

ROCK ART RECORDING: THE NEED FOR THOROUGH RESEARCH

IN ORDER TO PROVIDE SUFFICIENT RETRIEVAL DATA

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ABSTRACT

The growing concern of recording rock art as an integral part of the archaeological data bank has brought a raft of researchers into the field. Much of the work accomplished in the past reflects the individual recorder's methodology, often with little regard for future research. This paper presents a method of recording that has worked well for certain governmental agencies whose primary thrust is future data retrieval combined with cultural resource management.

INTRODUCTION

The need for recording the world's rock art has been discussed by eminent scholars and researchers for decades. As early as 1882, Garrick Mallery's work titled "Pictographs of the North American Indians, a Preliminary Paper" was printed accompanying the Fourth Annual Report of the Bureau of American Ethnology, Washington D.C. In a subsequent report, Mallery stated "The importance of the study of picture-writing depends partly upon the result of its examination as a phase in the evolution of human culture" (Mallery 1893:26). This sobering thought has been reflected by a series of authors, to the present day. Fenenga set a standard for rock art recording forty years ago (Fenenga 1949), and as recently as 1987, we co-authored a report on recording a site near Redding, California, in which we stated: "The casual methodology employed in the past when the existence of rock art at larger archaeological sites was only briefly noted is an increasingly rare situation, particularly in California" (Van Tilburg et. al. 1987:12). The days of fighting rear guard actions in terms of the significance of rock art research are, indeed, numbered.

Yet, despite the concerned efforts of many who are

actively involved all too often rock art research is looked at strictly from a recording standpoint, that is, gather the mapping equipment and cameras, the photo logs, the sketch pads, and head for the site. Recently some friends of ours doing research on the Mogollon influence, revisited a site that we all had worked on, and to their dismay, found it difficult to relocate certain boulders containing specific elements.

Our own past experience includes using standard references for insight into research, only to find errors, distortions in drawings, misplaced elements, misplaced boulders, and even complete sites misplaced. Great quantities of material accumulated by Robert Heizer over several decades reside today at the UCLA Rock Art Archives--and are rather useless for scholars, since it's mostly photo negatives (no prints), placed in boxes, with little or no information on provenience, dates, element inventories, etc. Equally alarming is the vast amount of research on New Mexico rock art, spearheaded by the late Jim Bain, that has not been properly cataloged for further research. All of this frustration brought into sharp focus the value of sufficient data retrieval; in short, rock art research for someone coming after the recording has taken place. Even as the dirt archaeologist strives for high standards, combined with rigorous, professional field techniques, so must the rock art researcher maintain equally high standards and techniques for data retrieval.

DISCUSSION

What type of information will future researchers need? Should this information be available to anyone glancing through the literature?

The first question is, indeed, difficult to answer, since accurate prognostication is an impossible task. Still there are a few guidelines that seem to be basic to any field of research, and based on our own needs, we would like to address them. The second question we can answer without too much difficulty; no, all data should not be available to all people. There will always be "sacrificial" sites -- those areas already well-known by the general public. But some sites should remain confidential; today's recorder must weigh the consequences of publishing exact locations and thus be aware of limiting access to the data collected. Such data belong in "protected custody," monitored by responsible agencies.

We have been asked by several agencies to assist in recording rock art located under their jurisdictions. These groups include specific Bureau of Land Management offices in California and Arizona, the Western Archaeological Conservation Center, which is a part of the National Park Service, and the National Forest Service. The following

discussion is a personal, but quite workable, plan for recording rock art. We devised this plan based on their data retrieval needs, which includes not only recordation, but recommendations in terms of cultural resource management.

Data Needed for Sufficient Retrieval

Date.

It is vitally important that all site reports, photo logs, element sketch forms -- in short, all forms used in recording should have the date when the recording was done. This not only establishes geological conditions, but additionally brackets any cultural impact on a site, particularly important for cultural resource management.

Location.

Recordation should start with the big picture, and progress to the specific. In the United States, there are several map-types and coordinate-grids that will locate a site within a few meters. The most used map is the U.S.G.S. Quadrangle (topographic) either 15 minute or the preferred 7.5 minute series. These maps are dated, so this should be included on the form. The site should be located by at least three different coordinates when possible (Figure 1).

- 1) Township, Range, Section, and to the fourth quarter section.
- 2) Geographic Coordinate System, longitude and latitude to closest second.
- 3) U.T.M. (Universal Transverse Mercator) Grid System, which is the most accurate and places the site most exactly.

At the site itself, it requires a "Boulder Plot" (Figure 2). This is a plan map that indicates relative position of the boulders with rock art.

Both magnetic north and true north are to be indicated, including the declination in degrees. Future researchers will be further aided by locator boulders, as well as a boulder profile (Figure 3). A boulder profile is a sketch of how the cliff-face or the boulder field appears from the ground level looking toward the site. The rock art boulders are sketched, as well as some "locators". Some foliage or trees may be helpful. Perhaps the greatest help is to sketch an outstanding petroglyph (or pictograph) or two on a few boulders to help in identifying location. Photographs of the boulders can be helpful.

