

# MESA PRIETA PETROGLYPH PROJECT

## GENERAL RECORDING GUIDELINES & TEAM MEMBERS' ROLES

### PETROGLYPH RECORDING GENERAL PRINCIPLES

- Petroglyph recording is a multi-step, formal, scientific, descriptive procedure that includes Survey, drawing, photography, measuring and mapping.
- It is unlikely that the recording MPPP volunteers complete on Mesa Prieta will ever be repeated. The documentation becomes the permanent archival record provided to the land owner, retained by the Project and submitted to ARMS (Archaeological Records Management Section) in Santa Fe.
- The most efficient recording involves a 3 person team: recorder-artist, mapper, and photographer. A fourth team member is desirable for scheduling if one or more team members have other responsibilities that require his/her presence, i.e. work schedule, obligation to family member, etc.
- MPPP requests that each team member become competent with all the roles of a recording team - recorder-artist, mapper and photographer.
- For safety reasons, all recording teams will have a minimum of three members.
- Accuracy, neatness, attention to detail and completion are essential. The ideal recording is an objective, systematic record of what is seen. It is detailed, accurate and readable to allow systematic data entry into the GIS data base and a suitable drawn image for the viewer.
- Drawings supplement the photographic record, especially when images are faint and difficult to photograph. Both are made from the same viewing position. Drawings and categorizations should include enough detail to clarify the observed human made marks.
- All human made features are included in recording. In addition to rock images and markings, this includes cupules, grinding slicks, worked holes, mortaros, walls, shelters, lithic and ceramic artifacts, agricultural terraces, water features, trails, historic artifacts, etc. The recording teams document the cultural history of humans on the mesa.
- Forms used for petroglyph recording include a Photo Data Sheet (PDS), Mappers' Notes (MN), Design Element Illustrated and Condensed Category List (DEI) and Trails Recording Sheets.
- Prior to documentation of a locus, team members discuss the position that will be used to record the petroglyph panel and what the panel encompasses; drawing, photography and Above Ground Level (AGL) measurements should all be taken from same location.

### EQUIPMENT AND SUPPLIES

- Each team is assigned a recording pack. The pack is to be used only by that team. MPPP requests that **ONLY EQUIPMENT BELONGING TO THE PROJECT** be used in recording. Please do not remove any article from a pack not assigned to your team.
- The equipment in each pack costs the Project about \$500. PLEASE use extreme care in the use of the equipment, especially the GPS units and cameras, the most costly items in the pack. Please use care with the Mug Board both in the field

and with pack placement; time and materials required to make the Mug Boards are costly as well.

- Recording packs are stored in Katherine Wells' studio on the Wells Petroglyph Preserve.
- All recording material including photo cards remain in the pack until the provenience is complete.
- A supply box is kept in the studio; each team is responsible for replenishing supplies in their pack including paper forms, pencils, batteries, etc. Extra GPS units and cameras are also in the supply box and may be borrowed for a day's use. Please notify the Recording Coordinator at [cwborduin@att.net](mailto:cwborduin@att.net) or the Project Director at the MPPP office if the supply box needs restocking @ [director@mesaprietapetroglyphs.org](mailto:director@mesaprietapetroglyphs.org)
- Please respect Katherine's space and art work with observance of "eyes only". Thank you!
- When changing batteries in the GPS, use fingernail to remove batteries very carefully, **positive end first**, so as not to rip tiny wire in GPS unit.

### **SURVEY OF PROVENIENCE**

- When a team first enters a provenience, the members decide how to survey the area. Most are 20 acres. Some teams like to walk the perimeters and provenience to gain an appreciation of the terrain and density of images in their provenience. Others approach survey and recording in a methodical and thorough manner completing one small section at a time recording as they go.
- Use of the MPPP Provenience Grid Map that compliments the provenience as shown on the GPS unit helps teams to document where they have surveyed and recorded within their provenience. Placing the loci letters on the map further enhances orientation.
- The entire provenience is surveyed and recorded by the recording team; the EXCEPTION would be areas too dangerous to enter.
- PROJECT RECORDING VOLUNTEERS COMPLETE WHAT IS LIKELY TO BE THE ONLY AND MOST COMPLETE RECORDING OF ARCHAEOLOGICAL FEATURES ON MESA PRIETA. THE SURVEY MUST BE THOROUGH!
- The Survey Teams (RATs) who survey a provenience prior to the assignment of recording teams perform a rapid, often one day, pass-through of the area noting images, difficulty of access and difficulty of moving about within the provenience. The recording teams should not rely on the results of the Survey Teams as being a complete survey.
- An archaeological survey is conducted by all recording team members walking about 10, 15 or 20 feet apart, depending on the density of boulders. All boulders are inspected at close range on all sides for petroglyphs. When a petroglyph is found, the boulder is marked with a piece of survey tape tied around a rock. The surveyor also surveys the ground terrain and open areas for artifacts, rock structures or any man-made feature.
- The team decides how large an area to survey before recording the features found.

