

The Presence of a Pleistocene Colonizing Culture in La María Archaeological Locality, Casa del Minero 1

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La María archaeological locality lies 150 km northwest of Puerto San Julián in the department of Magallanes (48° 25' S, 68° 55' W), 150–450 m. a.s.l. La María is remarkable because of its rock art, which is extraordinarily rich in variety and quality. The polychromy used in diverse motifs constitutes an important example of parietal art. Four and sometimes even five colors appear in a single composition, and images are painted in natural holes or on the prominences of walls, achieving an outstanding degree of abstraction and symbology (Cardich and Paunero 1994; Paunero 2000).

Different aspects of rock art, including overlapping by sector and panel, motifs, and groups of motifs, have been studied (Franchomme 1991; Paunero 2001); techniques, raw materials, pigments, and clays and gypsum have been analyzed (Aschero 1988; Paunero 1992); and various symmetries related to location and different uses of space have been identified. Present efforts are directed at integrating research from archaeology, ethnography, present social perception, and experimentation to discover the probable sequence and chronology of different stylistic expressions (Gradin 1987, 1988; Miotti 1991; Onetto 1991; Paunero 2001).

Since 1993, when we researched Estancias San Rafael, Los Granaderos, and other sites, we have systematically registered and surveyed the 22,000 hectares that compose the region. By using the GPS system to locate archaeological variables within its limits, we have plotted the location of microenvironments, plateaus, canyons, lagoons, creeks, quarries, and open campsites. Twelve sectors are defined, based on environmental, archaeological, and landscape features (Criado Boado 1991; Miotti et al. 1997; Paunero 2000, 2001).

During the summer of 1996 we started excavating with the aim to identify the earliest human occupation in the locality. We also planned to fit our discoveries within the context of the natural and cultural stratigraphy of other localities of the Central Plateau of Santa Cruz.

We set up initial grids in four sectors: La María Bajo, La María Quebrada, Cañadón de la Ventana, and Cañadón de la Mina. In an excavation at Cueva de la Mesada de La María Quebrada, we identified a component from the early Holocene, dated to 9090 ± 40 RCYBP (Beta-135963). Two samples from Cueva de la Ventana yielded ages of 7970 ± 40 RCYBP (Beta-135965) and 7665 ± 75 RCYBP (AA-35237).

In 2000 we started the first excavation at the Casa del Minero 1 site, in Cañadón de la Mina, the subject of this report. Cañadón de la Mina is located at $48^\circ 34' 33''$ S, $68^\circ 54' 45''$ W, 1,360 m northeast of Laguna Grande. At the bottom of the canyon we identified a spring that feeds a basin, producing a course of water that ends in the lagoon. There are two outstanding caves in this sector, named Casa del Minero 1 and 2. In the latter we found evidence of naturalistic rock art.

The stratigraphy in the excavated sector is sealed by roof fall, which separates two archaeological components. The lower one contains remains of Pleistocene fauna.

Stratigraphic Units (Figure 1)

C: Volcanic ash from the Hudson volcano (1991); thickness 1–2 cm.

1. Light gray loose sediment with medium sands, without guano, and with historical cultural remains from miners' occupation during last century; thickness 6–8 cm.
2. Compact sand with faded lines of charcoal in the base and Holocene archaeological remains; thickness 5–10 cm.
3. Silt-sand compacted layer with medium-size stones contains lithic artifacts and fragments of bone in the two levels of Holocene occupation. It overlies the fallen rocks or unit 4; thickness 10–14 cm.