Mapping boulder fields, overhangs, cliff faces and other exposed sites is less involved than mapping caves. Mapping caves presents another problem altogether, and requires some unique answers. Paiute Cave (Figure 4) is located on the

American Rock Art Research Association	
P.O. Box 65, San Miguel, California 93451 - Tel: (805) 467-3704	
Rock Art Site Recording Form - 1: Site Information	Sheet of
Site Name:	Site No: State:
County:	Map Name
Township. (N S) Range. (E W)	
.....1/4 of the 1/4 of the 1/4 of the 1/4 of Section.	
UTM: Zone. East. North. Accuracy (1 10 40 160 640)	
Owner: <input type="checkbox"/> Federal <input type="checkbox"/> State <input type="checkbox"/> County <input type="checkbox"/> City <input type="checkbox"/> Private <input type="checkbox"/> Unknown	
Access: <input type="checkbox"/> Foot <input type="checkbox"/> 2X4 Car/truck <input type="checkbox"/> 4X4 Vehicle <input type="checkbox"/> ATV/Mobile	
Area Site Access: <input type="checkbox"/> Ground <input type="checkbox"/> Ladder <input type="checkbox"/> Talus <input type="checkbox"/> Toe & Hand Ledge	
Visibility: <input type="checkbox"/> Visible <input type="checkbox"/> Not Visible due to	
Rock Art appears on: <input type="checkbox"/> Basalt <input type="checkbox"/> Sandstone <input type="checkbox"/> Granite <input type="checkbox"/> Tuff <input type="checkbox"/> Other	
Worked Surface is: <input type="checkbox"/> Vertical <input type="checkbox"/> Horizontal <input type="checkbox"/> Sloping <input type="checkbox"/> Overhead	
Category: <input type="checkbox"/> Petroglyph <input type="checkbox"/> Pictograph <input type="checkbox"/> Combination of both	
Technique: <input type="checkbox"/> Pecked <input type="checkbox"/> Incised <input type="checkbox"/> Abraded <input type="checkbox"/> Painted <input type="checkbox"/> Stencil	
Pictographs: <input type="checkbox"/> Monochrome <input type="checkbox"/> Polychrome <input type="checkbox"/> Outlined <input type="checkbox"/> Solid <input type="checkbox"/> Sprayed Munsell Color(s)	
Photos: <input type="checkbox"/> B/W <input type="checkbox"/> Slides <input type="checkbox"/> Color Prints	
References:	
Description of Rock Art: <input type="checkbox"/> Abstract <input type="checkbox"/> Anthro <input type="checkbox"/> Atlal <input type="checkbox"/> Bird Tracks <input type="checkbox"/> Geometric <input type="checkbox"/> Footprint	
<input type="checkbox"/> Chevron(s) <input type="checkbox"/> Circle(s) <input type="checkbox"/> Crosshatching <input type="checkbox"/> Dot(s) <input type="checkbox"/> Hand Prints <input type="checkbox"/> Bear Paw	
<input type="checkbox"/> Crescent <input type="checkbox"/> Deer Track <input type="checkbox"/> Grid <input type="checkbox"/> Triangle <input type="checkbox"/> Wavy Line <input type="checkbox"/> Lizard	
<input type="checkbox"/> Lines <input type="checkbox"/> Meander <input type="checkbox"/> Rectilinear <input type="checkbox"/> Snake <input type="checkbox"/> Starburst <input type="checkbox"/> Zigzag <input type="checkbox"/> Pottery	
<input type="checkbox"/> Sunburst <input type="checkbox"/> Shield <input type="checkbox"/> Other <input type="checkbox"/> Blanket	
Style. Possible Time Period.	
HOW TO GET TO THE SITE:	
(Refer to permanent features, give best approach eg. from above, below, along cliff. Draw diagram on separate sheet).	

FIGURE 1. Sheet one (site information) of the Rock Art Site recording form with spaces for specific information on site location, access, type of rock, and rock art style(s).

ARARA Rock Art Recording - Form 2: Map(s) Sheet of
 Site: BILLY GOAT CYN. (NAMPANWAND) Site No.: AZ:A:12:170 Locus: 1 Section: 1
 View: PLAN Scale: 1" = 4M Recorder: F. Bock Date 8/8/89