### **RECORDER TIPS - Recorder uses the Photo Data Sheet (PDS)**

- The RECORDER uses the PDS sheet, recording box, pencil and eraser and DEI category sheets.
- Determine photo number – one photo number per locus no matter how many photos taken.
- Number photos using three digits, i.e. 003, 045 or 149.
- Determine locus letter
  - 1 rock = 1 locus; If rock images are on multiple sides of a rock or if the image cannot fit in a single photograph, sub-loci are recorded and numbered A-1, A-2, A-3, etc. for each side of the boulder; its photo is numbered with the next sequential number. I.E. A-1 is Photo 001, A-2 is Photo 002, etc.
  - Each side of a rock or sub-locus is entered on a separate Photo Data Sheet
  - The same GPS UTM coordinate is used for all sub-loci on that boulder no matter how large the boulder.
    - Number loci through sequential alphabets A – B – C – D – E ETC.; AA – AB – AC- AD – AE – ETC.; BA – BB – -BC – BD -BE - ETC.; CA – CB – CC – CD – CE – ETC
- If the boulder with images is in a cluster of boulders with images, each boulder is identified as a single locus with its unique letter and number. The related boulders are not sub-loci of the first boulder.
- Prior to documentation of a locus, the RECORDER leads a discussion about the position that will be used to record the petroglyph panel and what the panel encompasses. Documentation of drawing, photography and measurements are all taken from the same location.
- Make a drawing of the boulder on the PDS form; draw rock features if they impact the rock images. Draw all of the man-made rock images and markings and fill in all information cues.
- When drawing individual elements, the drawing should reflect the density of pecking made to make the petroglyph. For example, a sparsely pecked image would be reproduced on the PDS sheet using sparsely made pencil marks (be certain to make the pencil marks dark), moderate pecking is drawn with pencil marks touching but not solid, dense pecking is recorded as dense pencil marks. The edge of each element should reflect what is seen. It is very rare for a petroglyph to have clean cut edges unless it is incised. The edges are irregular and should be drawn as such.
- Number each element on the drawing (if there is more than one element). List the number to correspond with that element’s description on the PDS.
- Enter the category description listed on the DEI under “description”, category number and sub-category on the PDS form for each design element. Complete information about repatination, method of manufacture, multiples and additional. If uncertain about any aspect of the recording, discuss the recording with team members.
  - **MULTIPLES** may be used if elements are assigned to the same category and sub-category, have the same repatination levels, are made the same way, i.e. all medium pecking or all abraded and have or do not have an Additional, i.e. worked edge, lichen encroachment, etc. If this is not true, each element should be entered on its own line under descriptions. Multiples are listed in numerical form under “Multiples”.

- **ADDITIONALS** categories are found at the end of the Design Element Inventory and include “D” for Defacement, “N” for Natural Deterioration and “S” for Special Features. The recorder may use as many Additional annotations as apply. The annotations are grouped in the “Additional” box at the end of the elements line.
- **S-7** is an Additional used for an Outstanding Panel and is the only Additional that is written out on its own line on the PDS form using the descriptor “Outstanding Panel”. We do not use S-7 for a single outstanding element; the entire panel is noted as an S-7.
- Use the “Notes” section for additional descriptive information.
  - Examples may be suggestions made during the team discussion about the images or notes about how images impact each other. Descriptions of location related to land forms or drainage are useful. Any information that contributes to understanding the rock images are appropriate to place here and will be useful in a Data Base query.
  - Avoid using any descriptive note including adjectives on the “Description” line. With data base entry, one does not have the option to edit the “description” line, only to enter additional data under the notes section.
- Document measurements, direction facing, GPS readings and accuracy from Mapper.
- Please DO NOT number the PDS pages. Pages are numbered when processing is completed.
- If an error is made in numbering the photos on the Mug Board, please make a note on the PDS form for the Recording Coordinator, the error can easily be corrected in Photo Shop when the data are processed.