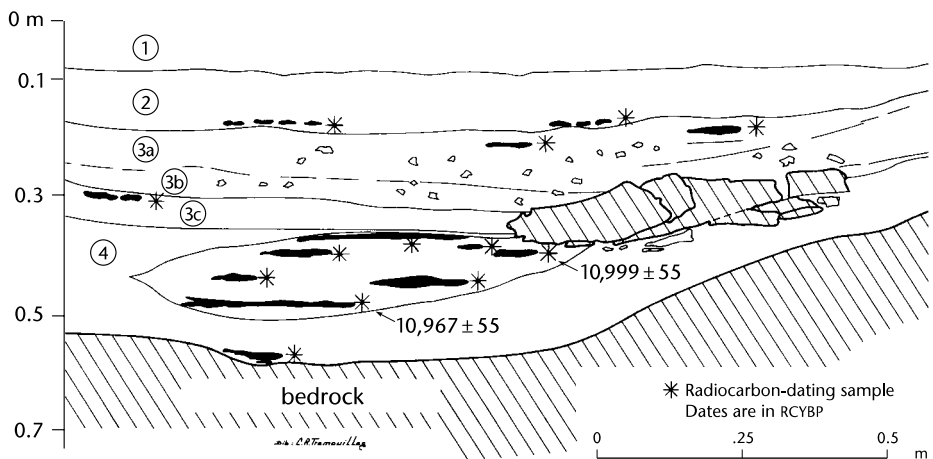


Figure 1. Stratigraphic profile, square A, Estancia La María, Cañadón de la Mina, Casa del Minero site 1.

RD: Roof fall

4. Compact light ochre sediment of sand and silt with an important cultural content and a lenticulate hearth structure; thickness 10–20 cm. The following datings were obtained: $10,999 \pm 55$ RCYBP, $-24.6 \delta^{13}_{12}\text{C}$ (‰) (AA 37207); $10,967 \pm 55$ RCYBP, $-25.9 \delta^{13}_{12}\text{C}$ (‰) (AA 37208).
5. Light-colored sediment of sand and silt that overlies the bedrock, without archaeological content; thickness 8–14 cm.

The archaeological context dating to the Pleistocene contains lithic tools and remains of fauna, both extant and extinct species.

Lithic Assemblage

Tools

- A knife with an inverse-extended retouch and a bifacial distal retouch made of a red flint (*silix*) blade (Figure 2A).
- A sidescraper with unifacial and bifacial retouches made of a wide flake of petrified wood (Figure 2B).

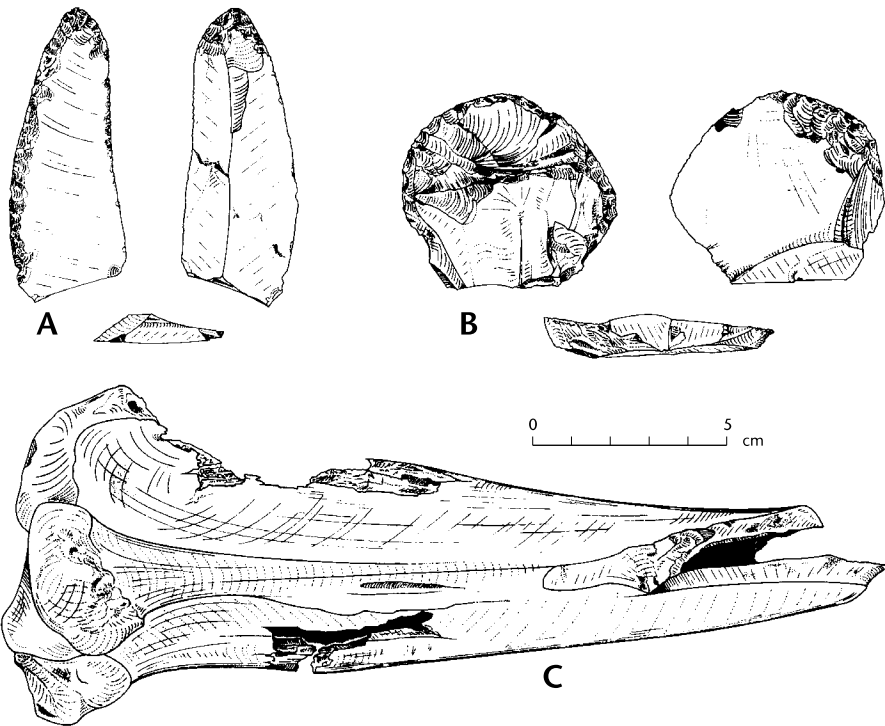


Figure 2. A, knife made of red flint with inverse-extended retouch and bifacial distal retouch; B, sidescraper with unifacial and bifacial retouches made on wide flake of petrified wood. C, *Hemiauchenia* cf. *paradox* right proximal tibial epiphysis.