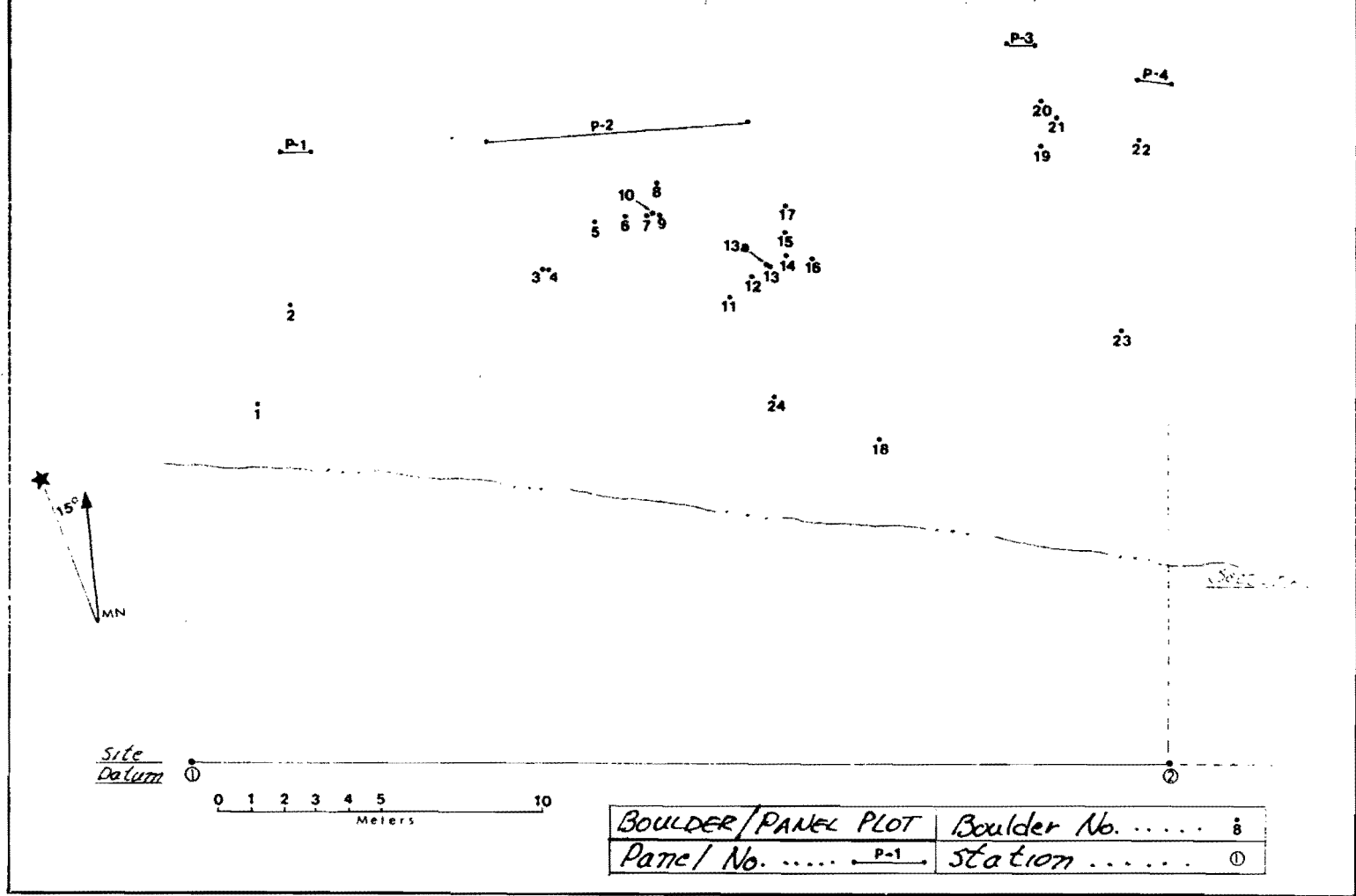


FIGURE 2. Boulder and Panel plot, indicating exact location from the baseline (AZ:A:12:170).

Arizona Strip approximately 30 miles south of Colorado City. The pictographs are located in a lava tube "blow-out," not tumbled rocks, a rather stable geological environment. However, it is well known by the local ranchers, and has already seen considerable vandalism. This site is in desperate need of conservation, and suggestions for resource management submitted by the American Rock Art Research Association have been forwarded to the Arizona Strip Bureau of Land Management. This recommendation has resulted in the school children from Colorado City assuming stewardship of Paiute Cave and plans are already firm for future conservation of the site.

Extent of Site.

A thorough survey of the area should be undertaken, including nearby "potential" sites (Figure 5). If time does not allow a complete survey of related sites, notes should be quite explanatory as to distance and compass reading for future research.

Perhaps the most important archaeological information needed, if a future researcher is to relocate the site, is a permanent datum. It is helpful to indicate recognizable landmarks, but not such things as windmills, fence lines, filling stations, ruins or even roads. Nothing is permanent, and cultural "land marks" are much too transient for references.

Surfaces.

It is most valuable for the next researcher to know if he/she is seeking rock outcroppings, a cliff, tumbled boulders, or overhangs, as well as what kind of rock, basalt, granite, sandstone, limestone, etc. Note if lichen is present and/or covers the designs. How much, if any, patina is there? Has this begun to form in the lines of the glyphs?

The Designs.

The more elaboration in describing the designs, the better it is for the future. The days of describing a site in general terms are over. Too often we've seen references such as: "There is some rock art nearby;" "Pictographs are present on an overhang above the ruins;" "Boulders containing Indian writing were found a short distance from the site." These are actual quotes! Not only should the wording be precise, but all information that would help the researcher should be included. And do not ignore scratches! Much of this information can best be ascertained by drawings and sketches in the field.

An over-all sketch of each boulder cliff or panel, is an excellent reference tool for the future researcher. Figure 3a shows a sampling of the elements for a quick reference. And additionally when placing element numbers in their correct location(s) aids in relating both drawings and

