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La Pintura

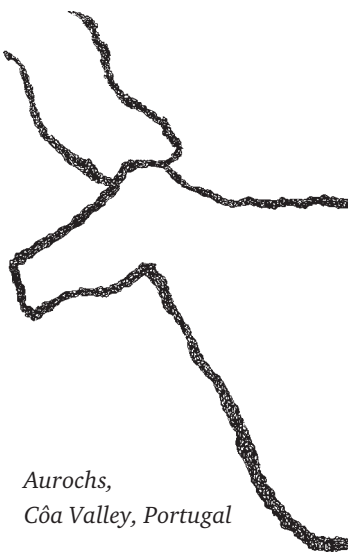
The Official Newsletter of the American Rock Art Research Association
Member of the International Federation of Rock Art Organizations

Paleolithic Engravings Endangered in Côa Valley, Portugal

By Paul G. Bahn

A series of major discoveries over the past 15 years have transformed our conception of the parietal art of the last Ice Age in Europe, confirming what had long been suspected by some researchers—that the well-known art surviving in roughly 300 caves in western Europe is unrepresentative and uncharacteristic of the period, owing its apparent predominance in the archaeological record to a taphonomic fluke. In reality we have no idea how important or frequent the decoration of caves was in Ice Age Europe, but it is extremely probable that the vast majority of that period's rock art was produced in the open air. Very few examples will have been able to survive the many millennia of weathering (unlike the caves), so that the six sites discovered so far—in Portugal, Spain, and France—are all the more precious. The current threat to the largest of them in Portugal's Côa Valley, of being drowned by a dam, is therefore a grievous blow to a phenomenon of which we still know almost nothing.

This discovery—first made public in October 1994—has occurred in the Côa Valley, a tributary of the Douro in northeast Portugal. The pecked figures and engravings—there are at least 150 of them on schist blocks spread over about 13 km—are of horses, ibex, and especially of aurochs (wild oxen); they measure from 15 cm to over 2 meters in size. From their style, it has been estimated that they are probably Solutrean (Clottes 1995), though in fact it is extremely likely that several phases of Paleolithic and perhaps even Epipaleolithic artistic activity are represented. They include some very fine images, particularly two large horses with overlapping heads. The vast majority of known figures are the visible,



*Aurochs,
Côa Valley, Portugal*

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Albuquerque Update

Plans for the 1995 ARARA meeting in Albuquerque, New Mexico, are proceeding apace. A pre-registration form was mailed to all ARARA members in March. To take advantage of pre-registration prices, remember to return the form with your check or money order by May 15, 1995 (and remember, now is the time to renew your membership for 1995-96). If you have not received pre-registration information, call ARARA Treasurer Donna Gillette at (408) 223-2243, fax 223-2248, for information and to request a copy of the form.



Field trips are being arranged for Friday, May 26, and Tuesday, May 30, in addition to the usual Monday, May 29, field trips. The Friday and Tuesday field trips will be strenuous, involving climbing steep and

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Côa Valley

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pecked examples, but the area also seems to contain quantities of exceedingly fine, small, almost invisible engravings.

Some of the Côa figures have been under 3 meters of water for the past 12 years, since the Pocinho dam was built 2 km away, but fluctuations in water level have exposed them several times during that period, so that they are still more or less accessible. Yet a new factor now threatens to destroy them completely. A new hydro-electric dam, that of Vila Nova de Foz Côa, is planned for the valley, and work began on it in September 1994. By the time it is completed in 1998, the engravings will be irrevocably lost under 100 meters of water; they may already be totally inaccessible by August this year.

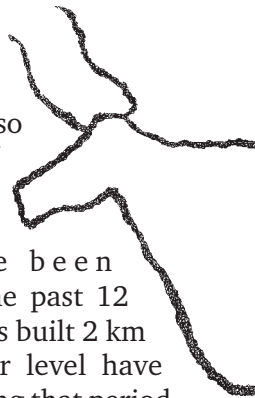
If the art had only just been discovered, it would be unfortunate. But since its existence has been known since 1992, and kept secret, a scandal has erupted within the world of Portuguese archaeology, industry, and politics. The President of Portugal, Dr. Mario Soares, who visited the engravings earlier this year, has been asked to intervene personally in an affair that may lead to the cancellation of this very costly engineering project.

The company building the dam, EDP (Electricidade de Portugal), commissioned an environmental impact report for the region in 1989; its archaeological aspect was carried out by archaeologist Sande Lemos, who spotted some important Copper Age paintings in rock shelters (the most important group in northern Portugal), and a couple of Roman villas of exceptional interest. He recommended that intensive archaeological investigation should take place. The EDP published this report in 1991, but despite Lemos's insistence that the region contained an "archaeological patrimony of exceptional interest," the company claims that the study revealed a few things of archaeological value but nothing to indicate huge significance.

In March 1993, IPPAR (the Instituto Português do Património Arquitectónico e Arqueológico, funded by the Ministry of Culture) sent in a team, financed by the EDP and led by a young archaeologist, Nelson Rebanda. It has emerged that, although the art's existence was officially announced by IPPAR on November 19, 1994, after the main body of sub-

merged engravings was spotted—by which time work on the new dam had been underway for two months—they and the EDP knew well over a year before about ten engraved figures on rocks that have never been submerged (in fact, a video of them was made in 1993), yet said absolutely nothing publicly. Portugal's top archaeologists and rock art specialists were kept completely in the dark, until two Portuguese members of IFRAO (the International Federation of Rock Art Organizations), Mila Simões de Abreu and Ludwig Jaffe, learned of the site and informed their colleagues. The reasons for this long silence are unclear, and suspicions abound as to the motives behind it.

IPPAR—which claims it intended to undertake an adequate recording and publication of the site—has been called incompetent and irresponsible by some archaeological researchers and professors for its years of bureaucratic inertia; there have been declarations that the organization no longer has any moral or scientific authority, and even talk of putting it in court for crimes against the country's heritage. Others have referred to a "scandalous concealment" and accused Rebanda of trying to keep the engravings a secret so that he could publish the definitive book on "his" site after it had been drowned—in other words, of putting his self-interest and personal glory before the risk of the site's irrevocable destruction (Bednarik 1994). It was Rebanda who, as a



*Conjoined horses,
Côa Valley, Portugal*

student, had reported the existence of Mazouco to his professors in Porto; apparently slighted because they received all the kudos for this find, he was determined not to let the same thing happen again (Bednarik 1994).

