

ARCHAEOLOGICAL SURVEY OF SONORA, MEXICO

By DONALD J. LEHMER
UNIVERSITY OF CHICAGO MUSEUM FELLOW
IN ANTHROPOLOGY

THE Mexican (Sonora) Archaeological Expedition began field work early in February. The project was jointly sponsored by Chicago Natural History Museum, the University of Chicago, and Arizona State Museum. The field party consisted of the writer, Mr. Bryant Bannister of Yale University, and a jeep named Alice. We were fortunate in having Dr. Ernst Antevs, Research Associate in Glacial Geology, with us for ten days to study the geological exposures in which we had found archaeological material.

The expedition was organized to work on two related problems. We hoped to be able to determine the southern limit of the Cochise culture, a complex that first appeared in southern Arizona some 10,000 years ago, and we also hoped to find some trace of prehistoric contacts between the southwestern United States and Middle America.

INHABITANTS FRIENDLY

Sonora was strange country to us when we began our work, but we came to know it well in the four months we were in the field. The people were friendly and interested in our work. Some of our pleasantest memories are of the many friends we made—friends who ranged from the Director of the State Museum and the Secretary of the Interior to the old woman who keeps the coffee stall in the market at Navajoa and Antonio Varela who was our guide for several days near Estancia.

Sonora is a sparsely settled country, and we made our own camp most of the time. The back of the jeep carried our cots, bedrolls, extra gas cans, a change of clothes, and our excavation and recording equipment. There was a grub box and water can on the tailgate that made our kitchen. Part of our food was taken in from the United States, and the rest was bought in the markets of the towns we visited. The native coffee was particularly good, and one brand of cigarettes was very much like the United States variety. Once every week or so we made a point of spending a day in one of the larger towns where we could get a hotel room, a bath, and a change from our own cooking. We discovered that Sonora hotel beds are the hardest in the world.

HAMPERED BY FLOODS

During the first six weeks we were in the field we had a great deal of trouble because of the weather. In late January, Sonora had the worst series of floods it has experienced since 1890. Especially in the southern part of the state, roads were washed out, towns destroyed, and fields damaged.

During February it rained a great deal, and as a result the rivers all ran bank-full. Bridges are almost unknown in Sonora, and even with the jeep we had difficulties with the stream crossings. On Valentine's Day we were the first car in sixteen days to cross the Rio Sonora into the town of Ures. By that time we had learned to respect the flooded rivers; so we made that crossing with the help of a team of four mules. There, and in other places, our Mexican friends were amazed at what the jeep could do in



MULE POWER AIDS 'HORSEPOWER'

Even a jeep needs help in getting around in parts of Mexico. Here the motor equipment of the Sonora Expedition is seen preparing to cross the flooded Rio Sonora.

rough country, and their favorite remark after a spectacular bit was: "*Que caballo!*" (whatta horse).

In the southern part of the state we crossed the larger streams on *pongos*. A *pongo* is a flat-bottomed barge used as a ferry, with an arrangement of ropes and cables that allows the current to carry it across the stream. Crossing on a *pongo* is a minor social event. The boat is always on the wrong side of the river, and it takes some time to bring it across. Some enterprising soul keeps a small brush shelter near the landing, where there are soft drinks and coffee on a charcoal brazier made of a five-gallon gasoline can.

EVERYTHING BITES, STINGS, OR JABS

Sonora is the very northwestern corner of the Mexican mainland. It lies between the Gulf of California and the rugged peaks of the Sierra Madre Occidental. The area along the coast is very flat and has a heavy cover of mesquite and cactus. One resident American told us: "Down here everything that doesn't bite or sting has thorns on it." Farther inland the country becomes broken, with narrow stream valleys deeply incised between the hills. In the eastern part of the state the mountains begin. Sonora is a dry country. Most of the part through which we traveled is brown and stony, and the only colors are those of the leaves of the desert shrubs and the deep blue of the sky. The stream valleys, fertile and heavily cultivated, make vivid slashes of green across the desert landscape. Along the Gulf coast are lines of glistening sand dunes between the purple of the sea and the brown of the inland plain.