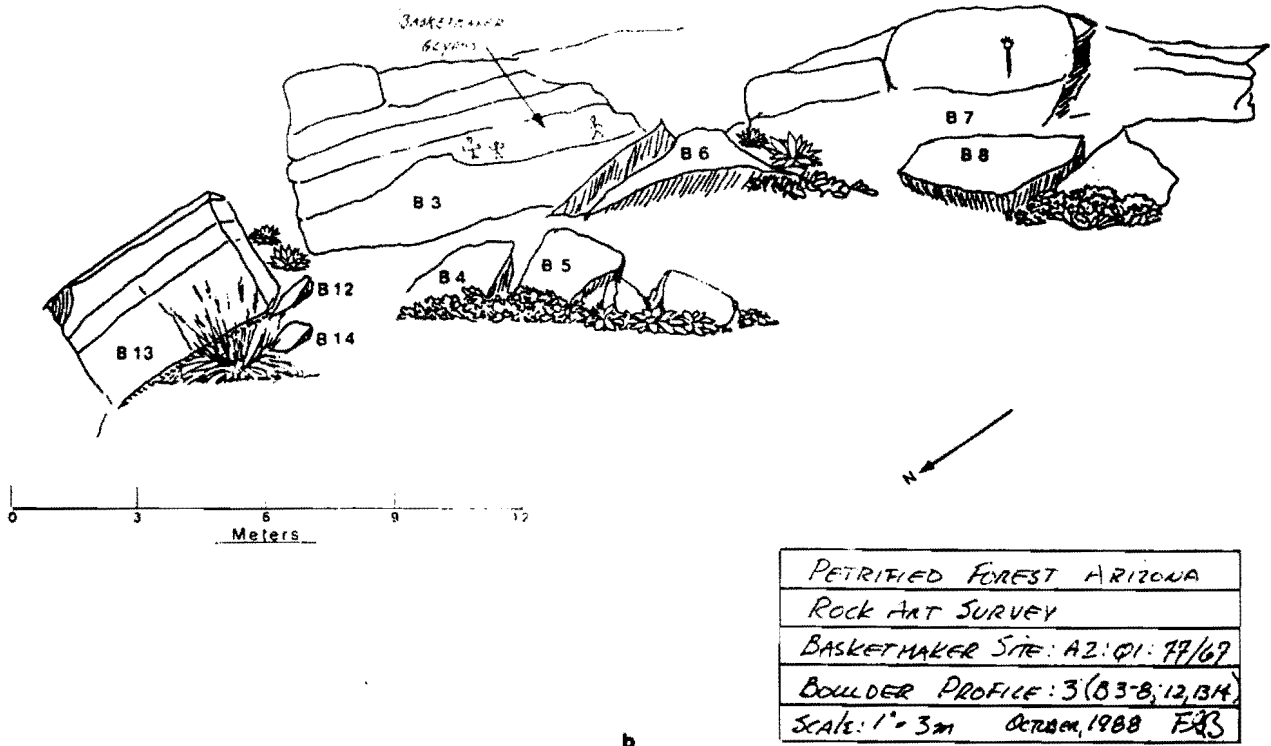
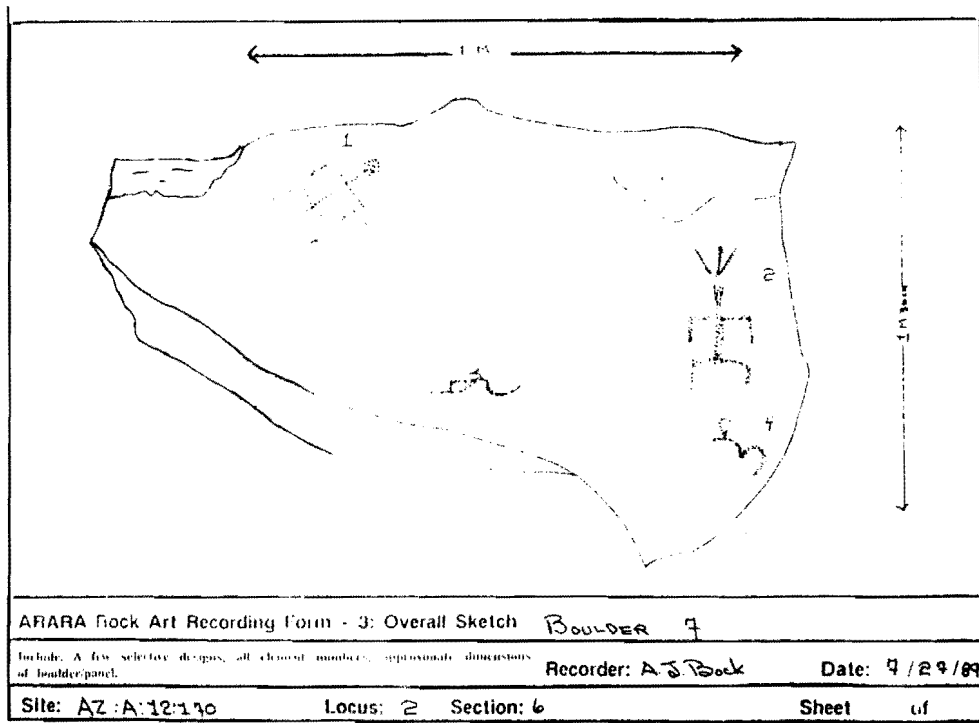


FIGURE 3. a) Overall sketch of a boulder for future reference in relocating the rock and petroglyphs (not to scale) (AZ:A:12:170). b) Boulder profile, indicating relative positions of boulders with rock art, and a few glyphs to aid in location (AZ:A;12:170).