A number of Socialist members of parliament have demanded that a parliamentary commission must investigate the affair, and some have visited the site to see

for themselves. A report by a team of specialists from UNESCO who visited the area in early February has insisted on the world-class importance of the engravings, and urged that work on the dam be halted, at least temporarily, so that an extensive and intensive archaeological study can be carried out. President Soares has received letters from rock art specialists in France, Italy, Britain, and America, urging him to intervene to ensure the rescue of the engravings. Pedro Santana Lopes, the Secretary of State for Culture, has guaranteed that “everything will be done” to save the art, but it is not yet clear what can or will be done—whether the waters will be lowered for a study to take place, or the fragile and fissured engraved rocks will be removed, which runs the risk of destroying them. All of these options are very expensive, but the simplest choice, that of abandoning the dam project, may also be the cheapest since only a fraction of its funding has so far been used.

Major engineering projects of this type often involve conflicts of interest—a huge amount of money has already been spent, and the dam is providing temporary employment for 600 construction workers. But there are, and always have been, strong reasons to question its very existence. The EDP may have commissioned an impact study, but their dam will inundate 900 hectares of soil that is absolutely ideal for the production of vines of Port, a crucial industry of Portugal, and will alter the microclimate of a far wider area. Currently, what was once a beautiful and tranquil valley is already disfigured with deep and hideous wounds, and there are dynamite explosions every day: there will soon be an irreversible ecological and cultural calamity.

Moreover, Nuno Ribeiro da Silva, an ex-Secretary of State for Energy, declares that the dam is not needed for energy, and that those who defend it are ignorant or charlatans. While in power—less than five years ago—he consistently rejected this project because the potential electricity production was not worth the loss of the optimal lands for Port production. The new archaeological factor merely confirms his view, and he has been particularly outspoken in denouncing the project as a stupid mistake by Portugal’s dominant technocracy, influenced by engineers who are obsessed with building big dams. He claims that, in Portugal, studies of environmental impact merely serve to legitimize options that have already been taken *a priori*.

The immediate solution, demanded by archaeologists and specialists within Portugal and beyond, as well as by some Portuguese politicians and by the UNESCO

report, is for an independent international commission of experts to be assembled to examine this unique body of ancient art, and advise on how best to investigate, record, and safeguard it for the future, as part of humanity’s heritage. If it can be preserved *in situ*, by abandoning the dam, it is probable that tens of thousands of tourists will visit the site and hence contribute enormously to the area’s economic growth.

At the time of writing, it remains to be seen what the outcome of this extraordinary dilemma will be: work continues on the dam, and the government seems determined to remove some engravings and let the rest drown. However, there is tremendous local support for preserving the engravings *in situ*, not least among the youngsters from the local high school in Vila Nova de Foz Côa, who have collected almost a million signatures on a petition, have produced T-shirts and stickers, and on February 3 carried out what was probably the world’s first rock art demonstration, marching on the town hall with banners, chants, and songs in an effort to stop the dam and save their heritage.

Their campaign deserves wholehearted support, since it would be an unthinkable tragedy to lose the Côa engravings before anything whatsoever has been learned about their archaeological context. We also know very little about their distribution, and untold quantities of pecked figures and, especially, of small fine engravings doubtless remain to be found in this valley and in other valleys of the region which are also threatened by future dam projects. We know of only six open-air sites of this kind, and since three of them (Mazouco, Fornols, and Piedras Blancas) comprise single figures or rock faces, our extremely limited knowledge of this newly discovered phenomenon really rests only on the other three: Domingo García and Siega Verde are being studied in exemplary fashion, with the latter probably destined to become an archaeological park. It is hoped that the Côa Valley can also be studied, rather than drowned, so that we can learn more about “normal” Paleolithic art.

References

Bednarik, R. G. 1994. The Hell’s Canyon Petroglyphs in Portugal. *Rock Art Research* 11(2):151-2.

Clottes, J. 1995. Paleolithic Petroglyphs of Foz Côa, Portugal. *International Newsletter on Rock Art* 10:2.

(Editor’s Note: See Larry Loendorf’s Conservation Committee article on page 12 for further information and pertinent address and phone numbers.)



Correction

NEWS 95 Rock Art Congress

Because of a layout error, a portion of the address was dropped from the NEWS 95 International Rock Art Congress announcement in the last issue of *La Pintura*. We repeat this brief announcement of the meeting, to be held from August 30 to September 8, 1995, at the Royal Castle of Valentino, Faculty of Architecture, Torino, Italy. The 10-day congress, supported by the Italian Central Office and Regional Government Agencies of the EEC, European Authority, includes symposia, field trips, debates, films and exhibitions, and special events including the 1995 IFRAO meeting.

Sixteen symposia in four thematic areas have been announced, including such varied topics as Semiotics, Signs, and Symbols; Museology and Museography; Preservation and Restoration; Dating, Recording, and Computer Science; Rock Art in various regions of the World: Circumpolar, Mediterranean, and Sahara; Christian Manifestations in Rock Art; and Rock Art and Ethnography. For information and a pre-registration form, address:

Prof. Dario Seglie
Centro Studi e Museo d'Arte Preistorica
Viale Giolitti, 1
10064 Pinerolo (TO), Italy

Call for Papers

We have received a call for contributions for the NEWS 95 Symposium 10C—Recording, Dating and Computer Science. For Symposium rationale see *SAA Bulletin* 12(5):17-18 or *Rock Art Research* 10(2):132-133. Please mail title and abstract to:

B. K. Swartz, Jr.
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2780 Oeiras
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Phone/fax 351-(0)1-4421374 or 4101359



Albuquerque

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rocky slopes. Hiking boots are a must. The trip will be to sites on private property in northern New Mexico near Taos, about 3 hours from Albuquerque. Please call Helen Crotty at (505) 281-2136 for more information. Self-guided tours are available any time at Three Rivers, Bandelier National Monument, and El Morro National Monument (all of which have overnight camping available), and at Petroglyph National Monument and Puye Tribal Park. Information on Monday's field trips will be available at the conference.

Sunday's banquet will be a Southwestern buffet. Vegetarians take heart—the buffet will include plenty of choices for vegetarians and non-vegetarians alike. We have some special events planned, including the presentation of the Wellmann award for 1995.

Please note the Friday evening reception at the Pueblo Cultural Center hosted by ARARA. The reception is covered in your registration fees, but we do need an advance head count, and there is a charge of \$5 for each guest not registered for the conference.

Please make your hotel reservations in advance. The conference will be held at the Four Seasons Quality Hotel just north of Interstate 40 on Carlisle Boulevard. Reservations are \$50 (plus taxes) per night, single or double occupancy. To receive this rate, be sure to mention the ARARA conference when making reservations (1-800-545-8400 or 1-505-888-3311).

