



**Archaeological Society of New Mexico
Rock Art Council**

**Rock Art Recording Projects
Recording Guide**

**Jean Brody
Jerry Brody
Carol Chamberland
Helen Crotty
Gary Hein
Maynard Merkt**

Archaeological Society of New Mexico Rock Art Council

ASNM Rock Art Recording Guide

<i>General Principles</i>	3
Recording Process	3
Photography	4
Mapping	4
<i>Rock Art Recording Forms</i>	5
Photo Data Sheet Key	5
Definitions	5
General Comments	5
Recorder Tips	9
Mapper's Notes Sheet Key	9
Mapper's Tips	11
GPS Tips for the Best Reading	11
Photography Guidelines	12
General Comments	12
Photography Tips	12
<i>Glossary of Specialized Terminology</i>	13
<i>Safety</i>	15
Sample Emergency Notification	15
Sample Snake Bite Plan	16

Archaeological Society of New Mexico

Rock Art Council

General Principles

- Recording is a multi-step, descriptive procedure that includes drawing, photographing and mapping.
- The most efficient recording involves a 2- or 3-person team: recorder-artist, mapper, and photographer.
- Large rock art clusters are most efficiently documented by being subdivided into recording units (called “proveniences”) such that different teams may record multiple proveniences simultaneously.
- The ideal recording is an objective, systematic record of what was seen. It is detailed enough to allow other investigators to do preliminary analyses before a site visit and to locate panel(s) on-site.

Recording Process

- Drawings supplement the photographic record, especially when images are faint and difficult to photograph. Both are made from the same viewing position. Drawings should include only enough detail to clarify the observed human-made marks. They should not fill in missing portions or “prettify” an image. Draw only what is there.
- Measurements are made in meters and centimeters. Measurements of rock art panels are of those parts that have human-made design elements rather than of the entire rock.
- Tools and Definitions (see Glossary of RARP Specialized Terminology).
- Photo Mug board for each provenience has site, provenience, photo numbers, and the date. A metric scale is included on the board.
- A Locus is assigned to each panel, boulder, or other recording unit that is separately photographed and recorded on the Photo Data Sheet and Mapper’s Notes Sheet. A locus with two or more faces or one that is too large and complex to be photographed as a single unit is shown only once on a map. Each photograph of the locus is recorded and numbered sequentially as a discrete portion of a multi-faceted locus subdivided into sub-loci that are all identified by the same Locus letter modified by a sequential number (for example K-1, K-2, K-3 etc.). See Locus Definitions for examples.
- Photo Numbers are consecutive for each provenience.
- Condition statements include notes on qualities of patination, method of manufacture, depth of line (for petroglyphs), quality and condition of paint (for pictographs), and condition of the rock surface.
- Image categories should be spelled out and include category numbers as shown on the category inventory.

Archaeological Society of New Mexico

Rock Art Council

Photography

- The best archival quality is obtained with archival prints made from film negatives or digital files. The archival life of stored digital images is unknown and always dependent upon availability of equipment to read the image. Color slides and prints generally have an archival life of less than 50 years. A polarizing filter, lens-shade, and umbrella are indispensable.
- Some rock art panels are more visible when shaded. Under bright sunlight and high contrast conditions use an umbrella or polarizer to create even light on the rock art. Take meter readings only from the part of the rock that has rock art images on it; do not let the meter read other dark or light areas. When surfaces are part-sunny/part-shady, shade the entire panel with an umbrella and meter the area with the shaded images only. When in doubt take two or more different exposures using the same mug board photo number. The best-exposed photo will be used.
- When more than one day is needed to record a site or provenience, Photo Mug boards should show a change of date but continue numerical sequences from the number used for the last recorded photograph.

Mapping

- Enough mapping information should be recorded to allow a future investigator to find each provenience in a site and each locus in a provenience. In the absence of GPS technology, measuring and recording metric distances and compass directions from an existing mapped datum point or by measuring at right angles from a base line already located on a map can be used to locate a panel.
- Using UTM coordinates, the final map locates the site, proveniences and all datum points, base lines and loci on the appropriate USGS map.

