FLAG RETURN REPORT of EXPLORERS CLUB FLAG #97 for the

Baja Natural History Expedition to Sierra de San Francisco

BAJA CALIFORNIA, APRIL 2-11, 1997 prepared by Capt. Robert G. "Rio" Hahn, FRGS, FN'86 Chairman, San Diego Chapter of The Explorers Club

Expedition Purpose & Background:

This expedition's primary purpose was to investigate six of the archaeologically significant rock art sites in the canyons of the Sierra de San Francisco, and evaluate the recently instituted management plan for protection of these remote and fragile sites.

Natural history observations by team members were made during the course of the expedition, but collections were not possible due to the permitting restrictions of the area management plan. Attached to this report are lists of birds, plants, mammals, reptiles and amphibians for the area. The plant list was prepared by Jon Rebman, a botanist at the San Diego Museum of Natural History; the reptiles list by Richard Schwenkmeyer, who participated in the expedition; the mammals list by Norman Roberts, who also participated in the expedition; and the bird list by Jim Clements, who was unable to participate in the expedition due to a last minute medical emergency.

This expedition was the first combined San Diego Chapter of The Explorers Club and San Diego Natural History Museum (President's Circle) field expedition. Both the San Diego Chapter of The Explorers Club and the San Diego Natural History Museum have chosen to focus their efforts on the California region from Point Conception north of Santa Barbara, California, U.S.A., to Cabo San Lucas, Baja California Sur, Mexico. This area sustains one of the highest levels of biodiversity in all of North America, considering the number of plant and animal species, and it is also one of the most sensitive and vulnerable areas of the continent, with the highest number of threatened or endangered species. This region's rich biodiversity has nurtured human habitation for thousands of years, despite its difficulty of access.

The Sierra de San Francisco is a small volcanic upland located in the central part of the Baja California peninsula in northwest Mexico, lying approximately between 27 degrees and 28 degrees North. Comprised primarily of tertiary breccia and basaltic lavas, the Sierra presents a land form of high mesas dissected by a series of deep canyons and arroyos radiating from the Sierra's center. It rises to a maximum elevation of 1590m and has total area of approximately 3600km₂.

Rock shelters in the Sierra are found along the vertical cliffs of canyons where erosion has created shallow overhangs. The deepest shelters form when large blocks of progressively unsupported breccia conglomerate break away. The rock art sites in this area form a monumental mural tradition, which in terms

of scale, is amongst the largest prehistoric painted imagery in the world. There are literally hundreds of rock shelters in the sierras of the central Baja California peninsula.

The Sierra de San Francisco Archaeological Zone is contained within the El Vizcaino Biosphere Reserve, located in the Sonoran Desert biogeographic zone. The Sierra has a climate that is generally hot and dry, receiving on average less than 100mm of rainfall annually.

Though considered one of the most marginal environments on earth, the Central Desert of Baja California provided conditions adequate for the establishment of groups of hunter-gatherers from the end of the Pleistocene era to the arrival of Jesuit missionaries in the peninsula at the end of the seventeenth century AD. The Jesuit missionaries, on their arrival in the region in 1697, found numerous indigenous populations of Cochimi stock, which followed a seminomadic lifestyle.

Shortly after their arrival in the region, the Jesuits conspired to scientifically determine what the Cochimi knew of the origin of the rock art sites in the area. The Jesuits coordinated amongst themselves, and on the same day asked different groups of Cochimi in different locations the same questions. The Cochimi unilaterally disavowed authorship of the rock art, but attributed their creation to a civilization of giants from the north. By the middle of the nineteenth century, the Cochimi had become virtually extinct, and the Hispanic population that replaced them had lost any traditional knowledge of the painting phenomenon.

Carbon dating of associated materials has placed the age of the rock paintings between 800 to 4,000 years old and older. The dating of the pigments used in the paintings is inexact, and can consequently only be considered preliminary. The most reliable date at this time comes from a piece of textile found amongst the paintings, which has been determined to be 3,000 years old.