See you in Albuquerque!



INORA Offer Repeated

INORA, the *International Newsletter of Rock Art*, is a valuable source for rock art developments around the world. By special arrangement with *INORA* Editor Jean Clottes, ARARA is able to repeat the special offer of subscriptions to the thrice-yearly 32-page newsletter (text in French and English) at the special rate of \$18 per year. Because of bank charges, the regular rate is \$28. If you wish to save \$10 and receive *INORA*, send your remittance, payable to ARARA, to:

Donna Gillette, ARARA Treasurer
1642 Tiber Court
San Jose, CA 95138

Education News

Barbara Gronemann, Education Chair

Ellen Martin, Education Co-Chair

ARARA Represented at Grand Opening of Deer Valley Rock Art Center

By Barbara Gronemann, ARARA Education Chair

The Deer Valley Rock Art Center in Phoenix, Arizona, held its grand opening on Saturday, December 10, 1994, from 10 a.m. to 4 p.m. Barbara Gronemann was invited to do a children's activity and chose the ARARA Education Committee's fair kit display. The display theme is *Our Heritage: Share the Responsibility*.

This beautiful rock art site is located on Deer Valley Road just west of I-17 in north Phoenix. The petroglyphs, located along the base of the Hedgpeth Hills facing Skunk Creek, were recorded 15 years ago in conjunction with the Adobe Dam flood control project. J. Simon Bruder recorded the petroglyphs with the help of volunteers from the Arizona Archaeological Society. Last November she presented "Hedgpeth Revisited" at the meeting of the Arizona Archaeological Council, held at the then-uncompleted Center. The project recorded 579 boulders with 1538 design elements, of which 87% were abstract and mostly curvilinear.

The Deer Valley Rock Art Center came about as part of the flood control project when the Army Corps of Engineers entered into a memo of agreement to build an interpretive center at the site to protect it. The petroglyphs are at the western end of the dam, and the Center's new building sits at the edge of Skunk Creek opposite the petroglyphs.

The Deer Valley Rock Art Center is operated by the Arizona State University Department of Anthropology under the directorship of Dr. Peter Welsh. The site is on the National Register of Historic Places and is also a nature preserve. After visitors have had an introduction to rock art through museum displays in the Center, they exit to a trail which leads them along the base of the hill in front of the rock art boulders. A trail guide informs visitors about the geology, wildlife, and petroglyphs. The Deer Valley Rock Art Center is a must for your next trip to Phoenix.

The Education Committee set up and worked its travel booth display for the grand opening of the Deer Valley Center. It was calculated that 800 people came through the newly opened center. ARARA President Bill Hyder, Education Chair Barbara Gronemann, and Education Co-Chair Ellen Martin manned the ARARA set-up. We had a very busy day spraying negative handprints and stamping positive prints on paper that reminded children and adults to call 1-800-VANDALS to protect Arizona's rock art. Stacks of ARARA membership forms disappeared, as did the children's brochures. The Education Packet was on display and many teachers placed orders.

Any member interested in using the ARARA Fair Kit may contact Barbara Gronemann, (602) 991-0341, or Ellen Martin, (602) 820-1474.



The President Speaks

Bill Hyder, ARARA President

Research, Conservation, Education — these activities are equally important and each is important to the success of the other two. Of the three, education is probably the least glamorous. Our annual Education issue appropriately acknowledges the dedication of our members in pursuing rock art education. I had the opportunity recently to observe and participate in one of these efforts and want to share my reactions to the experience.

Our Education Committee set up an ARARA table for the opening of the Deer Valley Rock Art Center. I traveled to Phoenix to see the new facility, but had no real plans for what to do with the rest of my day. Volunteering to work at the table seemed like a good idea. It had been a long time since I had talked to kids about rock art and it was my first time with hands-on experience helping kids make handprints. I have always been fascinated by handprints and I enjoy spending time with kids. The combination made for an enjoyable afternoon. (If you haven't seen the

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President . . .

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activity, the child presses a hand into a large sponge soaked with red poster paint, then presses the hand onto a sheet of paper to make a print. With a little luck, they get their hands washed off before they paint their clothes.)

Most visitors to the table were young kids, but there were a few teens, a college-age couple, and a university professor. The teens, in particular, surprised me. They often seem so disconnected from what is going on in the world around them, but those visiting the table really got involved with making their handprints. It was fun to watch their eyes light up as the handprints emerged. The two college students took the activity seriously as they tried to create elaborately patterned handprints. It's not as easy as it looks and it gives one pause thinking of some of the prints encountered on the rocks.

The idea behind the exercise is to involve the kids in talking about rock art, teach them something about vandalism, and send them home with a reminder of their day. Does it help protect rock art? I don't know. I don't think our brief encounters made a lasting impression. But, maybe we helped plant an idea of rock art's value that will blossom as the kids grow and learn more about other peoples and cultures.

Before I moved to Santa Cruz, I visited grade school classes in Santa Barbara and talked to the kids about Chumash rock art. I volunteered to speak to my daughter's fourth grade class, but I was out of town the week they learned about California Indians. The rest of their year was spent studying the California gold rush. I guess 2 weeks for the first 10,000 years of state history and 30 some odd weeks for the last 150 years seems an appropriate balance. I should have been prepared. When my son's sixth grade class studied the great civilizations of the world (*i.e.*, Europe, the Middle East, and Asia), I asked about the Maya, the Inca, or even the Mississippian Mound Builders. The teacher's response was really quite simple: Indians are studied in the fourth grade.

I see education as the only way to ensure that rock art survives the threat of vandalism. I know there are teachers who care about their subject matter and teach kids much more than I have related here. Unfortunately, the gold rush and Tom Sawyer are more familiar and more fun for many teachers than rock art. That makes the efforts of the Education Committee that much more important. The lessons

and activities they initiate may be the only contact most students have with rock art.

I encourage all ARARA members to participate in educational activities if the opportunity presents itself. Start in your own community and local schools. To do more, volunteer for the Education Committee. Through your efforts, ARARA might make a difference in the survival of America's rock art heritage.



