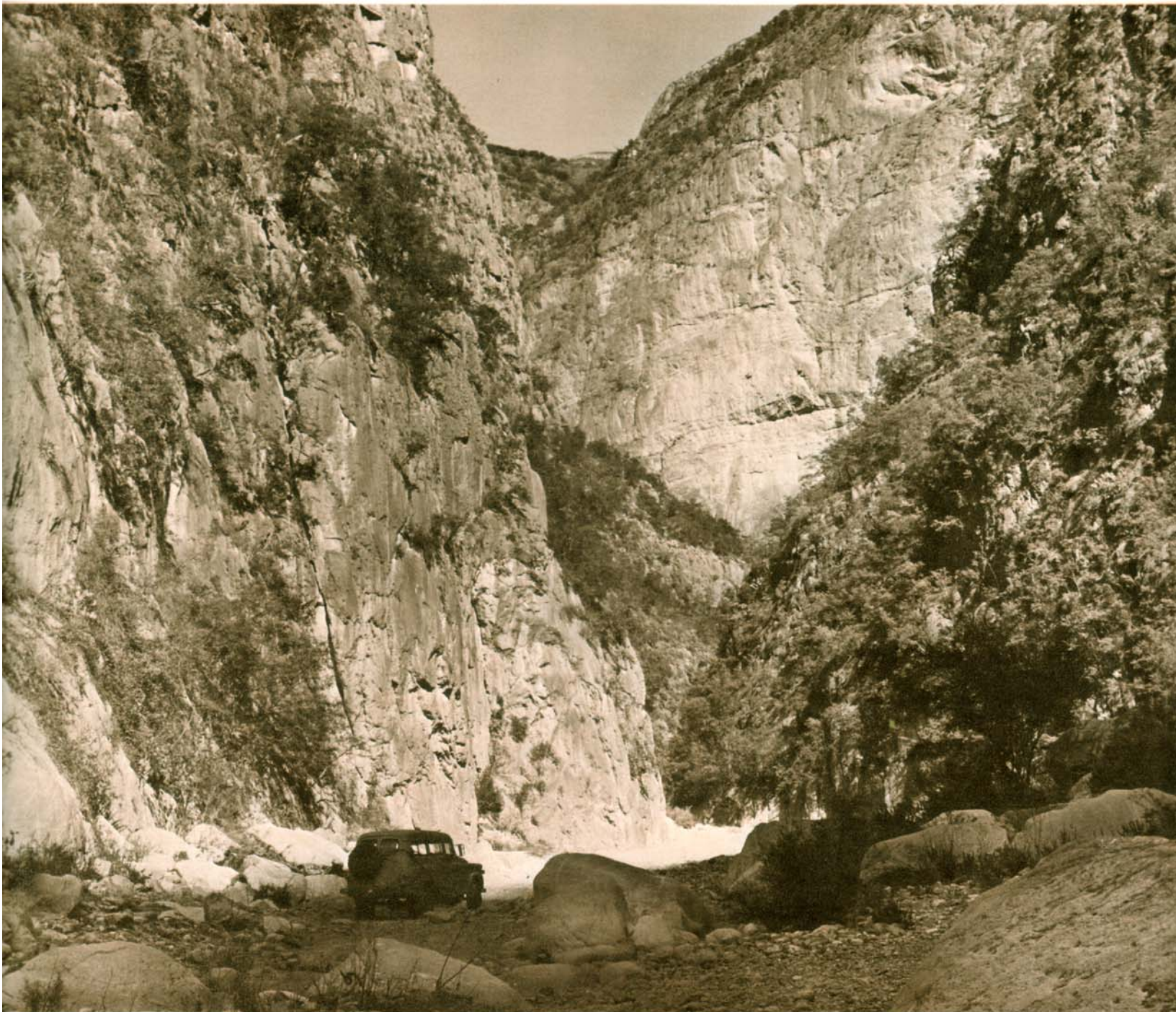


Association For
Mexican Cave Studies
NEWSLETTER



The Association for Mexican Cave Studies is a non-profit organization whose goals are the collection and dissemination of information concerning Mexican caves. The AMCS publishes a Newsletter, Bulletin, and Cave Report Series which are available to any sincerely interested conservation-minded person. The AMCS Newsletter is published six issues per volume as frequently as necessary at a cost of \$5 US per volume. Information concerning the other publications is available upon request. Potential contributors are urged to submit articles for publication. The article may cover any phase of Mexican speleology. Trip reports are requested from all trips. All correspondence and orders for publications should be sent to:

ASSOCIATION FOR MEXICAN CAVE STUDIES
P.O. Box 7037, University Station
Austin, Texas 78712 USA

Material for publication in the Newsletter should be sent to James Reddell or Terry Raines at the above address.