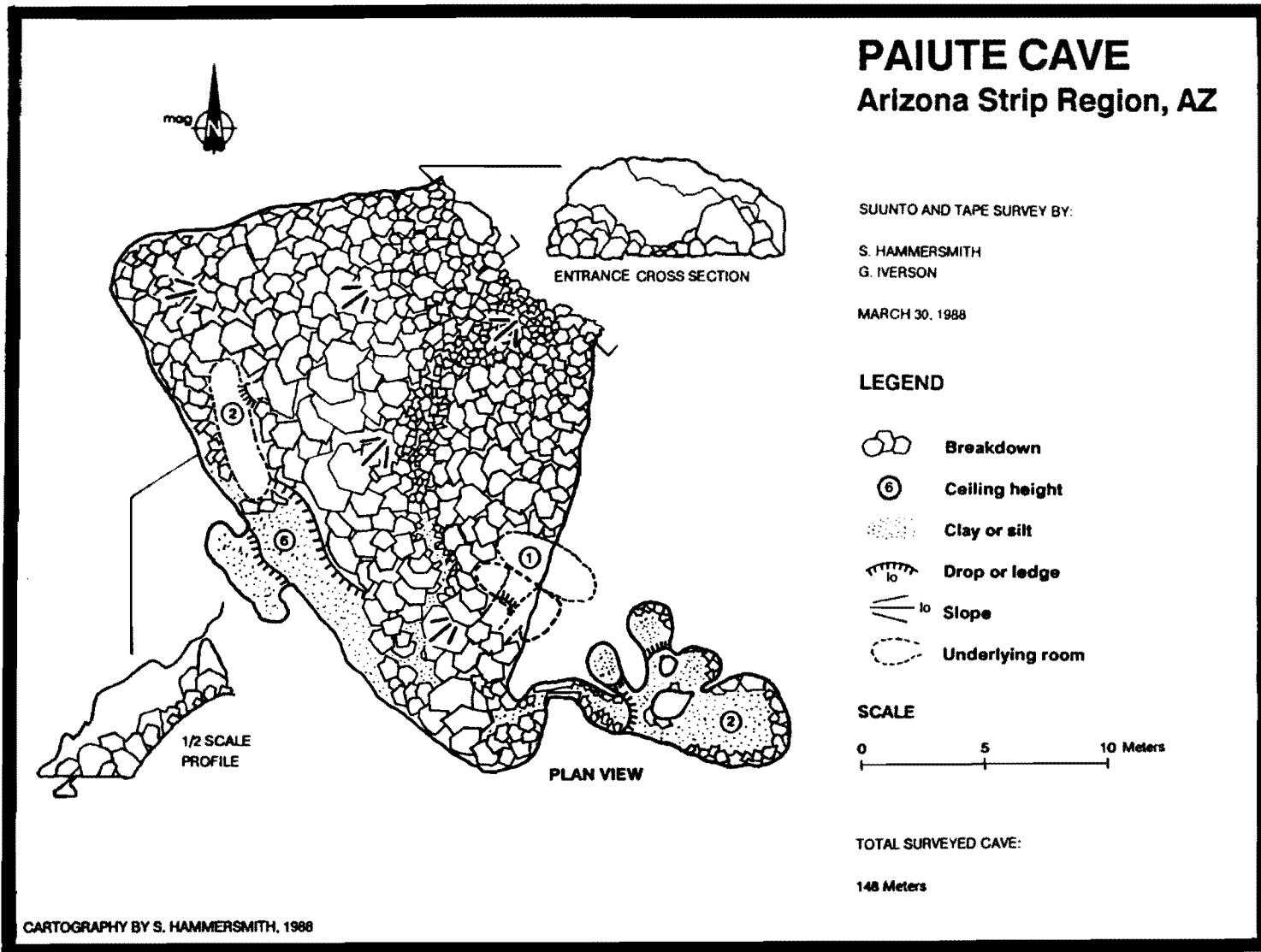


FIGURE 4. Paiute Cave (AZ:A:8:29) map.

photography to the over-all picture.

Individual element sketches are vital (Figure 6). They help in relating photography and scale drawings, especially when completing the forms for a report. The element drawings also save a considerable amount of time when it comes to tabulating the design inventory. Scale drawings completed in the field are necessary (Figure 7). Unfortunately, a popular misconception is that the elements can be drawn from slides at a later date. However, in too many instances a slide may be confusing and not clear enough; thus cracks in the rocks, exfoliation, "modern" scratches or additions, and a myriad of other visual material may be mistaken when the researcher is away from the field, relying solely on the photograph and memory. Georgia Lee and Bill Hyder (personal communication) experienced this problem when recording rock art in Lava Beds National Monument, in Northern California. Nothing takes the place of sitting before the element(s), grid in place, and taking the time to observe and draw! We experienced this problem when we returned home from Puerco Ruins in Petrified Forest, Arizona. There were three drawings rendered of a large anthropomorph. A question arose as to whether the forehead of the figure had a "widow's peak" carved as part of the design. If it did it could possibly indicate a Mogollon influence. Perusal of the photographs and slides did not clarify the problem. Consequently, one of the crew had to return to Petrified Forest for a closer observation and additional drawing and pictures.

Thus the need for accuracy in drawing must be stressed. Once a report is published, the drawings -- warts and all -- become part of the record, and will forevermore be used, and relied on, as reference material. As inspirational as he was in pioneering American rock art research, the late Robert Heizer allowed a progression of errors to be printed in his name (Heizer and Baumhoff 1962). As late as 1973, his publication coauthored by William Clewlow contains pages of mis-drawn designs. A simple example of this is indicated in Figure 8 (Heizer and Clewlow 1973).

Relocating rock art is another major problem, one that is compounded by publishing previously unpublished material without field checking. Schaafsma's (1971) excellent volume on the rock art of Utah, is an example. She indicates, on page 53, (Figure 9), a rock art panel from Salt Creek, Utah, source: Charles B. Boogher photo. This panel is located several miles distant from Salt Creek, actually in Indian Creek. It contains considerably more elements than Boogher/Schaafsma's recording.

These representations, gleaned from literally dozens of examples taken from several publications, are not meant to denigrate the valuable work done by previous researchers. Rather, we wish to draw attention to at least two factors.