Archaeological Society of New Mexico

Rock Art Council

Rock Art Recording Forms

The main product of the recording effort are the photographs and the completed forms. The ArcView file and digital photos are stored as additional records. It is critical that the paper work be completed in the field as a collaborative effort of the team.

To assist in the consistent identification and coding of design elements use the Design Element Category Inventory. There is one page that lists the Category and Subcategory of each design element. These are used to provide a unique identifier to each design element that can then be sorted. The more complex version contains that same information but augmented with an illustration.

Photo Data Sheet Key

Photo Data Sheets are used to record all the location, size, and design element descriptions.

Definitions

- Panel is a collection of design elements that are recorded as a group.
- Locus (see Figure 1, Locus Definitions)
- A design element is a single pictorial unit in the judgment of the recording team.
- Prehistoric is the period of time before 1540.
- Historic period is between 1550 and 1956 (50 years before the present).
- Recent period is between today and 50 years ago.

General Comments

- Place the Photo Data sheets in sequential order by the Photo Number.
- Before going to the next panel verify that the Photo Data Sheet and Mapper's Notes are in agreement (Photo Number, Locus, UTM, etc.).
- Avoid agonizing over categories. It is the clearly identifiable design elements that are of the most interest. Put doubtful design elements in Category 12, Miscellaneous Elements.
- Use the z subcategory in the appropriate numbered Category to add an unlisted repeated element. Provide a definition on the Photo Data Sheet.
- Count each design element once.
- If you choose to add information to the forms beyond what is requested please use the notes. For example, if you use an arrow with a number to indicate the location of a nearby photo/locus it would be clearer to others to use "Loc of Photo ____"

Archaeological Society of New Mexico

Rock Art Council

The following discusses each field on the Photo Data Sheet and how to fill it out:

Date	The date in the form of MM/DD/YYYY that the work is being done. This is also the date on the Mug Board.
LA No.	The LA Number is site number assigned by Archaeological Records Management System (ARMS).
NMCRIS	The New Mexico Cultural Resources Inventory System (NMCRIS) number assigned by ARMS
Prov. No.	Provenience Number. This should agree with the Mug Board.
Recorder	Enter the Name and initials of the Recorder. On subsequent pages the initials are all that is needed.
Photo	Enter the name and initials of the Photographer. On subsequent pages the initials are all that is needed.
Map/GPS	Enter the name and initials of the Mapper/GPS. On subsequent pages the initials are all that is needed.
Sheet	The current sheet number. The sheets are numbered sequentially for each provenience. When finished the final sheet number will be added to all the sheets.
Photo No.	The number assigned to this photo. This is the same number that is on the Mug Board. All photos are assigned numbers starting with 1 and continuing in sequence until the provenience is completed.
Locus	<p>A sequential identifier assigned to the panel or boulder being recorded. The locus identifiers are assigned letters starting with A.</p> <p>In the event that more than one area is to be photographed and recorded on the same panel or boulder each is assigned number sub identifiers, C1, C2, C3 for the three different areas for Locus C.</p> <p>If the end of the alphabet is reached the start the next series as AA, AB, ... AZ, the next as BA, BB, BC, ... BZ, and so on as needed. See Figure 1, Locus Definition</p>

Archaeological Society of New Mexico

Rock Art Council

Facing	This is the general direction that the panel faces. It is easier and more accurate to face the panel squarely and read the back sight at the bottom of the compass. N, NE, E, SE, S, SW, W, NW, and UP are the expected values. UP is used only when the panel is more flat than vertical.
Easting	The easting UTM coordinates from the GPS.
Northing	The northing UTM coordinates from the GPS.
H	Height of the panel in 1/100 meter. Measured to match the sketch and photo.
W	Width of the panel in 1/100 meter. Measured to match the sketch and photo.
AGL	Above Ground Level measurement. Measured in 1/100 meter from the Photographer's and Recorder's feet to the bottom of the panel.
Position	Position in the provenience relative to the northern boundary. This helps to relocate the panel. TD = Top of dike/cliff MD = Middle of dike/cliff BD = Bottom of dike/cliff TS = Top of slope MS = Middle of slope, an area between TS and BS BS = Bottom of slope See Figure 2, Position on Slope
Distance from Last Locus	The distance in Meters and direction (N, NE, E, SE, S, SW, W, NW) from the last locus.
(Design Element Inventory)	On the lines below the "Distance from the Last Locus" identify each individual design element in the sketch using the terms in the Design Element Inventory sheets.
DE	Design element number is a reference between the sketch and the Inventory description.
Description	Description of the design element.