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THE SPELEO PRESS
Austin Texas

Cover Photograph—

If you fancy yourself as a successful cave hunter, may we suggest Cañon de la Huasteca for your next objective. The Cañon area is quite extensive, covering several hundred square kilometers, and is characterized by high, parallel mountain ridges of massively bedded limestone, and a drainage system forming deep canyons that both parallel and cut directly across the ridges. The photograph shows one of the many points where the stream has cut directly through the ridge, exposing, in places, limestone sequences as great as 400 meters. The network of roads in the area make use of these natural water gaps as well as smooth gravel stream beds. Perhaps the most popular route (four-wheel drive) through the area begins at Santiago, N.L. and ends at Santa Catarina, N.L. It is about 100 km long and the river bed is followed down stream. The trouble with all this limestone is that hardly any caves are known. Climbing the mountain walls is rugged and very few people live in the area to give directions. For this reason cave hunting is a real challenge, but should prove rewarding for the determined.

probably give faster service on small orders, while large orders of over four or five of the same map should be sent to the main office on San Antonio Abad. Service is likely to take a month or so. Index maps (Indice de Hojas) are available free. The AMCS will attempt to maintain a few maps in Austin to provide a few maps for trips going to México, but as our stocks are limited this service cannot be counted upon. Needless to say these maps show large areas of sinkholes and sinking streams not yet investigated. Mexican caving will never be the same. Promising cave areas can be easily located, the best routes of access planned, and once found individual caves can be located with accuracy.

PETROGLYPHS AT SÓTANO DE LOS MONOS, SIERRA DE EL ABRA, SAN LUIS POTOSI, MEXICO

by John W. Greer

Abstract

A small upper room at Sótano de los Monos in east-central México contains humanoid, animalistic, and geometric petroglyphs, including bundle figures. From the naturally lit room, burials probably were dropped down the 141 m vertical shaft.

Introduction

Recently, members of the Association for Mexican Cave Studies (AMCS) located a vertical pit known locally as Sótano de los Monos. They made the initial descent of the 141 m (464 ft) vertical entrance shaft, briefly recorded a few of the petroglyphs in the upper cave, and later returned to fully explore and map the upper cave passage and the lower cavern systems (AMCS cave files, Austin, Texas, USA). In June 1972 I revisited the cave and recorded the petroglyphs, which are described here. No other archeological materials were observed.