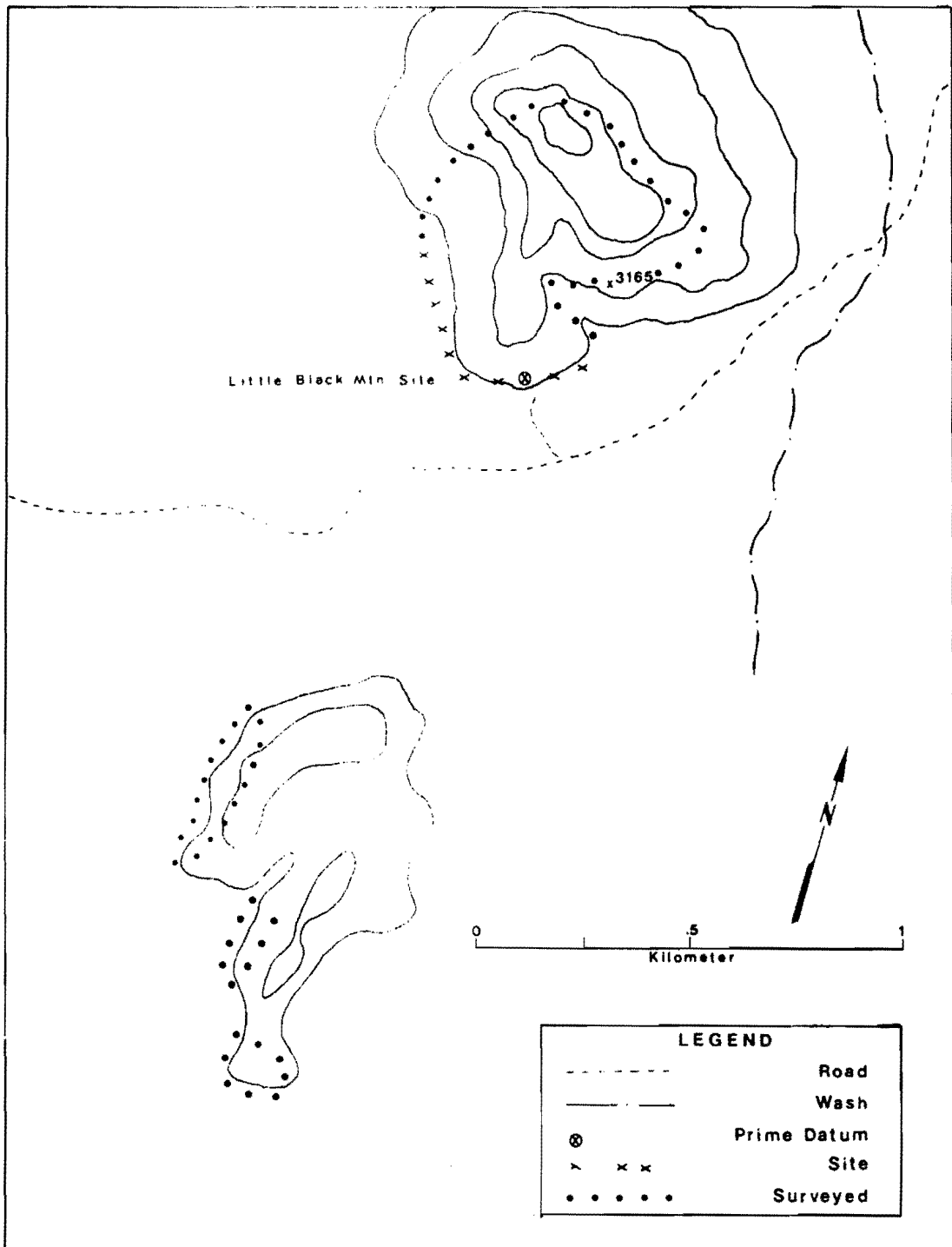


FIGURE 5. Map indicating a rock art site (AZ:A:2:51) and initial surveys conducted nearby to ascertain other potential sites.

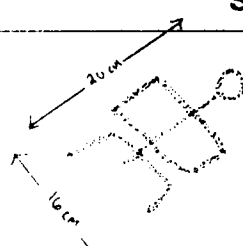
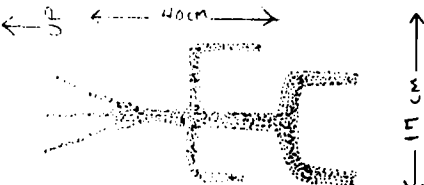
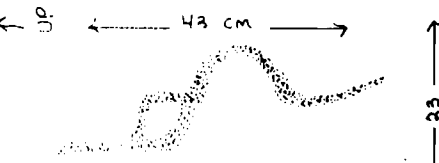
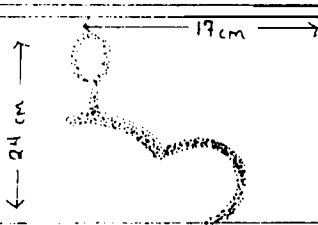
ARARA Rock Art Recording Form - 4: Element Index/Sketch		
Site: AZ:A:12:170		Locus: 2 Section: 6
		Boulder <input checked="" type="checkbox"/> No. 4 Panel <input type="checkbox"/>
Recorder: A.J. Bock		Date: 7/27/89 Sheet of
EI.#	Description	Sketch
1	ANTHRO-Deeked	
2	ANTHRO w/head dress	
3	MEANDER	
4	Meander w/circle	

FIGURE 6. ARARA Form No. 4 used for sketching every rock art element at a site (AZ:A:12:170).

First, if the drawings used by these (and other) researchers are accurate, then considerable erosion or vandalism has occurred over the years. Such a comparative study is valuable in ascertaining that destruction, and gives further credence to a program of conservation and management.

If, on the other hand, the previous research is inaccurate, the conclusion becomes clear: it is paramount that researchers exercise rigorous caution and control when recording rock art.

Photography.

The one recording technique that imposes the least bias upon that technique is, of course, photography. The camera sees what is there; but this must be balanced against personal observations and drawings. It is incumbent upon the photographer to establish a set of criteria that then provide the best record possible. For example:

- 1) Data boards, with all pertinent information should be included in each photograph (Figure 10).
- 2) Photo logs must be accurately kept (Figure 11).
- 3) It is imperative that catalog numbers correspond to sketchnumbers, drawing numbers, and to map numbers.
- 4) Time of day, film type, ASA all are important to note for accuracy.
- 5) It is advisable to photograph in both black and white and color. Color will eventually fade, and hopefully today's record will survive well into the next century.

Speaking of photography, today we are on the cutting edge of rock art research in terms of video taping. This exciting adjunct to recording may be tomorrow's prime technique. By combining space-age technologies, we may well be able to feed video tape images into computers, including enhancement programs, and thus obtain better, more accurate data, faster than ever before. And this technique should out-last any previously known or used medium -- paper, photo prints, slides, or what-have-you. Presently, a video camera cannot differentiate between a culturally-produced peck or incision and a rock scar. It still takes the personal, on-site observation. But by the turn of the century, we may well have discreet imaging to the point where video will be the answer.

However, with many rock art sites, time is of the essence if the rock art is to be recorded. Another ten, twenty, thirty years could see the complete disappearance of some of the petroglyphs and pictographs.

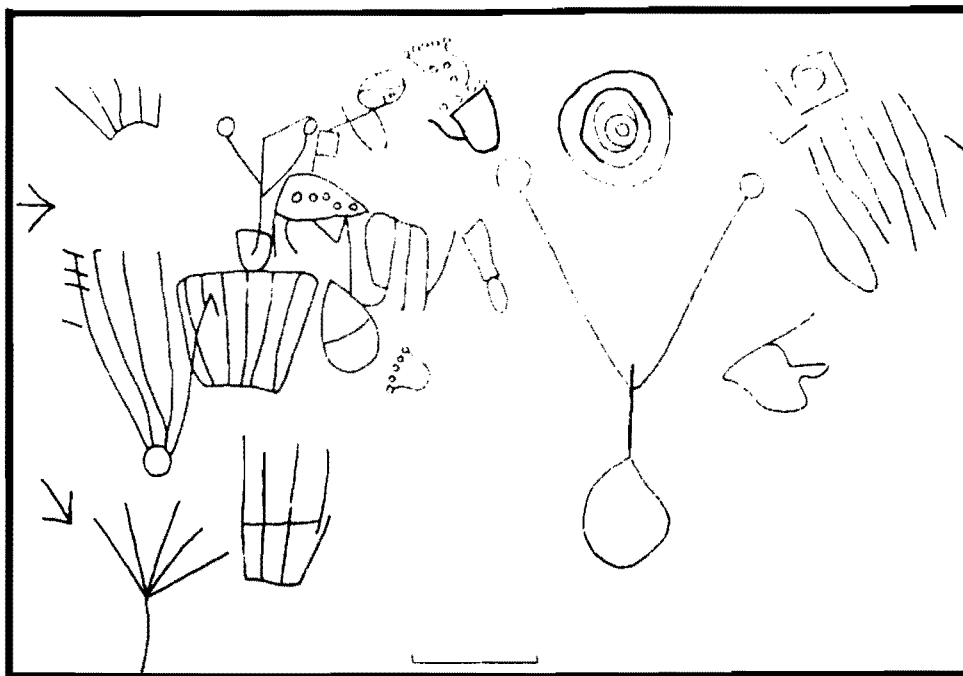
Potpourri.