Archaeological Society of New Mexico

Rock Art Council

Repatination	<p>This is a subjective indication of the relative age of the design element based upon the level repatination.</p> <p>O = None, looks like a fresh break in the rock L = Light M = Medium H = Heavy T = Total, looks dark like the natural rock surface</p>
Pecking	<p>Pecking is a measure of the effort made to produce the design element.</p> <p>S = Sparse, pecks are widely separated M = Medium, pecking is between SPARCE and DENSE D = Dense, pecks have no space between them R = Relief, pecks are deep such that a piece of paper folds in pushed into the pecked area</p>
Abraded	<p>If the design element was created by rubbing to form a smooth surface, use a check (☑ or X). Otherwise leave blank.</p>
Scratched	<p>If design element was created using a sharp object to scratch through the surface patination and form a thin line use a check or X. Otherwise leave blank.</p>
Incised	<p>If design element was created by scratching a wider and deeper line, use a Check or X. Otherwise leave blank.</p>
Category	<p>This is the category code from the Design Element Sheet.</p>
Multiple	<p>The total number of design elements that would be classified the same as this one.</p>
Additional	<p>These are items from Categories D, N, and S, Defacement of rock art elements, Natural Deterioration affecting rock art panel, or Special Features such as rock incorporation, superimposition, etc.</p>
Sketch	<p>This area of the form is for a sketch of the panel from the same angle as the photo was taken. The sketch shows all the design elements, notes spalls or other deterioration, and superimposition.</p> <p>NOTE: For large or complex panels use the Single Panel Photo Data Sheet.</p>

Archaeological Society of New Mexico

Rock Art Council

Notes The recorder should describe any unusual, natural, or manmade features of the panel. The notes should also be used to provide additional information that the Recorder feels is necessary.

Recorder Tips

- Discuss the approach that will be used to record the panel.
- What is the Photo Number?
- What is the Locus?
- Agree with the Photographer about where to take the photo.
- When finished, discuss the recording and make sure all data is on the form.
- Make sure there is Repatination, Method of Manufacture (pecked, scratched, ...), Category/Subcategory for each design element.
- On the bottom of the last sheet for the provenience, add an “End of Provenience” note.

Mapper’s Notes Data Sheet Key

Mapper’s Notes Data Sheet, Figure 6, records all the information used to identify location, and how to relocate the panel.

Map/GPS	Name and initials of the Mapper/GPS. On subsequent pages the initials are all that is needed.
LA No.	The LA Number is site number assigned by Archaeological Records Management System (ARMS).
NMCRIS	The New Mexico Cultural Resources Inventory System (NMCRIS) number assigned by ARMS.
Date	The date in the form of MM/DD/YYYY that the work is being done. This is also the date on the Photo Mug board.
Sheet	The current sheet number. The sheets are numbered sequentially for each provenience. When finished the final sheet number will be added to all the sheets.
Prov. No.	Provenience Number. This must agree with the Photo Mug board.

Archaeological Society of New Mexico

Rock Art Council

Photo No.	The number assigned to this photo. This is the same number that is on the Photo Mug board. All photos are assigned numbers starting with 1 and continuing in sequence until the provenience is completed.
Locus	<p>A sequential identifier assigned to the panel or boulder being recorded. The locus identifiers are assigned letter identifiers starting with A.</p> <p>In the event that more than one area is to be photographed and recorded on the same panel or boulder they are assigned number sub identifiers, C1, C2, C3 for the three different areas for Locus C.</p> <p>If the end of the alphabet is reached the start the next series as AA, AB, ... AZ, the next as BA, BB, BC, ... BZ, and so on as needed. See Figure 1, Locus Definition.</p>
Facing	<p>This is the general direction that the panel faces. It is easier and more accurate to face the panel squarely and read the back sight at the bottom of the compass. N, NE, E, SE, S, SW, W, NW, and UP are the expected values.</p> <p>UP is used only when the panel is more flat than vertical.</p>
Height	Height of the panel in 1/100 meter. Measured to match the sketch and photo.
Width	Width of the panel in 1/100 meter. Measured to match the sketch and photo.
AGL	Above Ground Level measurement. Measured in 1/100 meter from the Photographer's and Recorder's feet to the bottom of the panel.
UTM Coordinates	
E	The easting UTM coordinate from the GPS.
N	The northing UTM coordinate from the GPS.
Notes:	Include any comments or other data that will help locate the panel. These notes may contain a simple sketch or words.

