

Redating habitation of the Americas



Meadowcroft Rockshelter: A perfect site for habitation 16,000 years ago.

When did the first Ice Age peoples cross the Bering Strait from Asia to the Americas and begin to populate the Western Hemisphere? The question is still open, but every year, after each summer's archaeological digs, the date is pushed back a little farther. Last year, students from the University of Pittsburgh unearthed charcoal samples that confirmed human habitation of a rockshelter near Avila, Pa., at about 14,000 to 15,000 years ago (SN: 8/10/74, p. 84). Carbon dating confirmed the site to be the oldest known area of human habitation in North America east of the Mississippi. This year, evidence from the same site pushes the date back to 16,000 years—the oldest confirmed date yet in the Western Hemisphere.

The site is the Meadowcroft Rockshelter about 25 miles southwest of Pittsburgh. The evidence consists of charcoal from a firepit. Accompanying stone tools and artifacts suggest that the fire was of human, rather than natural, origins. The rockshelter, with its overhanging ledge, probably served as a perfect all-weather campsite for nomadic hunters.

In addition to the well-dated charcoal, this summer's excavations have yielded more than 50 cutting tools. These, together with the 100 unbladed stone tools found previously, represent the oldest, largest and most securely dated collection of such tools in the Americas. Because of the number of tools (projectile points and knives) and the abundance of food

bones and the remains of edible plants, researchers conclude that the rockshelter was used continuously until European settlers came on the scene.

Commenting on the find, Robert Stuckenrath of the Smithsonian Institution's Radiocarbon Section said, "That makes this the earliest, well-dated evidence of human habitation in a stratified site in the hemisphere." But more than that, the find

tends to confirm the hypothesis that immigration across the Bering Strait took place as early as 20,000 to 30,000 years ago when a land-bridge is known to have existed. If the strait was not crossed then, it is assumed that people would have had to wait until another such land-bridge existed, about 13,000 to 10,000 years ago—too late for anyone to have reached Pennsylvania by 16,000 years ago. □

The return of the long lost peccary

"The reports of my death are greatly exaggerated," cabled Mark Twain to his friends in the United States when he heard, in London, rumors of his untimely death. And so might say a species of peccary thought to have been extinct since Pleistocene times (perhaps two million years ago).

"We are pleased to announce," say a group of zoologists in the Aug. 1 SCIENCE, that a third species of peccary, discovered in the Chaco of Paraguay, can now be added to the living members of the family Tayassuidae. The newly discovered peccary has been assigned to the genus *Catagonus* Ameghino, heretofore considered confined to the Pleistocene. The discovery is reported by Ralph M. Wetzell and Robert E. Dubos of the University of Connecticut at Storrs, Robert L. Martin of the University of Maine in Farmington and Philip Meyers of the University of California at Berkeley.

Peccaries are the New World counterpart of the swine. Resembling pigs with small, erect ears and almost no tails, they can be found from Texas to Patagonia. Until now, only two species of this mammal were thought to have survived to the present—the collared peccary and the slightly larger white-lipped peccary.

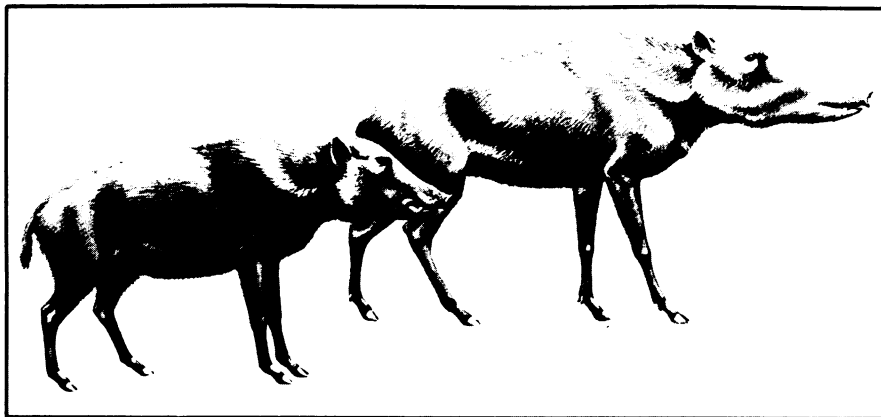
It is possible that the third species of peccary has been overlooked by earlier investigators because of the highly inaccessible area to which it seems confined. Large portions of South America, particularly the thorn forests of the Gran Chaco extending from southeastern Bolivia through western Paraguay to northern Argentina remain relatively unstudied. It is

even possible, the zoologists say, because the existence of only two species of living peccaries has been so long accepted, "that specimens of the third peccary are concealed in some of the collections of the world under various synonyms of the other two species."

Working with 29 skeletal specimens, the researchers conclude that the new species of peccary is far more different from the other two living species than they are from each other. Comparisons with fossil remains suggest that the third species may be more closely related to extinct North American peccaries than it is to the extant South American species.

The researchers, now in Paraguay, plan to study the biology and habits of the rediscovered peccary, which does not seem to be terribly rare in the Gran Chaco. Live animals will be collected, and zoos will probably be exhibiting them in the near future.

But for various reasons, the continued existence of the new peccary is in doubt, and the excitement of the find is clouded by the possibility that it may rapidly become an endangered species. For one thing, the peccary is one of the major mammalian species hunted for food in western Paraguay. The all-weather surfacing of the Trans-Chaco Highway, now in progress, will bring with it greater accessibility and greater pressure from sportsmen, hunters and hide buyers as well as increased land clearance for ranching. The researchers conclude: "One cannot be optimistic about the future of this relict or of most other wildlife of the Paraguayan Chaco." □



Extinct North American peccaries: A long-lost cousin is alive in Paraguay.