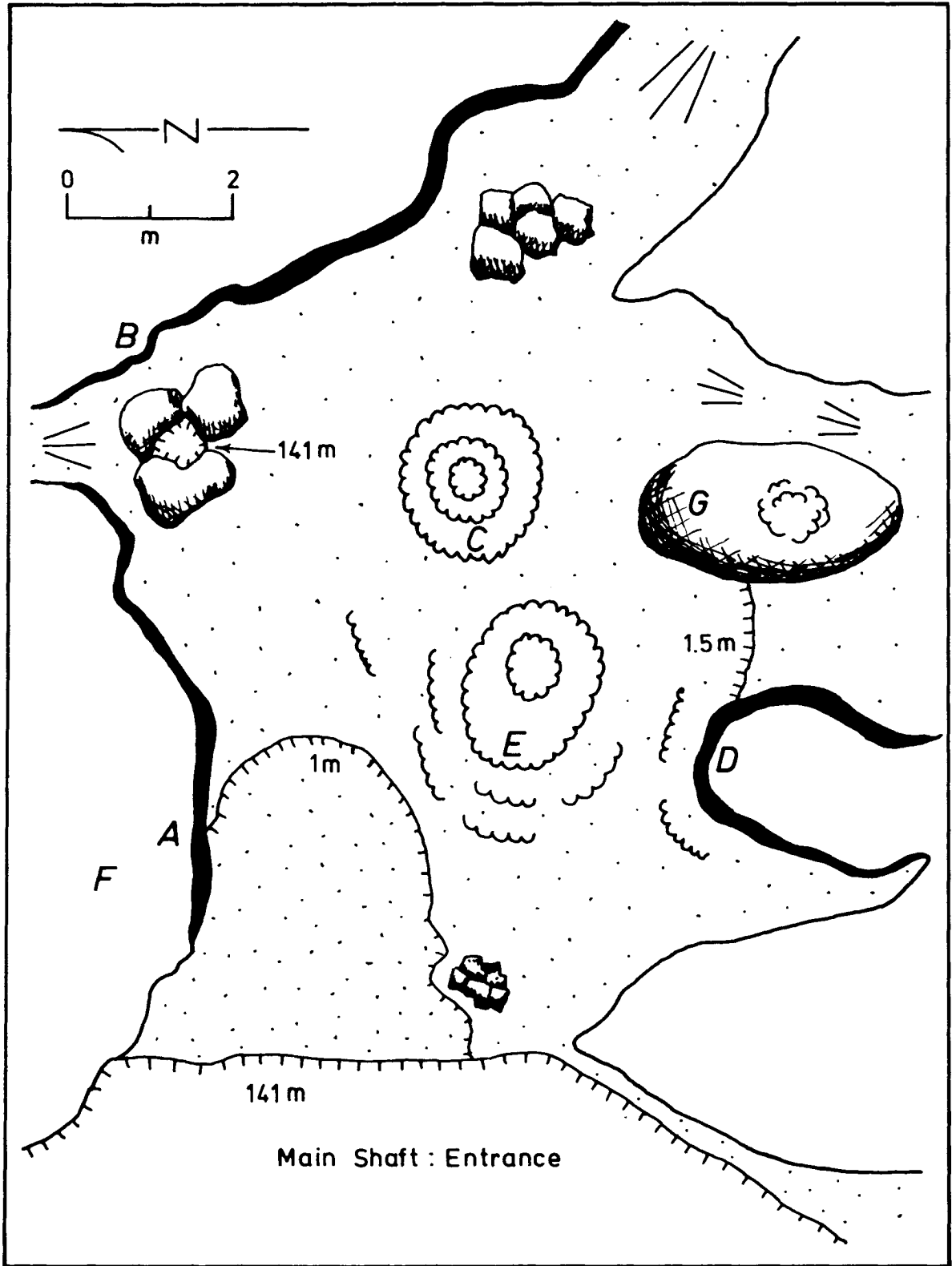
Location and Description

Sótano de los Monos is located in the south-central part of the crest of the Sierra de El Abra, 16 km northeast of Cd. Valles in east-central México in the state of San Luis Potosí (Russell 1972a:127; 1972b:140) (see location map). The crest of this karsted limestone range is moderately dense jungle and brush, necessitating passage along the few trails or with machete.



The natural entrance shaft is 15 x 30 m across and drops 141 m to a large room leading to an underground system reaching a total depth of 290 m (951 ft). A presumably older horizontal cave, the remaining portion 61 m long, is near the surface next to the pit entrance. The entrance room to the upper cave is approximately 10 x 7 m, overlooks the main shaft, and contains petroglyphs. A small hole, 0.6 m in diameter, in the floor opens into a 141 m vertical shaft paralleling the main shaft and joining it at the bottom (see map, p. 24).

Inset location map of México.