### **MAPPER - Uses the Mapper’s Notes (MN)**

- The MAPPER uses the GPS, tape measure, compass, Mapper’s Notes, clipboard and pencil.
- Each locus or sub-locus is entered on a single line on the Mapper’s Notes.
- Complete each line on the MN as work continues over multiple days.
- Number the sheets sequentially for the entire provenience. Please do not complete the second blank line in “Sheet \_\_\_ of \_\_\_.” That number will be entered by the Recording Coordinator when the provenience is complete and forms are being processed.
- With each sequential day of recording, use the next available line on the MN. Do not start a new sheet for a new day. You may place a date in the left margin to note the beginning of each recording day
- Use a call and response dialog to communicate the Mapper’s data to the Recorder using a cadence of numbers in pairs or sets of numbers. Data must be accurate!
- Measurements are metric in meters and tenths of meters. (i.e. 1.20 meters; 0.02 meters; 2.53 meters. Please use 3 digits in measurement documentation)
  - Measurements of rock image panels are of those parts of a rock that have human made visual elements and markings rather than of the entire rock on which the panel occurs.

- Measure the height, width and Above Ground Level (AGL) for the rock images on each locus in that order to reduce documentation errors (matches the order on the forms).
- Measurements are taken from the highest element to the lowest (height) and farthest left and right elements (width).
- AGL is measured from the bottom of the lowest element to the ground where the mapper is standing (or the image maker likely stood, sometimes this is not on the ground.)
- If a locus is high above the ground, for example high on a boulder pile, measure the AGL from where the recorder is standing. In addition, record the estimated level above actual ground level in meters in the Notes section of the PDS form.
- Take a compass reading to determine direction the locus is facing. The recorder may use N (north), E (east), S (south), W (west), NE (northeast), NW (northwest), SE (southeast) or SW (southwest). Other options are UP and Down (DN). Do not use three digit directional readings i.e. ENE (east-north-east) etc.; this exceeds the number of letters the data base can accept.
- Record a GPS coordinate reading including Easting, Northing and GPS accuracy (see below).
- Position on Slope (POS reading) relates to the elevation of the position of the locus within the provenience the team is currently working in. “High” would be the highest elevation within the provenience, “Low” – the lowest elevation and “Mid” is mid range. This is a relative term that assists with relocation of a locus.
- Verify that the data on the Photo Data Sheet and Mapper’s Notes agree.
- Assist other team members or locate the next locus to record.

### **GPS TIPS FOR ACCURATE READINGS**

- Place the GPS vertically on the boulder being recorded.
- The Garmin 72 and 76 units will generally give the best reading when held vertically.
- Wait until the Satellite strength bars are solid black with a D in or above at least four bars and the 3D Differential is shown in the Receiver Status Window before reading the position. The GPS receiver receives satellite signals more quickly when the antennae are facing south.
- The “sky view” shows where the satellites are in the sky. Try to have the antenna positioned so the most satellites are in “view” of the antenna.
- Wait until the least significant digit (on the right) is stable or slowly goes up or down no more than one digit. The furthest right number is a single meter reading.
- Wait for GPS Accuracy (upper right on screen) to settle at 2-4 meters or less.
- The Datum (NAD 83) and Zone (13S) are listed on the MN. Document the Easting and Northing and GPS accuracy. **Write all numbers clearly.**
- PLEASE DO NOT CHANGE ANY SETTING ON THE GPS UNITS.
- In the event that the “Tracking Feature” is turned on, lines will be drawn on the GPS display reflecting everywhere the holder has traveled. Please attempt to continue to use the GPS for that day and report the problem to the Project Director at [director@mesaprietapetroglyphs.org](mailto:director@mesaprietapetroglyphs.org)

- Not all of the GPS units in the Supply box have grids for both large properties being recorded. The Recording Coordinator will provide you with a GPS with the appropriate grid. If the team borrows a GPS from the supply box, be certain the GPS selected has the correct grid noted on a tag that is connected on the unit. El Guique Mine property is 014; Cook property is 015.
- **PLEASE DO NOT DELETE ANY WAYPOINTS FROM THE GPS; THIS MAY ERASE THE GRID MAP.**