Outside the cities there are some ranches, but most of the people are small farmers with a few fields in the stream valleys. The commonest house is a low adobe structure with three or four dark and airless rooms and a deep covered porch. This porch is the place where the family really lives. There is usually an open fire on an adobe platform, a table and a few chairs are scattered about, and two or three folding canvas beds lean against the wall. There is always an *olla*, a porous pottery jar for drinking water, either hung from the roof or resting in the crotch of a three-pronged post set in the floor. When visitors arrive, they are given chairs, and in a few minutes the fire has been stirred up and coffee is ready. The grown men sit and talk to the company, and occasionally the older women join in the conversation. The young women and the children stand off and stare from a little distance, the family dogs and chickens wander about underfoot, and occasionally an inquisitive pig snuffles his way into the porch.

We depended a great deal on local information to aid in finding the sites for which we were looking. In some cases the people had never paid any particular attention to the local archaeology. In others they were very interested and were able to guide us to a number of sites. Around Estancia, just south of Moctezuma, there were a number of late sites from which the local women made a practice of collecting the old metates to use in their own kitchens.

TRAVERSES 5,000 MILES

The archaeological survey we made produced some very interesting information. Altogether we traveled nearly 5,000 miles, most of them in the jeep but occasionally on horseback when the country was too rough. We concentrated mainly on four sections of the state: the valley of the Rio Sonora, upstream from Hermosillo; the Arroyo Zanjón, a northern tributary of Rio Sonora; the Gulf coast in the vicinity of Estero de Tastiota; and the Arroyo Cuchujachi, in the very southern part of the state.

We were interested in locating very early sites and, in many ways, Sonora was a disappointment from that point of view. As a rule, early sites that were located in the open have been buried by subsequent deposition. It is impossible to locate them unless they are in the process of being uncovered by contemporary erosion. Unfortunately for archaeologists, there is comparatively little erosion in Sonora today. There are very few deep arroyo channels such as one finds in Arizona and New Mexico, and areas of sheet erosion are small and localized. However, we were able to locate non-pottery sites in all of the sections in which we worked. Evidence for dating them is still rather scant, but it seems doubtful that any of them represent a period

earlier than about 1000 B.C. The artifacts from these sites consist of large numbers of grinding tools and some chipped stone pieces. There are a number of typological similarities to the pieces from the later Cochise horizons, and it seems likely that there is some relationship between the two complexes.

In several places we were able to obtain stratigraphic evidence that the non-pottery sites were earlier than the pottery horizons in the area. There appear to be several traditions represented in the pottery from Sonora. In the northwestern part of the state, the majority of the sites yield sherds of the Trincheras wares. These are particularly interesting as they seem to be the only painted types that are native to Sonora. Pottery from the rest of the state was unpainted, although a few sherds showed textured decoration of different sorts. There also appear to be at least two basic traditions in the unpainted pottery. That in the northern part of the state is an unpolished brown ware; that from the southern part consists of polished brown and polished red-slipped wares. One of the most perplexing problems that our work raised was the lack of painted pottery throughout most of Sonora. Contemporary groups to the north in Arizona, to the east in Chihuahua, and to the south in Sinaloa all made painted pottery. Why the tradition of painting pottery never caught on in Sonora is a question that certainly deserves some study.

One of the most interesting facts we gathered is that pottery is apparently quite late in most of Sonora. Pottery making is one of the first steps on the road to an advanced culture. It is a trait that appeared in the Southwest by A.D. 1. Most archaeologists believe that it is a trait that diffused north from Mexico, and we had hoped to find traces of that diffusion in Sonora. Instead, it appears that pottery is quite late in the sections we worked. Granting the hypothesis that pottery making and other traits did diffuse north from Mexico, we can say that, on the basis of our work, the diffusion did not follow the drainage of the Rio Sonora.

A great deal of work remains to be done in Sonora before we have anything approaching a comprehensive picture of the archaeology of the area. It still seems to be the most likely region through which movements between the Southwest and Mexico could have passed. Our work left large sections of the state untouched, and it seems likely that work along the coastal plain and among the caves in the Sierra Madre would produce some very valuable information.