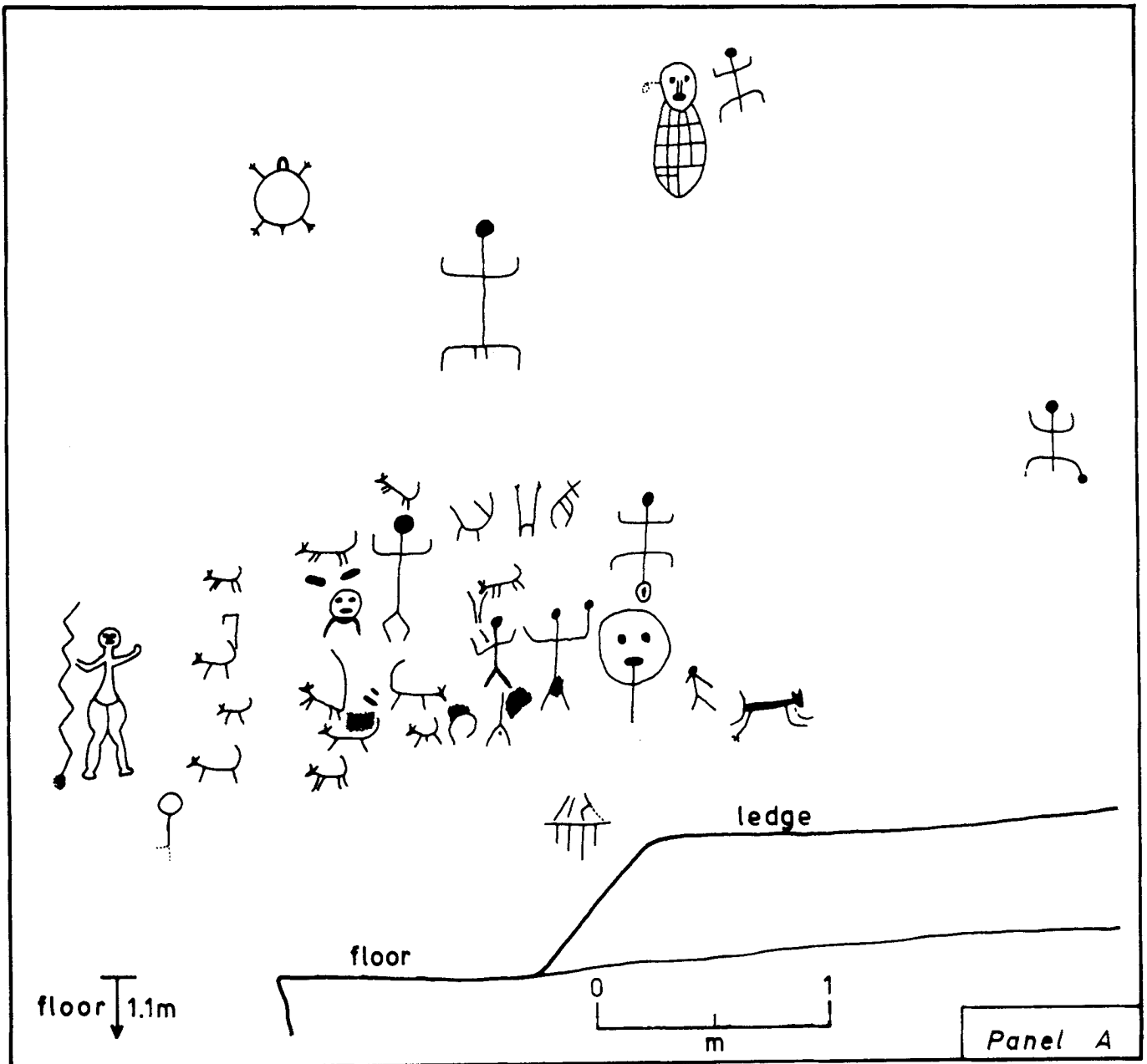


Entrance room to upper cave at Sótano de los Monos. Petroglyph panels are labeled in letters according to text descriptions.