Analysis of the rock art sites has to date yielded little definitive information regarding their origin or meaning. Due to the remote location of the sites, far removed from population centers, they are difficult to protect. The sites suffer deterioration through natural causes and from the activities of unlicensed researchers, non-regulated visitors and looters.

In 1993, the rock art sites of the Sierra de San Francisco (in total an area of 183,947 hectares) were inscribed on the UNESCO World Heritage List. The same year, the whole of the Vizcaino Biosphere Reserve was admitted into UNESCO's international Man and the Biosphere (MAB) program. An unexpected consequence of the naming of the sites to the World Heritage List has been the increase in visitation to the sites, which has increased their deterioration and helped to motivate the creation of the area management plan.

In November of 1994, the first draft of the management plan was submitted for discussion, and in April of 1995 a further meeting resolved outstanding issues in the plan. Implementation of the plan began concurrently with the discussions and formulation of the plan, and in May of 1997, following this expedition, a final review meeting was held after the formal signature of the plan document.

In 1992-4 an unprecedented program of twelve Special Archaeological Projects was launched by INAH (Instituto Nacional de Antropologia e Historia) in Mexico, which included the Rock Art Project of Baja California Sur. In 1994, the project of protecting the rock art sites was begun by the Getty Conservation Institute in collaboration with INAH, the Government of the State of Baja California Sur (B.C.S.) and the Fundacion Amigoes de Sudcalifornia, A.C. (Amisud), a nonprofit foundation dedicated to the conservation of Baja California's heritage, and perhaps most important, this project involved the active participation of the people who inhabit the region.

It is an almost unavoidable consequence of exploration discoveries that the subjects of discovery often suffer rapid and irreparable destruction. Therefore, in addition to carrying out further investigations of the rock art itself, this expedition was particularly interested in the success of the recently instituted area management plan, both in its own right, and for the example it provides for the management of other such historical sites. Expedition Route:

The area management plan defines the maximum allowable group sizes for campsites and rock art site visits, both on an annual basis and for each individual expedition. Our expedition team consisted of eleven members.

Explorers Club members included Capt. Robert G. "Rio" Hahn (awarded Flag #97 for this expedition), Chairman of the San Diego Chapter of The Explorers Club; Dr. Michael Hager, Director of the San Diego Natural History Museum; Jerry Murdoch, who chiefly underwrote the expedition, and served as co-leader; and Dr. Norman Roberts, author of the *Baja Plant Guide*. (Dr. Jim Clements, ornithologist, was forced to drop out of the expedition at the last moment due to emergency eye surgery, from which we are happy to report he has made an excellent recovery.) The other members of the expedition were Teresa Fiske, John and Christy Walton, Peter Kovacs, Richard Schwenkmeyer, Barbara Lyons, and Enrique Hambleton.

This expedition was in part the result of a presentation made by Enrique Hambleton to our Chapter in September 1996 on the rock art sites of the Sierra de San Francisco. He has been involved in exploring and documenting the rock art sites since the early 1970's, and has been instrumental in establishing the management plan for their preservation. Much of the information in this report regarding the sites and their management was provided by Mr. Hambleton.

The remote nature of this region created considerable logistical difficulties, such that our expedition team of eleven required the additional assistance of eight guide-muleteers, 19 mules, and 19 pack burros. All of the team members developed admiration for the surefootedness of the mule, which possesses the unique ability to place its hind feet in exactly the same place as its front feet. We also developed a healthy respect for the mules ability to kick, after one of our team members suffered a swift kick to the ribs, somewhat deflected by her camera.

Due to the regulations of the area management plan, the expedition was required to employ local guide-muleteers, who provided the pack animals and

mounts necessary for negotiating the several days' journey through the steep and precipitous terrain of the Sierra. We were required to transport in and out of the area, all of our necessities, with the exception of water, which was filtered on site. These regulations required the carrying out of all waste, including human, which required an unusual camp setup that quickly became a constant source of amusement for all.

The expedition members traveled by jeep and private plane to the central Baja region. Our first stop was at the date palmed oasis of San Ignacio, where all expeditions must register with the local INAH guard. A small museum has been established there, along with a recreation of a typical rock art site, which provides orientation and information on the region and the sites. About 28 kilometers north of San Ignacio, we left the main road (Mex 1) and turned east on a recently created dirt track that took us into the central Sierra to our trail head camp.