The researcher in the future may well want, or indeed

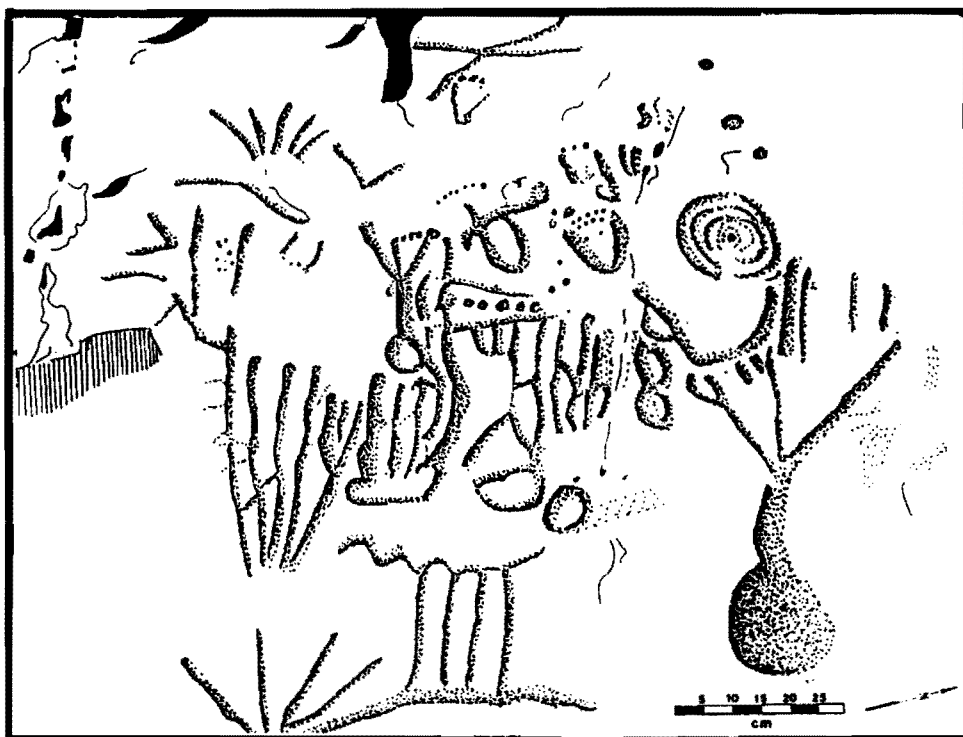
ARARA Rock Art Recording Form - 5: Scale Drawing				Sheet of		
Site: <u>AZA:12:170</u> Locus: <u>2</u> Section: <u>3</u>				Boulder <input type="checkbox"/> No. <u>5</u> Element(s) No. _____		
Recorder: <u>Esther Schwartz</u>				Indicate: North & Which way is UP		Date: <u>7/19/89</u>
Panel <input checked="" type="checkbox"/>						

	A	B	C	D	E	F	G
1							
2							
3							
4							
5							
6							
7							
8							
9							
	A	B	C	D	E	F	G

FIGURE 7. ARARA Form No. 5 used for scale drawings (AZ:A:12:170).



a



b

FIGURE 8. Comparison of an illustration at CA:Sha:39. The top figure (a) is from Heizer and Clewlow (1973:Fig. 273). The bottom figure (b) is an illustration of the same petroglyph panel by A.J. Bock (Van Tilburg, Bock and Bock 1987:Fig. 16).

need, data such as:

- 1) What literature is available? Where is it kept?
- 2) What other reports have been published (or unpublished) on the site?
- 3) Have there been studies on any cultural activities in the area? Archaeological/reports?
- 4) What has today's researcher ascertained about weathering? Vandalism? Cultural tampering?
- 5) Are there any "missing" boulders? "New" boulders at the site, brought by earth movement.

Potential.

The future researcher may be able to use information that today's record predicts as potential liabilities; data such as:

- 1) Future cultural impact due to shifting settlement patterns, increased recreational use, visitation due to ever-expanding awareness of rock art.
- 2) The potential dangers of damage by weather, natural exfoliation, wind and water, drifting sand, lava flow (as witnessed in Hawaii).

CONCLUSION

This is but a short (and probably inadequate) report. It is virtually impossible to anticipate all of the reasons for future research, but current recording techniques should address as many as possible in order to accumulate sufficient data for retrieval. There are far too many uncataloged photographs and recording materials that are being stored in dusty storage rooms, virtually useless for research purposes.

We have discovered, for the most part, that the research methods discussed in this paper work well, particularly in our recording for those government agencies mentioned earlier. However, we are quite aware that there are always unanticipated variables and, thus, we must consider the uniqueness of each site in terms of its geographic and geologic placement, cultural affinities, rock art styles, methodology of rock art production: in short, the myriad problems besetting the researcher. We feel strongly that in rock art recording, we must not get locked into one method; it is vital that a combination of techniques be implemented. So we stress accuracy in mapping, drawing, photographing, and record keeping. Rock art research must become as meticulous a discipline as any branch of archaeology. Above all, try to anticipate what future researchers may need. It is prudent to get more than just "enough."