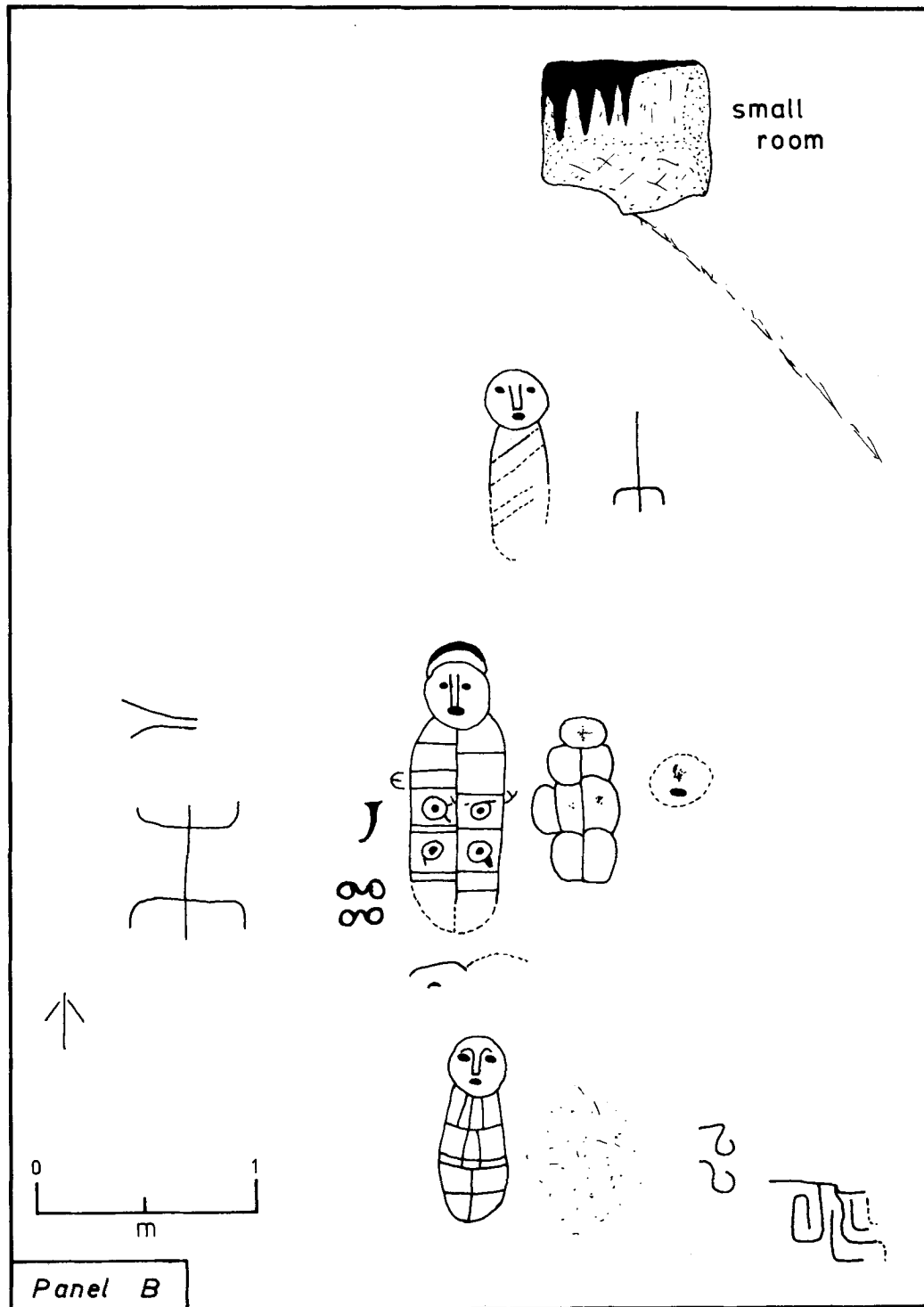
Petroglyphs

The soft flowstone surface on walls in the upper entrance room contains numerous petroglyphs. Most are about one meter or more above the floor, approximately at waist level or higher. All apparently were pecked, and most smoothed slightly, to lines usually 1.0-1.3 cm wide and 0.5 cm deep. The smallest figures are the Panel A coatimundi (?) figures (15 x 25 cm) and the largest the Panel B bundle figures (36 x 66 cm). All recognizable petroglyphs were recorded. Some of the faintest figures were chalked in for recording and photographing, but none originally contained any sort of pigment.