From our trail head camp, we visited by vehicle the Cueva de El Raton rock art site, and the nearby rancho San Francisco de la Sierra. The next morning we broke camp, and loaded all of our supplies and ourselves onto pack burros and mules. The vehicles were left at Rancho Represo, where the vehicle track ends. The entire expedition team then descended by mule into the Canyon Sal Si Puedes. The entire day was required to negotiate the steep canyon. We set up camp near Rancho Santa Teresa at the base of the canyon walls, and made a visit to the ranch the next day. We then descended deeper down into the Canyon Sal Si Puedes to our base camp at Campamento Cacarizo, where we stayed for the next three days.

From our base camp at Campamento Cacarizo we visited by foot five of the Great Mural sites: the Cueva Pintada, Cueva de la Soledad, Cueva de las Flechas, Cueva de la Musica, and Boca de San Julio. Our final day was spent in making the ascent back out of the canyon to the trail head where we picked up our vehicles for the return trip to the U.S.

Expedition Accomplishments and Observations:

Overall the expedition was a complete success. We accomplished our program for visitation of the six major rock art sites in the canyon. Also, for a such a logistically complex expedition involving the use of animals, we had no major problems or injuries.

All of the sites we visited appeared to be well cared for, and from the reports of our guides and Mr. Hambleton, most were now in better condition than prior to the implementation of the area management plan.

At the sites we found that the installation of walkways, handrails, barrier fences, access paths and information signs enhanced their accessibility, and reduced deterioration. Most of the paintings are located high up on rock shelter walls and ceilings, which would either be inaccessible to view or would be damaged by the use of climbing equipment. The addition of these facilities manages access to the sites, thereby protecting the shelter floors and paintings. The installations were

both structurally well built, and esthetically designed to blend in with the natural environment of the area.

The imagery of the rock art is mainly representational and is dominated by polychrome human and animal figures, most of them painted in red, black, white and, less often, yellow. Many of the figures are considerably larger than life-size and the monumentality of the imagery is enhanced by their often being placed high up on rock shelter walls and ceilings. Human figures are depicted full front with arms invariably raised, and human and animal figures are often impaled by spears or arrows. Female figures are distinguished by breasts below the arms. The most common large animal depicted is the mule deer, followed by the desert bighorn sheep. A host of other animals occur, as well as birds and various marine creatures including sea turtle, fish and sting rays.

Why the paintings were done, and what their intended meaning is, remain a mystery. The placement and superimposition of the figures in most paintings gives the impression that what was important to their creators was the act of painting, rather than the creation of narrative scenes or compositions. It is the opinion of this author that the paintings may have been related to some type of shamanistic activity. The occasional depiction of head dresses lends some support to this theory, as human hair was believed to have been given to shaman as payment for their services, and then worn by the shaman as a headdress.

High quality photography of the paintings was done at each site, and a video documentary of the expedition is in preparation by the author, which includes steadicam footage of the descent by mule into the canyons.

The area management plan is a historical first for Mexico in that it was written, agreed upon, and implemented by consensus of all parties involved. We were informed that the Mexican government is considering use of the plan as a model for other archeological sites in Mexico. From our observations, the single most important point in the success of the plan, has been the involvement of local people in its formulation and implementation.

Local people are employed as guides and custodians for the sites, which has enhanced the economy of the area. As a result, the local people have a vested interest in preserving the sites, and enforcing the management plan. There are approximately one hundred guides spanning a range of ages and expertise. As part of the plan, the guides have agreed to a rotational selection procedure in numerical order. Within that framework, guides are free to trade positions and make other arrangements amongst themselves in the event a particular guide is not able to work when his number is called.

We look forward to further expeditions into the sierras, which will enable more comprehensive and in-depth investigations. The rich natural history and archeological treasures of this region offer the promise of many discoveries. The successful implementation of the area management plan should help insure the continued survival of the rock art sites and the fragile ecology of this extraordinary region.

References:

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