri Breuil, Lilo Berger-Kirchner, Henri Lhote, Erik Holm, and Andreas Lommel
 - 1961 *The Art of The Stone Age*. Crown Publishers, Inc., New York.
- Consens, Mario, Ana Castellano, y C. Disueno 1989 Análisis de Rasgos en el Arte Rupestre del Valle del Río San Juan. En: El Arte Rupestre en la Arquelogía Conemporánea. M. M. Podestá, H. I. Hernández, y S. F. Renard (eds.). Buenos Aires.

Feyhl, Kenneth J.

1980 Tool Grooves: A Challenge. *Archaeology in Montana* 21(1):1-31.

Hedges, Ken

2005 Rock Art in Town: "Pilgrim Marks" in Santillana del Mar. In *American Indian Rock Art, Volume 31*, edited by Marilyn Sklar, pp. 99-109. American Rock Art Research Association, Tucson.

Keyser, James D.

2004 Art of the Warriors: Rock Art of the American Plains. University of Utah Press, Salt Lake City.

Keyser, James D. and Michael A. Klassen 2001 Plains Indian Rock Art. University of Washington Press, Seattle.

Keyser, James D., and George Poetschat

- 2005 Warrior Art of Wyoming's Green River Basin: Biographic Petroglyphs Along the Seedskadee. Oregon Archaeological Society Publication 15, Portland.
- 2009 Crow Rock Art in the Bighorn Basin: Petroglyphs at No Water, Wyoming. Oregon Archaeological Society Publication 20, Portland.

Loendorf, Lawrence, and Mark Willis

2020 Tool Grooves and Drill Holes at the Robert's Indian Caves Site, New Mexico. In *American Indian Rock Art, Volume 46*, edited by Richard

Volume 64(1), Spring 2020

A. Rogers, Evelyn Billo, and Robert Mark, pp. 163-172. American Rock Art Research Association, Cupertino.

Main, Steve

2004 *Albany County Rock Art*. Typescript in possession of the author. Fort Collins, Colorado.

Sujo Volsky, Jeannine

1975 El Estudio del Arte Rupestre en Venezuela. *Montalbán* 4:709-840. Universidad Católica Andrés Bello, Caracas.

Sundstrom, Linea

- 2002 Steel Awls for Stone Age Plainswomen: Rock Art, Religion, and the Hide Trade on the Northern Plains. *Plains Anthropologist* 47(181):99-119.
- 2004 Storied Stone: Indian Rock Art of the Black Hills Country. University of Oklahoma Press, Norman.

Urbani, Franco

- 1998 A Multivariate Approach to Characterize the Groove Shape of the Linear Parts of Petroglyphs. Rock Art Research 15:1:41-45. Australian Rock Art Research Association. Also available at Rupestreweb, http://www.rupestreweb.info/urbani.html.
- Wyoming State Historic Preservation Office (SHPO)
 - 2020 State site files. Accessed October 2020. Cheyenne, Wyoming.

John Greer and Mavis Greer Greer Archeology Casper, WY 82605