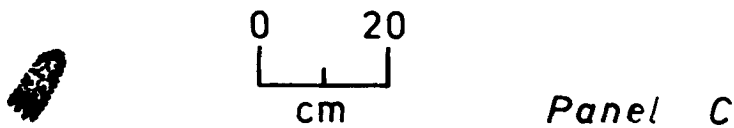
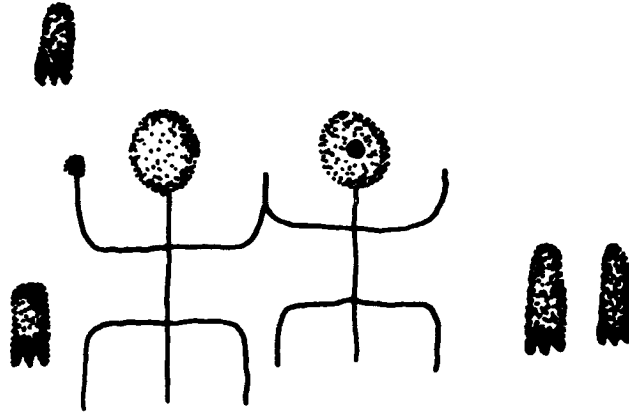
Panel A. This is the main panel and takes up most of the flowstone-covered north wall. It is nearly covered with numerous small animal figures (presumably coatimundi, dog, or tigre), a few stick men, a turtle with three-toed feet, a bundle figure like those on Panel B, a woman next to a zig-zag line, and several indistinguishable grooves and scratches (see below).



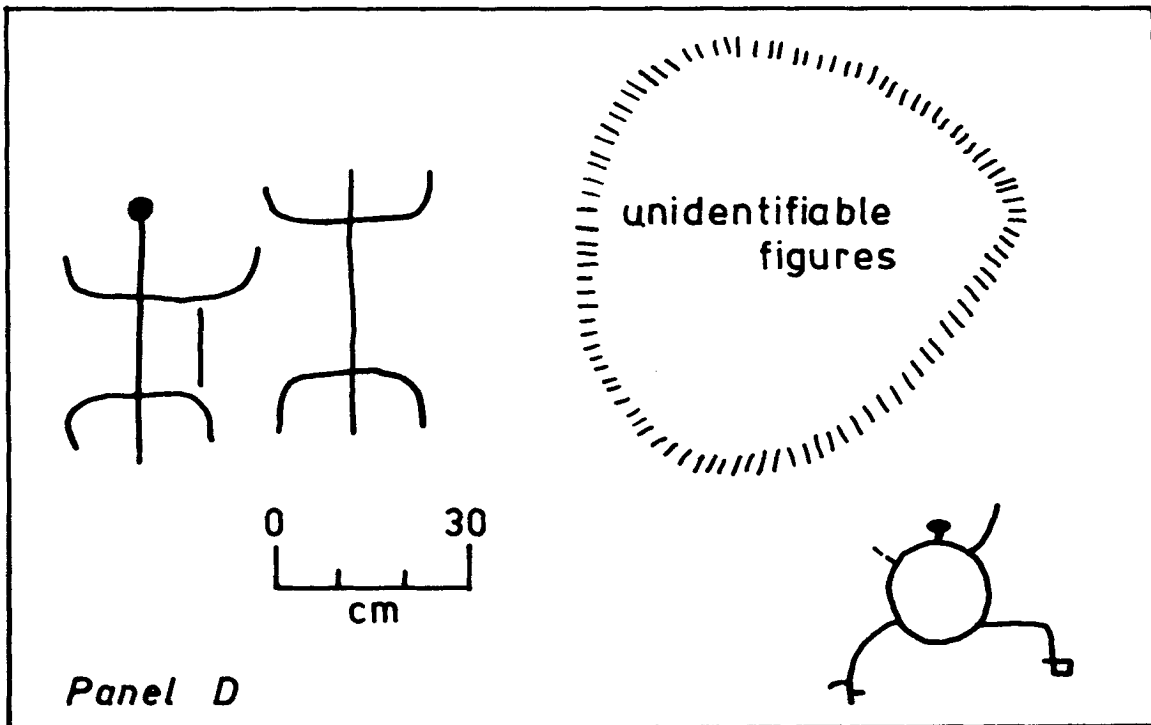
Panel B. This panel is on the back wall directly above the opening to the smaller shaft and faces west toward the main shaft. It is composed of at least four bundle figures, three stick men, and a few geometric designs not duplicated on other panels. The two complete and best recognizable bundle figures are 23 x 60 cm and 33 x 92 cm. A small square, flat-floored alcove 1.1 x 1.1 x 0.6 m deep is 1.4 m above the upper figures or 5.2 m above the floor. It can be reached without equipment but contains no cultural debris (see below).