### **PHOTOGRAPHER TIPS**

- The PHOTOGRAPHER uses the camera, Photo Mug Board and reflector/shade if needed.
- Photos are taken from the same position the recorder is drawing the image.
- Mug Board:
  - Verify Provenience and Photo Numbers are correct and in 3 digit format
  - Position Mug Board so that numbers do not reflect into the camera lens, does not obscure or shade part of the panel and is parallel to the side of the camera view finder
  - Whenever possible, hold the mug board on the boulder as close to the image as possible.
  - The meter scale on the mug board assists the viewer in estimating the size of the images. Whenever possible place the mug board on the left side of the image so the meter scale is closest to the image.
- Have uniform lighting on the panel to get the best exposure. This can be achieved with full sun, shade or reflection. Partial sun and mottled lighting will often result in a poor exposure that is difficult to see and is not acceptable.
- Ask team member(s) to assist by holding mug board or sun shade.
- Keep the camera parallel to the panel as best you can.
- Frame the photo to capture only the mug board and manmade images on the boulder. Try to omit other recorders, equipment, background, excess boulder view, etc.
- In addition, take a context (overview) photo to show the placement of the boulder in its location; this photo does not need a photo board. DO indicate the direction of North using the provided arrow. *Do this for each boulder/locus, one is sufficient for boulders with multiple panels.*
- NUMBERING OF PHOTOS
  - All photos for a single locus receive one photo number.
  - List the photo number as three digits on the Mug Board and recording forms.
  - With a large panel, an overview photo is taken followed by sequential detail photos, all with the same photo number.
  - With a panel that has exceptional elements, take an overall photo then detail photos of the selected elements.
  - Please indicate the total number of photos for loci in the space provided on the PDS form.
  - If a locus has multiple sides or sub-loci, each sub-locus receives its own photo number. The locus letter assignment is described above.

- Overview/context photos should receive their own photo number IF they cover a boulder with multiple panels, or if they cover multiple adjacent loci.
- Assist other team members or locate the next locus to record
- **4<sup>TH</sup> TEAM MEMBER (Optional)**
- Assists the Mapper in documenting UTM's, measurements and direction as Mapper reads them aloud
- Holds photo board or shade for photographer
- Assists in categorization for Recorder
- Looks for next image to record

**COORDINATION RESPONSIBILITIES** - All team members share in completing the team responsibilities.

- One team member is responsible for completing the Emergency Instructions Location information for EMS on the Emergency Instructions sheet in the recording box.
- One team member is responsible for reporting to Project Director and Recording Coordinator when the team is going into the field, where they are working and again, when they have returned,
- All team members are responsible for checking the work area around a locus to be certain all equipment is collected including flagging tape on the locus; all team members are responsible for the well being of the equipment.
- Team members are responsible for restocking the pack and for returning it to the studio when the day's work is done. The Recording Coordinator is notified if supplies in the Supply Box need replenishing. If depleted supplies are not reported and replaced, the next team will not have adequate supplies to support them in the field.
- All team members are responsible for assuring the collected data is complete prior to leaving a locus and prior to leaving the provenience for the day. Any incomplete data is entered on Field Error Correction Form. Incomplete data are completed the next time the team goes into the field.

### **TEAM LEADER**

- Team leader position evolves within the team as each team becomes more experienced
- Team leader is identified as the member of the team who verifies completeness of all of the recording sheets and quality of photographs at the end of each recording day.
- Team leader is responsible for preparing data to be turned in to the Recording Coordinator
- Notifies the Recording Coordinator that the provenience is complete and that paperwork and photo images are ready to be removed from the pack. Please DO NOT download photos from project cameras.
- If an error is made in numbering the photos on the Mug Board, please make a note on the PDS form for the Recording Coordinator, the error can easily be corrected in Photo Shop when the data are processed.
- **PLEASE DO NOT DELETE ANY PHOTOS FROM CAMERA. IF THE CAMERA CARD IS CLEARED BY MISTAKE, STOP USING THE CAMERA, REMOVE THE**

**CARD TO A PROTECTED PLACE OR CONTAINER, AND CONTACT THE PROJECT DIRECTOR RIGHT AWAY. IT MAY BE POSSIBLE TO DISCOVER AND RESAVE THE LOST IMAGES.**

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