Noted British Scientist Here

One of Great Britain's most noted scientists, Dr. William E. Swinton, of the Department of Geology of the British Museum (Natural History), in London, was a visitor

at Chicago Natural History Museum for several days last month. He consulted with members of the Division of Paleontology and the Division of Mammals.

FIFTY YEARS AGO AT THE MUSEUM

Compiled by MARGARET J. BAUER

With the closing of the 19th century the work of reinstalling the East Court of the Field Columbian Museum building was completed. The Court was devoted exclusively to archaeology, which was at that time sharply distinguished from ethnology.

Every case in the Court had been entirely reclassified during reinstallation. The north



Eskimo returning from seal hunt. This life-size group may now be seen in Joseph Nash Field Hall (Hall 10).

alcoves were devoted to the archaeology of the United States and Canada, the central portion to the archaeology of Mexico and Central America, and the south alcove to South American archaeology.

There was much activity also in ethnological exhibition. Objects formerly in the East Court were reinstalled, and much new material was placed on exhibition.

DAWN REDWOOD PLANTED ON WEST COAST

Last summer an exhibit of dawn-redwood material from the type locality in China, together with fossil redwoods and other related material, was placed on exhibition in Stanley Field Hall of the Museum by the Department of Botany. An article by Dr. Theodor Just, Chief Curator of Botany, about the discovery of the dawn redwood ("Shui-Hsa") and its botanical relations with extinct and living species of redwoods appeared in the *MUSEUM BULLETIN* (July, 1949, page 3). The article told of the work of Professor Ralph W. Chaney, of the University of California, who studied the dawn redwood in the area of China where it is still growing—about 140 miles northeast of Chungking—and who is the only American botanist who so far has had this opportunity.

An interesting follow-up to this is the United Press dispatch that was published in various newspapers last month:

BERKELEY, Calif. (UP), Nov. 15—Hundreds of seedlings of the dawn redwood, an ancient Chinese tree, have been transplanted along the Pacific Coast from Alaska to Guatemala.

The dawn redwood previously was believed to have become extinct 20,000,000 years ago, but recently living specimens were discovered in the remote interior of China.

University of California scientist Ralph W. Chaney went to China and brought back four seedlings and thousands of seeds, which he sent to former students and colleagues to plant in their neighborhood.

Thirty million years ago, the dawn redwood grew on the Pacific Coast. It is a cousin of the giant California redwoods.

HOW TO DO CHRISTMAS SHOPPING FROM YOUR EASY CHAIR AT HOME

Chicago Natural History Museum offers two Christmas plans that eliminate any necessity to fight your way through shopping crowds or to be burdened with the preparation of parcels:

(1) Christmas Gift Memberships

Send to the Director the name and address of the person to whom you wish to give a Museum membership, together with your remittance to cover membership fee or dues.

An attractive Christmas card notifying the recipient that through your generosity he has been elected a Member of the Museum will be sent, together with membership card or certificate and information on membership privileges.

(2) Museum Book Shop Gifts

Books endorsed for scientific authenticity by members of the Museum staff are on sale in the BOOK SHOP. The selection is for both adults and children.

Where desired, the BOOK SHOP will handle mail and telephone (Wabash 2-9410) orders and will undertake all details of wrapping and dispatching gift purchases to the designated recipients, together with such personal greetings as the purchaser may specify.



Lehmer, Donald J. 1949. "Archaeological Survey of Sonora, Mexico." *Bulletin* 20(12), 4-5.

View This Item Online: <https://www.biodiversitylibrary.org/item/25045>

Permalink: <https://www.biodiversitylibrary.org/partpdf/365501>

Holding Institution

University Library, University of Illinois Urbana Champaign

Sponsored by

University of Illinois Urbana-Champaign

Copyright & Reuse

Copyright Status: In copyright. Digitized with the permission of the Chicago Field Museum.
For information contact dcc@library.uiuc.edu.

Rights Holder: Field Museum of Natural History

This document was created from content at the **Biodiversity Heritage Library**, the world's largest open access digital library for biodiversity literature and archives. Visit BHL at <https://www.biodiversitylibrary.org>.