Archaeological Society of New Mexico

Rock Art Council

Mapper Tips

- Use a call and response dialog to communicate the Mapper's Data to the Recorder using pairs of numbers.
- Verify that the data on the Photo Data Sheet and Mapper's Notes agree.

GPS Tips For the Best Reading

- A GPS unit will generally give the best reading when held vertically.
- Wait until the Satellite strength bars are at least four before reading the position.
- The "sky view" shows where the satellites are in the sky. Try to have the antenna positioned so that the most satellites are in "view" of the antenna.
- Wait until the least significant digit is stable or slowly goes up or down no more than one digit.

Archaeological Society of New Mexico

Rock Art Council

Photography Guidelines

General Comments

1. The Recorder and Photographer need to concur on the best position to record the panel. They need to take the lighting and ability to view the whole panel into consideration.
2. Each panel will be photographed. An archival print of the image is submitted with the report to ARMS. The digital file will be included as ancillary information to ARMS.
3. The Mug Board MUST be fully visible in the photos.

Photography Tips

1. Keep the camera film plane/digital sensor parallel to the panel as best you can.
2. Have uniform lighting on the panel to get the best exposure. This can be achieved with full sun or shade. Partial sun and mottled lighting will often result in a poor light meter reading and poor exposure.
3. Position the Mug Board so that it doesn't reflect into the camera or obscure part of the panel.
4. In full sun images, a polarizing filter will reduce the glare off the rock surface.
5. The aperture is the key control element as it provides the widest depth of field. The aperture should be one or two stops below the maximum aperture for the best picture. The shutter speed should be the reciprocal of the lens length to minimize shake. The photographer has to balance these two to get the best photograph.

Archaeological Society of New Mexico

Rock Art Council

Glossary of Specialized Terminology

ABRADING: Rubbing a rock surface, often with another rock, to produce a smoothed area - for example to fill in a delineated space, smooth a pecked line, or prepare a surface for painting.

ANTHROPOMORPH: A human-like figure, may cryptically suggest a “sacred” person (not used on RARP forms).

BASALT: One of many hard igneous rocks commonly found in New Mexico. Often deposited as lava flows or in vertical outcrops (“dikes”). A common rock art medium.

DESIGN ELEMENT: Generic term used by ASNM/RARP for a human-made mark seen on a rock.

DESERT VARNISH: A dark, sometimes reflective coating or patina made over time on rock surfaces through chemical processes involving many factors such as oxidation, mineral weathering, moisture, bacteria, and wind-blown pollutants.

DINTING: A specialized pecking procedure that often produces deep, rounded peck-marks.

ENGRAVING: A relatively deep, firmly cut or scratched line in a rock that penetrates through the patination. Often made with the sharp end of a chipped stone tool. (See “scratched line”).

EXFOLIATION: A kind of splitting off or spalling of a thin sheet of rock from a rock matrix.

ICONOGRAPHY: Identification of an image with a known visual prototype.

LOCUS: As used by ASNM/RARP, any isolated rock or discrete segment of a very large rock or cliff-face on which design elements are recorded.

PATINATION: A film formed on the surface of many materials including rocks by complex chemical processes involving oxidation and various kinds of atmospheric deposition. (See “desert varnish”, “repatination”).

PECKING: Marking a rock surface through its patination by hitting it with another rock, sometimes using a hammer-stone. Peck marks may be abraded or made so closely together as to appear engraved.

PETROGLYPH: A visual element made on a rock in a natural landscape or cave using one or more of many scarring techniques including pecking, scraping, scratching, abrading, etc.