U of A Offers Field Class In Rock Art Protection

The University of Arizona announces *Instruction in the Protection, Conservation, and Recording of Rock Art*, a one-month course taught by Lawrence L. Loendorf (Department of Anthropology at the University) and J. Claire Dean (Dean and Associates). From May 30 through June 30, students will work at petroglyph sites near the Grand Canyon in the Kaibab National Forest north of Flagstaff, Arizona. Students will be instructed in the following topics:

- * *Techniques for recording rock art* (scale drawings, photography, tracing)
- * *Rock art descriptive control* (typology, styles)
- * *Rock art dating* (seriation, cation-ratio, chronometric analyses of pigments)
- * *Protection and management of rock art sites* (site protection techniques, management programs)
- * *Rock art conservation* (general site conservation, graffiti removal)

Students must furnish all personal camping equipment and each participant is required to pay a \$250 fee for food and cost of camping. The class is open for three units of credit to junior and senior undergraduates (Anthropology 418) or graduate students (Anthropology 518) in anthropology, art, conservation, or related majors. Class size is *limited to ten students*.

For additional information contact:

J. Claire Dean

Dean and Associates Conservation Services

3438 N.E. 62nd Avenue

Portland, OR 97213

Phone (503) 331-1972, fax 331-0762

or

Larry Loendorf

985 W. Eucalyptus Pl.

Tucson, AZ 85704

Phone (602) 797-0569, fax 797-6617



Audio-Visual Materials on Rock Art

Ellen Martin, Education Co-Chair

After examining many recently published Archaeology Education and Rock Art Education materials, I have noticed a dearth of materials geared to elementary and secondary students. If our target is young people, and we are relying on overworked classroom teachers to introduce and teach these lessons, we need to give them quick and easy access to background information.

Part of the problem is marketing, as most teachers buy supplemental materials (reproducible units, videos, transparencies, filmstrips, and books) via educational stores and catalogs, classroom book clubs, subject-oriented professional organizations, and general teaching magazines such as *Instructor*. Most have no idea that Archaeology Ed is a major focus of many professional and avocational archaeological organizations—or that there are many well-written, regional materials already in print. Much of the commercial material I have seen is corny, condescending, inaccurate—to the point that I can't bring myself to buy it, even for preview purposes.

From years of experience in a school library setting, I see a need for more than print materials and lectures anyway, no matter how well done. I have experimented with slides, physical objects (ethnic crafts and jewelry, broken tools and potsherds, pictures of sites and rock art designs), craft activities, videotapes from my own or the District's extensive collection, and overhead transparencies, all of which stimulate student discussion and learning. I also find that I am most effective when my subject matter complements grade-level curriculum, my lessons focus on a theme such as Archaeology Month, or I personalize my own travels and volunteer experiences.

My goal is to find non-print rock art materials for as many regions of the U.S. and the world as possible, which is where *you* come in. Obviously, it will be a never-ending task to incorporate new films, videos, slide sets, *etc.*, into the list that follows. I would appreciate *lots* of input from ARARA members on public television programs in your area, as well as commercial and avocational productions; please include publishers and addresses, copyright information, length, grade levels, costs, and your personal evaluations. With the goal of an expanded bibliogra-

phy, send any materials you are willing to share, or bring them with you to the 1995 annual meeting in Albuquerque. The resulting bibliography of audio-visual materials will eventually be added to the ARARA Rock Art Education packet.

Ellen Martin, Co-Chair

ARARA Education Committee

P. O. Box 27622

Tempe, AZ 85255-7622

Phone (602) 820-1474 (evenings best)

The following is a compilation of instructional materials I have either read about or used, some from the Washington Elementary District (Phoenix, Arizona) Instructional Materials Center, conveniently accessed via a CD-ROM catalog and a 24-hour computerized telephone booking system. Other school districts, public libraries, government agencies, and university film libraries should have similar materials.

Argument: Am I Right?, Challenge of the Unknown series, Phillips Petroleum Company, 1984, Grade levels: intermediate and junior high. Finding an answer may not be the end of a problem. Centuries ago, Indians left rock carvings or petroglyphs across the American Southwest. When Robert and Ann Preston discovered sun daggers bisecting Indian petroglyphs in the Petrified Forest National Park of Arizona, they began to search for an explanation.

Cave Painting, Return of the Artmaker series, ASSET (satellite transmitted educational television programs, for which subscribers pay annual fee for reproduction rights), 1986. Grade levels: intermediate and junior high. Discusses how cavemen possibly made brushes and what could have been used for paint. Demonstrates the technique of applying sand and glue on construction paper or cardboard for use as a background.

Cracking the Code/Written on Stone, Second Voyage of the Mimi series. ASSET, 1988. Grade level: intermediate. Series is also available as a 12-part interactive video set, in Apple IIe format, which includes an overview guide and student book(s), from Sunburst, 1990. In Episode 6, *Cracking the Code* demonstrates a technique for laying out a polar coordinate grid under water. It introduces and discusses the Maya number system and demonstrates the usefulness of a computer for record-keeping. Expedition 6, *Written in Stone*, shows David Stuart demonstrating his methods of deciphering Maya hieroglyphs.

If Rocks Could Talk, Dale Seymour Publications, P. O. Box 10888, Palo Alto, CA 94303, 800-872-1100 or 415-324-2800, 1993 & 1994. 20 minutes, grade levels: estimated intermediate and up. The 57-page paperback student book, written by B. Jane Bush, appeared in preliminary form in one of the Utah Rock Art Research Association's publications and was aimed at the fourth grade level, if I remember correctly. It is available separately for \$4.95 (I would like to see a hardback version for library use) or as part of a \$34.95 kit, which includes the videotape and a 148-page teacher's guide. In addition, there is a rock art timeline poster which sells for \$9.95. I have seen only the book, which includes three regional maps, an introduction to historic and prehistoric Southwestern tribes, numerous brown on beige hand-drawn

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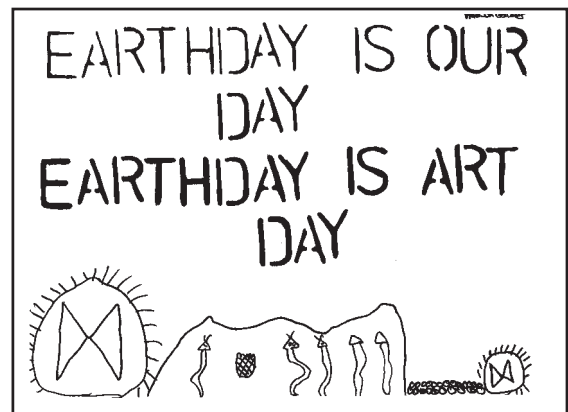
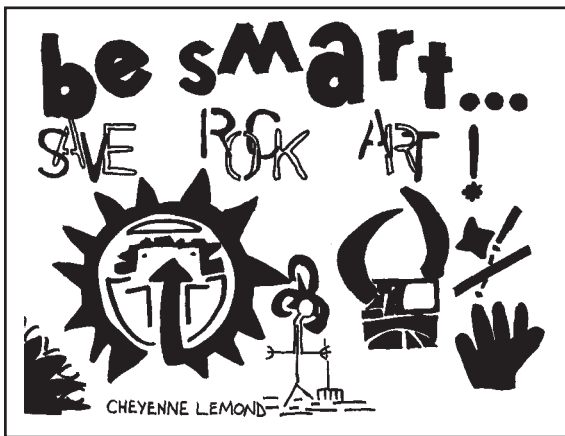
Rock Art Featured in Texas Archaeology Week