Panel C. On a large flowstone boulder in the center of the room are two adjacent stick men with joined hands. The heads are large, very shallow, circular depressions, one with a small, shallow, secondary pit in the center. The men are essentially surrounded by five foot-prints 12-17 cm long (see below).



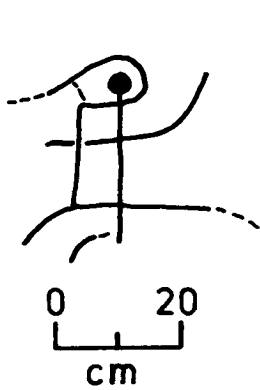
Panel D. A large spider or tick-like figure, two stick men, and a few indistinguishable line fragments are about one meter above the floor on a flowstone ledge or flowstone-covered boulder on the south side of the room (see below).



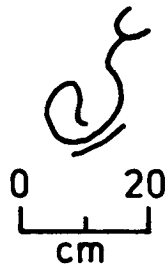
Panel E. A presumably single, man-like figure is on the west end of a flowstone boulder in the middle of the room (see below).

Panel F. Two stick men and several indistinguishable figures and light scratches are high on a vertical flowstone wall 1.4 m above the turtle at the sloping upper part of Panel A. It was impossible to discern whether the men have very slightly indented circular heads or no heads at all. Each hand and foot of the complete human figure has three digits (see below).

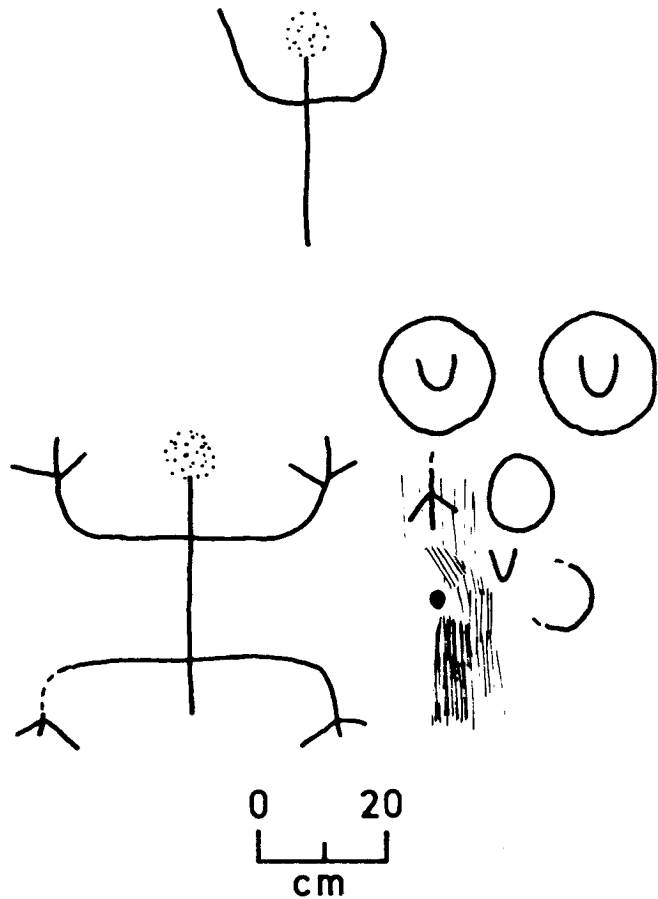
Panel G. A small group about one meter above the floor on the west end of a big flowstone formation is indistinguishable except for a single, presumably geometric element (see below).



Panel E



Panel G



Panel F

Discussion

Presumably some activity pertaining to the pit was performed in the area of the petroglyphs. Figures occur only in this room, although there are suitable walls and flowstone surfaces in natural light in other parts of the cave. Figures abound on most of the suitable flowstone surfaces in the entrance room, although they do not seem to have any relationship to each other. They do not, however, seem to be idle doodling and may represent different activities of different visits.

It seems likely that bundle figures on Panels A and B represent burial bundles to be dropped down the shaft immediately below Panel B. This small diameter shaft is vertical and as deep as the main pit entrance. Occasionally it is possible for a rock to fall free the total distance, but bundles undoubtedly would bounce on the walls. Wall indentations and ledges in the pit and the floor at the bottom were checked for potsherds, bone fragments, and other debris, but results were negative.