Archaeological Society of New Mexico

Rock Art Council

PHOTO MUG BOARD: Identification board used in all field photographs with site, provenience, photo number and date.

PICTOGRAPH: A painted visual element made on a rock in a natural landscape or cave.

PREHISTORIC: As used for ASNM/RARP, is a categorization for any time before the beginning of written records.

PROVENIENCE: As used by ASNM/RARP, is a reasonably large, field-defined, mappable portion of a rock art site.

QUADRUPED: Any four-legged animal, generally unidentifiable (not used on ASNM/RARP forms).

REPATINATION: After a patinated surface has been penetrated or otherwise scarred the patination process starts afresh on the scar. (See “patination”, “desert varnish”).

SCRATCHED LINES: Generally thin, shallow and sometimes faint human-made lines made on rocks, usually by use of discarded fragments of chipped stone tool manufacturing processes.

SUPERPOSITIONING: The layering of one image or visual element on top of another.

Archaeological Society of New Mexico

Rock Art Council

Safety

Often we will be driving on unmaintained dirt roads with cattle near by. Please drive slowly and don't "spook" the cattle.

Please do not make new roads. The scars from our vehicles will be apparent for many years.

Exercise care when walking on uneven ground.

When working on dikes/cliffs exercise extreme care not to dislodge any rocks. Make sure that those below you are aware of your position on the dike/cliff. Avoid climbing vertically. Use the three-point rule: maintain three points of contact with the rock at all times when you are on the dike/cliff.

The hazards on each recording project will be different. See below for a sample Emergency Notification plan. See below for a Sample Snake Bite Plan.

Archaeological Society of New Mexico Rock Art Council

Sample Emergency Notification

Cell Phones:

These people have cell phones and can call for emergency assistance

Placing the Emergency Call

Call 911.

Describe the type of emergency.

- Snake bite?
- Broken limb?
- Fainting?
- Bleeding?

Describe where the victim is.

- Place Name
- GPS coordinates noting they are WGS 84

Answer any other questions that the 911 dispatcher may ask.

Stay on the phone until the 911 dispatcher terminates the call.

Sample Snake Bite Plan

Prevention

- Even though most snakes are not poisonous, avoid picking up or playing with any snake unless you have been properly trained.
- Many serious snakebites occur when someone deliberately provokes a snake.
- When hiking in an area known to have snakes, wear long pants and boots if possible.
- Avoid areas where snakes may be hiding -- under rocks, logs, etc.

Archaeological Society of New Mexico

Rock Art Council

- Tap ahead of you with a walking stick before entering an area with an obscured view of your feet. Snakes will attempt to avoid you if given adequate warning.
- If you see a snake, back away from it slowly and do not touch it.

Call immediately for emergency medical assistance

Call 911 for emergency help if a snake has bitten someone. Time is of the essence. The field box has additional information.

First Aid

1. Keep the bitten person calm. Restrict movement, and keep the affected area below heart level to reduce the flow of venom.
2. Lay or sit the person down with the bite below the level of the heart.
3. Remove any rings or constricting items because the affected area may swell. Create a loose splint to help restrict movement of the area.
4. Monitor the person's vital signs -- temperature, pulse, rate of breathing, and blood pressure if possible. If there are signs of shock (such as paleness), lay the victim flat, raise the feet about a foot, and cover the victim with a blanket.
5. Cover the bite with a clean, dry dressing

What NOT to do if a snake has bitten someone

DO NOT pick up the snake or try to trap it. This may put you or others at risk to be bitten too.

DO NOT apply a tourniquet.

DO NOT slash the wound with a knife.

DO NOT try to suction the venom by mouth.

DO NOT apply ice or cold compress or immerse the wound in water.

DO NOT cut into snakebite with a knife or razor.

DO NOT give the victim stimulants or pain medications unless instructed to do so by a doctor. DO NOT give the victim anything by mouth. (Alcohol, caffeinated beverages) DO NOT raise the site of the bite above the level of the victim's heart.

Taken from:

<http://www.bt.cdc.gov/disasters/snakebite.asp> and

<http://www.medicineonline.com>