By Eileen Thompson

Accompanying this story are copies of Rock Art Posters made by sixth grade art students of Pt. Stockton Middle School, where I am the art teacher. Each school year, in April, I present a unit on Rock Art during Texas Archeology Awareness Week. The unit consists of basic information about rock art. As an introduction to rock art, the students view "If Rocks Could Talk" by B. Jane Bush, learning terminology,

metric system, finding coordinates, drawing in correct proportion. Science and art are blended through a discussion of the protection and preservation of rock art. Texas Archeology Awareness Week and Earth Day become the springboard for the creation of posters depicting the students' feelings and opinions about preserving and protecting the art ON the Earth (site locations), art made OF the earth (mineral pigments in pictographs).

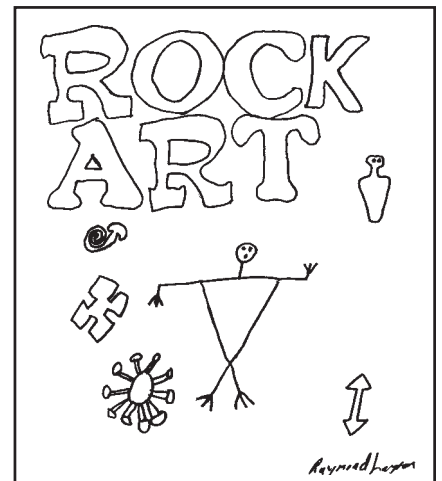
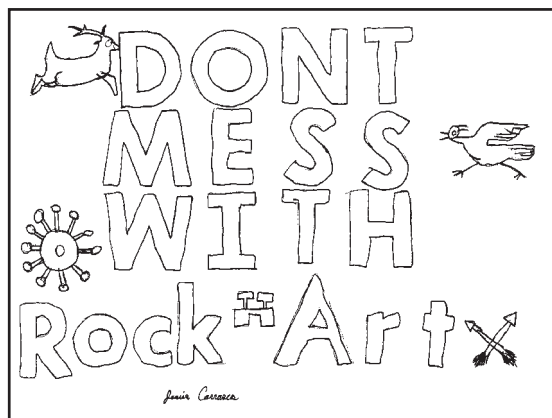
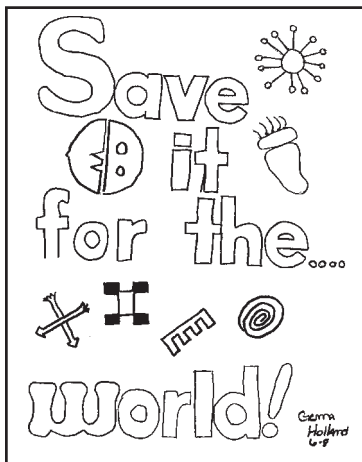
I presented a Poster Session entitled "Teaching Rock Art Archeology to Middle School Students" at the Trans-Pecos Rock Art Symposium in February at Sul Ross State University, Alpine, Texas. I also presented another poster, "Rock Art Workshop," that depicts drawings, paintings, and photographs of the rock art recording accomplished by graduate and undergraduate students of Sul Ross State University. The workshop was a credited course open to all



locations, and preservation issues. I enhance the lessons by showing slides of rock art from our area of the Southwest: Lower Pecos and Trans-Pecos Rock Art. Handouts from the ARARA Educational Packet are used to explain the "who, what, where, when, and why" of rock art and to emphasize the protection of the rock art. The unit becomes interdisciplinary as the pictographs and petroglyphs of West Texas are integrated with the study of local and state history. Math concepts are reinforced as the students are taught rock art recording: measuring, using the

students, regardless of previous experience. Art, education, and science majors participated in the three-week class this past summer. A local TV station used shots of the recording and interview statements of participants to inform their viewers of the damage of rock art sites by vandalism.

My Graduate Exhibit of artwork was held at Sul



ARARA Sponsors Rock Art Field Trip

Barbara Gronemann, Education Chair

Last year, two fourth-grade classes from West Sedona School visited the Palatki Rock Art Site on the Coconino National Forest, Sedona, Arizona. The trip was sponsored by the Education Committee of ARARA. The children and teachers were very appreciative to have this learning opportunity. As ARARA Education Committee Chair, I went along on the field trip. It gave me an opportunity to observe the use of the Education Packet lessons and to see just what is needed when a busload of children descends upon a rock art site. This experience—combined with my experience as Museum Educator at Pueblo Grande Museum, as a founding member of Museum Educators of Arizona, and in working with museums through my business—helped me come up with the following four categories to be considered seriously by teachers and rock art site personnel.

I. Communication

Teachers and site or museum personnel want field trips to be successful learning experiences. That first, and maybe only, communication between teacher and site personnel, probably over the phone, is the key to a well planned field trip.

Site Personnel should require scheduling of a tour at least two months in advance, and set the limit on the number of children the site can safely handle without harm to rock art. If a limit is not set, prepare for a busload of over 60 children and adults—in many cases, two busloads will descend, containing all of the classes in one grade level. If you accept busloads, establish a clear plan for handling the large numbers. In any case, require one adult per 6 to 8 children.

Give necessary information on bus parking, time required for the tour, restrooms, picnic facilities, expected behavior, and fees, if any. Be sure this same information is clearly and succinctly included in the pre-visit packet.

Stress that the pre-visit activity in the packet must be completed in the classroom and that it will be reviewed before the tour begins. Tell the plan for its use in conjunction with an introduction activity before children begin their tour. Many times, as a museum educator, I would ask the children at the beginning of a tour to tell me what museum they were visiting. It was amazing to find out from them that they did not know where they were. If they don't

even know where they are, or why they are there, you get a good idea of how seriously the field trip is taken.

Teachers need to schedule the rock art visit date at least two months in advance and obtain pertinent information when scheduling: bus parking, wash-room and picnic availability, tour length, required adults per number of children, fee payment, and pre-visit materials.