Debitage

- 130 flakes, 6 wide flakes, 2 long flakes, a blade, and a triangular flake; materials are red flint (60.76 percent), chalcedony (32.30 percent), and other kinds of flint (6.92 percent).
- 129 small flakes; materials are red flint (69.76 percent), chalcedony (22.48 percent), and other flint (7.75 percent).
- 310 microflakes; materials are red flint (89.35 percent), chalcedony (3.22 percent), and other flint (7.42 percent).

Small flakes of secondary flaking and bifacial retouch are almost exclusively red flint. No cores are recorded.

The raw material consists of only two kinds of stone, red flint and chalcedony. We located a quarry of red flint 400 m from the cave in the direction of the lagoon. This quarry has an approximate diameter of 550 m; lithic material is concentrated in a central area 400 m across.

Faunal Evidence

The bone assemblage contains remains of *Lama guanicoe* and extinct camelids: *Hemiauchenia* cf. *paradoxa* (right proximal tibial epiphysis (Figure 2C) and complete right cuboid, both from adult animals); and *Lama (vicugna) gracilis* (left distal humerus epiphysis and right proximal metacarpals, both from adult animals). We also recorded remains of Canidae (eight metapodials, a scapula, three phalanges, and three molars, all from adult animals) and *Rhea* sp. (a second phalanx of finger 3) (M. Bond pers. comm.; L. Miotti pers. comm.). In this component we found bone tools, three awls made of diaphysis flakes from an undetermined large mammal.

The presence of the extinct camelid *Hemiauchenia* cf. *paradoxa* (Menegaz et al. 1989) in southern Patagonia is noteworthy, especially since we found evidence of human modifications (distinct blow marks and an anthropogenic fracture in the analyzed right proximal tibia). The same Pleistocene genus has been recorded in such North American sites as Rancho La Brea (Webb 1965), Natural Trap Cave (KU), and Bergner Gravel Pit (SDSM 5181) (Breyer 1974). Extinct camelids have also been recorded in some South American sites: *Hemiauchenia* sp. in Paso Otero 5 (Martínez 1997); *Paleolama* sp. in Arroyo Seco (Fidalgo et al. 1986); and *Lama owenii* in Cueva del Medio (Nami and Menegaz 1991). However, at this time Casa del Minero 1 is the only site in the Central Plateau of Santa Cruz with a record of this genus. Note that the smaller camelid *Lama (Vicugna) gracilis* was recorded in the lower components of Los Toldos, El Ceibo, and Piedra Museo (Cardich 1987; Cardich and Miotti 1983; Miotti et al. 1999).

Conclusions

From the evidence obtained we can draw the following inferences:

1. The lower component was clearly sealed by a roof fall in the interior sectors that kept it undisturbed.
2. A high-resolution lithic assemblage shows low diversity of raw materials and a technology using unifacial and bifacial knapping.
3. The remains of extinct and extant camelids with evidence of butchering and consumption (helical fractures, cutmarks, and spatial distribution close to a hearth) reinforces the hypothesis of late-Pleistocene occupations in the region by hunter-gatherer societies and their exploitation of megamammals.

4. During the Pleistocene the lagoon probably had a larger diameter than at present and therefore would have been closer to the excavated site. The Cañadón de la Mina sector thus constituted a favorable environment, with shelter close to critical resources (water, fauna, and good-quality firewood) and sources of excellent minerals for knapping and making pigments.
5. The proximity to a large lagoon supports the theory that preferred hunting and primary processing sites during the late Pleistocene were places near water. By the time of the early Holocene, climatic oscillations in the region resulted in a shrub-like steppe replacing a herbaceous steppe; the environment was becoming drier and windier and probably more stressful for Pleistocene mammals.

In sum, we have identified an early occupation dating to the late Pleistocene at Casa del Minero Cave in the La María locality. Work will continue at the site and in the area in search of new evidence to discover cultural patterns in the late Pleistocene.

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