The future does indeed, begin today. What we, as rock art researchers, leave in our accumulated portfolios is the heritage of tomorrow's research. Let us strive to leave them the best set of records that we can.

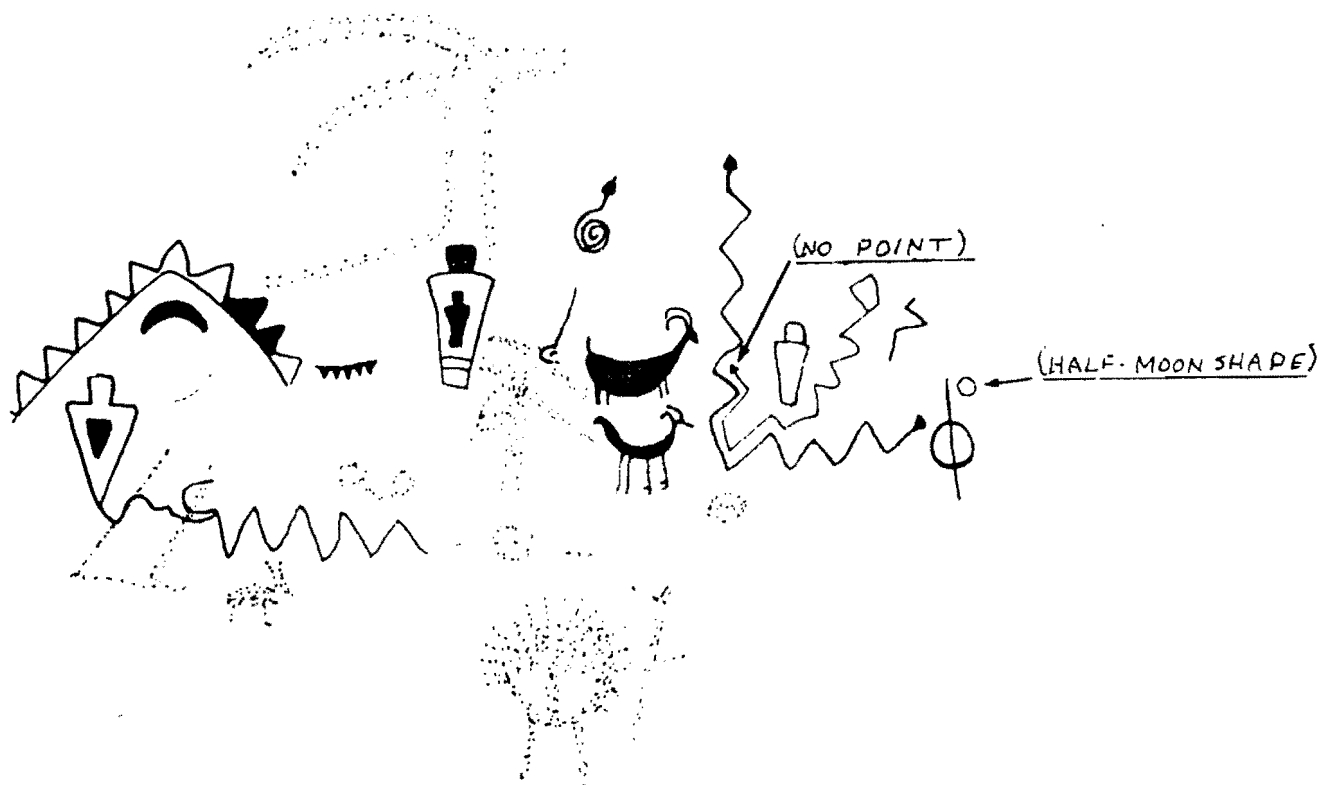


FIGURE 9. This panel illustrated in Schaafsma (1971:53) is relocated by the original researchers. It is actually in Indian Creek, several miles from Salt Creek. The dotted lines indicate rock art elements omitted from the Schaafsma volume.

Site: Billygoat
Site No: AZ:A:12:170
Loc: 2 Sec: 6 Panel 4
Element 5-6
7-28-89
TM 100

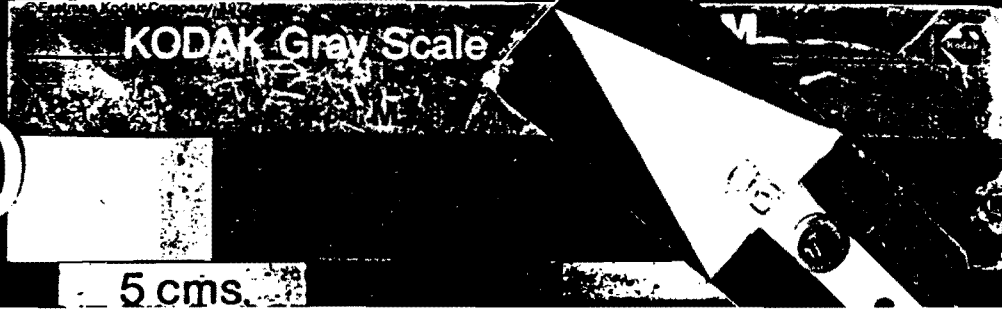


FIGURE 10. Data board displayed in every picture taken of rock art. This illustrates a board used in black and white photography. A similar board with the Kodak Color Scale is used in color photographs.

ARARA Rock Art Recording Form - 6: Photo Log										Sheet		of		
Site:				CAMERA				<input type="checkbox"/> B/W <input type="checkbox"/> COLOR						
Photographer:			Recorder:			Date: / /								
Roll	Frame	Azimuth*	*Not corrected for declination Direction RA Faces	LOCUS	Section	Film Type	ASA Speed	Shutter Speed	F. Stop	Filter	Lens Type	Daylight	Flash	Reflector
SUBJECT														

FIGURE 11. A copy of the ARARA Form No. 6 -- the photo log, filled out in the field while recording.

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