It would be nice to schedule only your own class, but with money for field trips being in short supply, the greatest number of children possible are squeezed on a bus to save on expenses. Unfortunately, children in large groups miss information, cannot see, lose concentration, and find other entertainment. One well-planned field trip per class is well worth the expense, if possible.

II. Preparation

Museum personnel will agree that the children who visit their museums and come prepared have a more successful learning experience. They are more interested, better behaved, and have more questions. They comprise the group that will walk away wanting to return.

Site Personnel must immediately send out the pre-visit packets to each teacher who has scheduled a visit. This allows plenty of time for teachers to review packet activities and set a classroom time for completing the pre-visit activity. The pre-visit packet should consist of concise and simple materials:

Pre-Visit Packet

Map of available facilities.

Background information about site.

Pre-visit activity that prepares children for the visit. This activity can also be used as a review or as a stepping stone to a pre-tour activity.

Fee information. If a fee is required, include a pass for the teacher so that the teacher can better plan the pre-visit programming with her/his students. Many museums request that the teachers visit the museum or site before the field trip to learn the logistics and better prepare the students.

Conservation and protection rules for site.

Instructions and plans for the rotation of small groups and the required number of adults.

Discovery sheet for adult use with rotating groups.

Teachers must be sure the allotted money is available, place the field trip date on school office calendar, make arrangements for the bus, make arrangements

with cafeteria personnel for bagged lunches, *etc.*, and carefully go through packet materials. Obtain the needed parents/adults; if there is a rotation plan, go through this with the adults in advance.

It is necessary to get information and permission slips to parents in time for them to be returned before the trip. Be sure there are alternative activities for those students who cannot go on the field trip.

Before the trip, go through pre-visit materials with the students, giving them background information about the rock art, specifying behavior and rules, and completing the pre-visit activity. Have name tags for each child and adult.

III. Implementation

Site Personnel will greet the school bus so that any forgotten details may be relayed to teachers. Introduce yourself, and introduce the site to the students. This is the time to outline rules and expected behavior and see if they have been prepared for the trip by asking them where they are and what the rules are. Be sure to explain the purpose of rules that emphasize conservation and partnership for preservation. Review the pre-visit activity or present a new activity that will tell you if they did the pre-visit activity in the classroom. Finally, go over the itinerary of the tour with the group and begin the tour of site.

Teachers will need to board students on bus in assigned parent/children groups so that time is not wasted when the bus arrives at the site. Parents and adult helpers can get to know their group on the bus ride. Upon arrival, before groups exit the bus, go over the rules and be sure they know where to go when they get off the bus.

Wait for greeting from site personnel and for introductions and instructions. During the group rotation or tour, the teacher should be free of a group so he/she can monitor the whole group—this provides important control so the guides can do their job. Often teachers forget they are still teachers with a group of students to handle—they go on holiday and leave discipline up to staff at the museum or site. This is not fair: a tour may be ruined when children are undisciplined. The guide cannot stop to do what should be the teacher's job.

IV. Reinforcement

Site Personnel should wrap up the visit with a short question and answer review—ask some questions designed to show how well the students listened or hypothesized. Have a post-visit activity in the packet or make it an activity for rotating groups when they return to the picnic or parking lot area. It

is desirable to have a positive response evaluation for teachers to fill out at the site or send back later. Teachers give helpful suggestions for methods of presentation, concept development, and ordering of presentation.

Teachers need to plan a follow-up activity or use the post-visit activity if there is one in the packet. Have the children write thank-you letters to rock art site personnel, and fill out the evaluation form and return it along with the thank-yous.

Finally

Don't forget to have extended rock art activities that can be interjected into different subjects throughout the year.

I wish to express my appreciation for the opportunity to have this valuable learning experience. We are indebted to the two very knowledgeable Coconino National Forest personnel who led the tours.



In Review

Pre-Teens Well Served by New Rock Art Book

Native American Rock Art: Messages from the Past, by Yvette La Pierre. Thomasson-Grant, One Morton Dr., Suite 500, Charlottesville, VA 22903-6806, 1994. U.S. \$16.95. Hard cover, 48 pages, color photographs and illustrations.

Reviewed by Bill Hyder

What book would you chose to give to a child interested in learning about rock art? Stumped? I didn't have a clue until my daughter ran up to me in the bookstore clutching her prize, a children's book about rock art. Each of my kids learned to say rock art almost before they learned to say daddy. (Sometimes I think they even interchange the terms rock art and dad.) They have been lucky enough to learn about rock art at rock art sites, from listening to me drone on and on, and from listening to the far more interesting and exotic visitors to pass through our house.

The book was sealed in cellophane as they sometimes do to protect the pristine pages from dirty little fingers. Without a second thought, I added it to my stack and proceeded to pay for it. If they didn't want the kids handling the book, it must have something going for it. Bookshop Santa Cruz, by the way, is a first rate, privately owned store with a generously

—Continued on page 12

New Rock Art Book

Continued from page 11

stocked children's section, reading benches, overstuffed chairs, and a coffee shop. The owner and staff love books, encourage reading, and hand pick the stock of everything from expensive, small press, hand-made books to fiction to paperbacks to a large selection of everything else under the sun. They always have a few rock art books prominently displayed in their Anthropology, Native American, and Indigenous Art sections. I was not to be disappointed with the care they bestowed upon my daughter's selection.

Native American Rock Art is beautifully illustrated with first rate color photographs and illustrations. I don't allow the kids to handle the book without parental supervision. That may seem a little strange, but I haven't quite figured out the target age group. My son is approaching 16. He could read it in 20 minutes or so, but he's already seen or heard all that it has to offer. He grunted when I showed it to him and went back to reading Tony Hillerman. My 10-year-old daughter can read it, but the choice of words such as "compelling questions," "culture is a complex system," or "increasingly sophisticated lifestyles" seem to just miss the mark. Later, she said. My 7-year-old daughter won't sit still for very long if I try to read it word for word. Its too boring. So I guess its aimed right around the preteen to early teen age group. That is, old enough to treat a good book with respect and to learn something from it as well.