Although burials could have been thrown into the main shaft from the room, it is believed that they were not. Bundles in the main shaft would remain in natural light and would be visible from the surface, while ones dropped into the secondary shaft quickly fall into darkness and can be heard striking the bottom only as a faint echo coming from the bottom of the main shaft. Bundles thrown into the main shaft *from the room* probably would initially land on a natural bridge less than 30 m below the room and might lodge there.

Explanations of other figures are nearly impossible. The unique figure of a woman holding lightning (or a snake) in Panel A is reminiscent of many Mexican figurines and likely represents an attempt to attract divine assistance in such daily activities as farming. Coati-mundis (?) are numerous on Panel A but are absent elsewhere. The lone turtle in the corner of Panel A and the large spider-like figure in Panel D are un-alike and likely represent different objects. Men are all stick figures with the usual pendant phallus portrayed in various ways. Human stick figures are on all panels and in three instances (in Panels A, C, and D) are standing in pairs—the pair on Panel C have joined hands. Appendages with three digits occur with stick men in Panel F, humanoid footprints in Panel C, the turtle in Panel A, and the tick-spider in Panel D.

Figures very similar to those at Monos also occur in remote sections of Loltún near Oxkutzcab in central Yucatán. These include bundle figures, human females with fattened hips, and linear male figures. Photographs from Thompson (1897:Pl. II, fig. 1, and Pl. IV, fig. 1) are not quite clear enough to provide sure comparisons, but David McKenzie, the first to visit Monos, also has visited Loltún and reports (personal communication) that the figures are very similar.

Gamio (1967:Foto 23) pictures a group of stone idols from Cola de Palma in Oaxaca having remarkably similar form and designs to the Monos petroglyphs. They are also the same size. Ceramics from that site are all from the Classic period. The age of the Monos figures is unknown.

The absence of pottery or other archeological materials suggests that Monos had a presumably religious function, possibly with different activities, and was not used for habitation or temporary shelter. The *total* absence of sherds, however, is still curious. It also is impossible to ascertain whether the fine grade calcite crystal here was aboriginally collected for pottery temper, since relatively recent mineral prospecting has disturbed a huge quantity of the formations. Also unknown is the cultural relationship of Monos with the nearly adjacent Hoya de Higuierón (Greer ms.a) and such nearby occupied caves on the east face of the range as Ventana Jabalf, Cueva de las Manos, and Cueva Cerámica (Greer, 1974; ms.b).

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RECENT STUDIES ON THE INVERTEBRATE FAUNA AND ECOLOGY OF SUB-TROPICAL AND TROPICAL AMERICAN CAVES

by **Stewart B. Peck**

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Abstract

The invertebrate fauna of temperate North American caves is now fairly well known at a taxonomic level, through the efforts of several generations of investigators. In contrast, the intensive study of the fauna of sub-tropical and tropical American caves began comparatively recently. A review of the advances in knowledge of these faunas is presented, based on some of the literature combined with the author's field experiences and data in sub-tropical and tropical American caves. Special consideration is given to the North, Central, and South American continental localities of Florida, Texas, México, the Yucatán Peninsula, Guatemala, British Honduras, Panama, Trinidad, and Venezuela. The islands considered are Jamaica and Puerto Rico in the West Indies, and Hawaii and the Galapagos Islands. Generalizations are given on the ratios of troglobites to troglaphiles, and aquatic to terrestrial species in the various areas, as well as aspects of guano ecology.

The fauna of sub-tropical North American caves is relatively well known. The fauna of tropical American caves is not yet well known. However, enough was known so that generalizations were made, stating that tropical aquatic troglobites are mostly all derived from marine rather than freshwater ancestors, and that tropical terrestrial troglobites are almost completely non-existent (Vandel, 1965:271-276). Nicholas (1962) lists some of this fauna. In the light of more recently acquired data, the generalizations will have to be altered or entirely re-written, for the distribution and evolution of tropical American cave faunas is proving to be much more complicated than previously suspected.

The purpose of this paper is to review some of the progress that has been made in recent years in our knowledge of the invertebrate faunas of the caves of the American sub-tropics