So what does La Pierre have to say to our children? First and most important, she attributes the creation of the art to Native Americans and interpretations of the art to archaeologists. Some may balk at that distinction, but I think it is important to be clear that most of what a child hears about the meaning of rock art comes from someone other than the artists themselves or their descendants. That doesn't mean that Native Americans don't have something to say, it means that their voices are not often heard and even less well represented in the literature. Chapters cover the first Americans, images on stone, how the art was made, its age, interpretation, and conservation. If I had to pick on a few lapses, I would fault the author for indirectly giving too much credence to hunting magic and for mentioning fantastic explanations such as aliens and ancient Egyptians without clearly dismissing them. She does dismiss the buried treasure hypothesis as having no evidence for its support. That probably applies to her fantastic theories as well, but

I think the distinction and choice of words (fantastic theories has more than one meaning for a 12-year-old) is too subtle for most children.

I could pick some more, but then I haven't attempted to write a children's book. I wouldn't know where to begin. The closing pages warn children about the dangers of climbing on the rocks, touching the art, or otherwise inadvertently damaging the art. Instead, kids are encouraged to let the rocks talk. Look closely. How is the art made? Is it weathered? Feel the rock at a spot without art (I did clench my teeth and inhale sharply!) — is it smooth or rough? Is the art high on a cliff or tucked away in cave? Why would the artist choose that spot? What else is around? Water? A game trail? Ruins or pottery? The child is warned to leave everything as it was found. That's not bad advice for children visiting their first rock art site or parents looking for some way to draw their child into the experience. The visitation guide is followed by a list of publicly owned sites in a variety of states where kids can go to see rock art.

The book isn't cheap, but the printing is well done and in color. I consider it good value for the money and I promise to let my kids read it when they are ready. (I've bought a second copy for my own library.) If you are looking for a birthday present, something for a special occasion, or a mini-coffee table book, *Native American Rock Art* would be a good choice.



Ice Age Engravings in Danger

Larry Loendorf, Conservation and Protection Chair

According to the *New York Times: Science Times*, December 27, 1994, a newly discovered Ice Age site along the Côa River in northern Portugal contains hundreds of engravings of animals like bison, horses, ibexes, and deer. The site is described as the most important outdoor (*i.e.*, not in a deep cave) Ice Age rock art site in Europe. Jean Clottes, French cave art specialist, has visited the site and estimates the age of the engravings at more than 20,000 years. No other Ice Age sites like this are known in the world! Rock art specialists in Portugal ask our support in its protection.

Dr. Mila Simões de Abreu and Ludwig Jaffe, International Federation of Rock Art Organizations, are pleading for support in the study and preservation of the site. Unfortunately the location is scheduled to be flooded by a dam presently under construction on the Côa River. See Paul Bahn's article beginning on page 1 of this issue of *La Pintura* for details of the situation.

Seeking a resolution to the problem, the company building the dam suggested casts of the engravings as a way to record them before they were flooded. But this solution does not account for the damage done to the rock surface by the latex molds used in the casting process. Experiments show that rock surface chemistry (and any potential dating) is adversely affected by latex molds and until there are no other alternatives, restraint should be used in making latex molds.

This is a difficult problem. A large dam is under construction and the dam promoters are caught between the proverbial "rock and a hard spot." They are being asked to search for a way to preserve the site for its scientific merit and also find a way to meet the energy needs of Portugal.

We applaud the effort of Dr. Mila Simões de Abreu and Ludwig Jaffe and appeal for the help of the company building the dam to find a way to preserve the engravings. Solutions are not easy, but please send your support to:

Dr. Mila Simões de Abreu and Ludwig Jaffe
Av. D. José I, n. 53
2780 Oeiras
Portugal
Phone/fax 351-(0)1-4421374 or 4101359



Announcements

Chaco Canyon Rock Art Reunion

Persons who recorded rock art in Chaco Canyon with Col. Bain's group from 1976 to 1981 are invited to a Reunion on July 14, 1995, at the Group Campground in the Chaco Culture National Historic Park.

For further information, contact Paul P. Steed, Jr., 5635 Yale Blvd., Dallas, TX 75106, phone (214) 827-6223

Next *La Pintura* to be Distributed at Albuquerque

For those of you who have been wondering, we *really do know* that it's not Winter anymore, but we maintain the proper labeling to avoid future library cataloging problems. The Spring issue of *La Pintura* will be distributed in Registration packets at the 1995 Albuquerque annual meeting, and mailed to those members not in attendance. The Summer issue will follow in July, and by then we should be back on track!



ARARA Members Conduct Training for BLM and Fort Mojave Personnel

Reported by Don Christensen

On February 25-26, 1995, Tom Holcomb, the Bureau of Land Management archaeologist for the Needles Resource Area in eastern California, coordinated a training session for BLM personnel and members of the Fort Mojave Indian Reservation. The course was taught by ARARA members Don Christensen and Jerry Dickey, who have been recording rock art sites in the East Mojave for the BLM for the last two seasons. In attendance were BLM rangers Mike Dodson, Dennis Daraghy, Curt Schmidt, and Mick Joplin, BLM range specialist Nancy Lansing, BLM volunteer Connie Holcomb, and archaeological specialist Wendel Johnson of the Ahamakav Cultural Society (Fort Mojave Tribe).

Saturday morning was spent in classroom instruction, after which the group went to the field and actually documented a site north of Topoc in Arizona. The site was very interesting as it had 40 petroglyph boulders associated with trails, cairns, a rock alignment, ceramics, bedrock metates, and extensive lithic reduction. Even more important was the fact that this was the first site systematically recorded on the Fort Mojave Reservation. Johnson is just now beginning a recording program for the reservation which is necessary to provide baseline data and guide future development. The BLM personnel all have received training as archaeological technicians, and since they cover hundreds of miles a day on patrol in the desert, they are the primary monitors of archaeological resources in the region. With their prior archaeological experience, they proved a very able recording crew which Holcomb expects to utilize in the future.

We were very excited to have this opportunity because it creates more local involvement and awareness, particularly on the part of the Native American community. I recently recorded the West Well site (CA-SBR-215) because the Chemehuevi tribe asked Tom Holcomb to do this because of its significance to them (probably associated with the Southern Fox song cycle). We are going to begin sharing recorded data with the local tribes. Hopefully this will further protection of the numerous rock art sites in the area.



Requests for Information

Teaching on Southwest Reservations

New ARARA member Audrey Yow Buie has the following inquiry:

I am looking into the possibility of going to graduate school to complete my Master's degrees in both Art Education and American Indian Studies. I am considering using my teaching degrees to teach on a reservation in the Southwest. Any suggestions on ways I might work on a reservation and complete my Master's degrees would be greatly appreciated.

Audrey Yow Buie
204 North Vance St.
Red Springs, NC 28377

Judaculla Rock, North Carolina

Robert Bednarik is looking for information on a petroglyph site:

There is a small petroglyph site called Judaculla Rock in Jackson County, in the westernmost part of North Carolina. It is on an outcrop of metamorphic rock above a small tributary of the Tuckaseegee River, and an octagonal roof has been erected over it. The rock art is mostly non-figurative (lines and pits), but there are also hand-like motifs. The question is: has this site ever been recorded, and has it been mentioned in a publication?

Robert G. Bednarik
Australian Rock Art Research Association
P. O. Box 216
Caulfield South, Vic. 3162
Australia

Trains, Planes, and Automobiles

For a possible future project, your Editor is on the lookout for rock art representations of 19th and 20th century transportation, including trains, automobiles and trucks, and airplanes (wagons and ships would also be of interest). If you have examples of these subjects, I would appreciate word at the address below. Please do not send original slides, but let me know if you are willing to have duplicates made.

Ken Hedges
8153 Cinderella Pl.
Lemon Grove, CA 91945



Ute train, Ioka, Utah

Help! Cultural Heritage Questionnaire

John W. Jones, an archaeologist with the U.S. Forest Service and a graduate student at California State University, Chico, is conducting a study of the impacts of interpretive signs on cultural heritage sites. He is requesting responses to a detailed questionnaire. Unfortunately, the questionnaire is too long to reproduce in this issue of *La Pintura*; readers may wish to respond to his recent message on the Internet:

I am seeking archaeologists, interpreters, and cultural resource managers who are involved in the interpretation of cultural heritage sites. I need to find professionals who have knowledge of the condition of a site, or sites, prior to and after the installation of interpretive signs in order to ascertain the changes (if any) in site condition. This questionnaire may seem familiar to some of you, but in actuality, it is different. A questionnaire distributed by the U.S. Army Corps of Engineers in 1989 addressed views of professionals in relation to cultural resource signing practices. Respondents expressed a strong need for "field research to evaluate various signing strategies." This questionnaire makes that attempt.

More specifically, this study aims to assess the impact of interpretive signing on cultural heritage sites by examining data relating to type and placement of interpretive signs and changes in site condition. It will also serve to gather data in order to compare sign type and placement with site type and setting in hopes of drawing some conclusions as to which type of interpretive signs are more effective in assisting in resource protection.

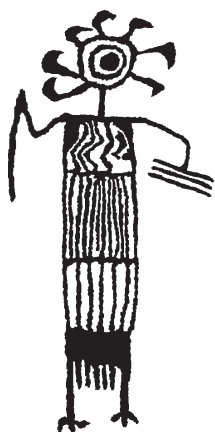
Conclusions drawn with the aid of this survey will guide resource managers in selecting the best signing alternatives for their respective sites. Results of this study will be available to all who want them.

The questionnaire has five sections. Section V provides space for expansion on any of the questionnaire responses or for any general comments. Please use one questionnaire for each site reported.

The questionnaire is being distributed using a variety of electronic systems. Readers with electronic access may contact me via the Internet at Jonesy13@aol.com or on the DG system at this address: J.Jones:R06F20. Others may reach me by mail at the following address. Thank you for your help!

John W. Jones
12011 Mallory Dr.
Klamath Falls, OR 97603





The **American Rock Art Research Association** is a non-profit organization dedicated to encourage and to advance research in the field of rock art. Association members work for the protection and preservation of rock art sites through cooperative action with private land owners and appropriate state and federal agencies.

The **Association** strives to promote non-destructive utilization of rock art for scientific, educational, and artistic purposes. This is accomplished through a wide-ranging program to inform and educate the members as

well as the general public regarding the rock art heritage of the United States as well as worldwide. These goals are communicated through the quarterly newsletter, **La Pintura**. Annual three-day conferences give both members and others interested in rock art the opportunity to share professional papers, slide presentations, and informal discussions.

Membership in the **American Rock Art Research Association** is open to all who profess an active interest in research, non-destructive utilization, and preservation of rock art, regardless of their nationality or country of residence. Membership fees are as follows:

Donor	\$100.00
Sustaining	\$40.00
Family	\$30.00
Individual	\$20.00
Student*	\$15.00

*For student rate, applicant must enclose a photocopy of a current student identification.

Membership runs from July 1 through June 30 of each year. Although the Association is concerned primarily with American rock art, membership has become international in scope. The benefits of membership include yearly subscriptions to **La Pintura**, reduced conference fees, and information on current publications in the field of rock art.

But more importantly, membership means a shared concern for the ongoing conservation and preservation of one of the most significant elements of our heritage. Memberships may be sent to:

ARARA Membership
 Arizona State Museum
 University of Arizona
 Tucson, AZ 85721

ARARA Code of Ethics

The **American Rock Art Research Association** subscribes to the following Code of Ethics and enjoins its members, as a condition of membership, to abide by the standards of conduct stated herein.

1. All local, state, and national antiquities laws will be strictly adhered to by the membership of **ARARA**. Rock art research shall be subject to appropriate regulations and property access requirements.
2. All rock art recording shall be non-destructive with regard to the rock art itself and the associated archaeological remains which may be present. No artifacts shall be collected unless the work is done as part of a legally constituted program of archaeological survey or excavation.
3. No excavation shall be conducted unless the work is one as part of a legally constituted excavation project. Removal of soil shall not be undertaken for the sole purpose of exposing sub-surface rock art.
4. Potentially destructive recording and research procedures shall be undertaken only after careful consideration of any potential damage to the rock art site.
5. Using the name of the **American Rock Art Research Association**, the initials of **ARARA**, and/or the logos adopted by the **Association** and the identification of an individual as a member of **ARARA** are allowed only in conjunction with rock art projects undertaken in full accordance with accepted professional archaeological standards. The name **ARARA** may not be used for commercial purposes. While members may use their affiliation with **ARARA** for identification purposes, research projects may not be represented as having the sponsorship of **ARARA** without express approval of the Executive Committee.

The **ARARA** Code of Ethics, points 1 through 5, was adopted at the annual business meeting on May 24, 1987. The Code of Ethics was amended with the addition of the opening paragraph at the annual business meeting, May 28, 1988.

ARARA Officers

President William Hyder
 Vice-President Daniel F. McCarthy
 Secretary Sharon Urban
 Treasurer Donna Gillette
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La Pintura

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Lemon Grove, CA 91945-3000

Address Correction Requested

First Class Mail — Dated Material

La Pintura is the Official Newsletter of the American Rock Art Research Association
Please address all editorial materials and letters to:
La Pintura, Ken Hedges, Editor, 8153 Cinderella Pl., Lemon Grove, CA 91945-3000

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