
ISLAND HOPPING TO A NEW WORLD

The first Americans may have arrived not on foot
but by boat from Asia, even Europe

BY ALEX MARKELS

Digging in a dank limestone cave in Canada's Queen Charlotte Islands last summer, 21-year-old Christina Heaton hardly noticed the triangular piece of chipped stone she'd unearthed in a pile of muddy debris. But as her scientist father, Timothy, sifted through the muck, he realized she'd struck pay dirt. "Oh my God!" he yelled to her and the team of other researchers scouring the remote site off the coast of British Columbia. "It's a spear point!"

Bear bones found near the artifact suggested that its owner had probably speared the beast, which later retreated into the cave and eventually died with the point still lodged in its loins. Radiocarbon tests soon dated the remains at about 12,000 years old, making them among the earliest signs of human activity in the region or, for that matter, in all of the Americas.

"It's not the smoking gun, but we're getting closer and closer to finding one," says Timothy Heaton, who is the director of earth sciences at the University of South Dakota. He and his colleagues are trying to rewrite prehistory and show that the people who first explored the Americas at the waning of the last Ice Age

may have come earlier than archaeologists thought and by routes they never suspected.

Walk this way. Almost from the moment the first white explorers set eyes on America's indigenous "Indians," people have wondered where the natives came from. Among the first to guess right was Fray José Acosta, a Jesuit priest who in 1590 speculated that a small group from Asia's northernmost latitudes must have walked or floated to the New World. Indeed, since the 1930s archaeologists have taught that the first Americans were big-game hunters who walked across the Bering land bridge from Siberia, chasing woolly mammoths southward through Canada down a narrow corridor between two ice sheets. By about 11,500 years ago, they'd tromped as far south as Clovis, N.M., near where archaeologists first found their distinctive fluted spear points. The Clovis hunters didn't stop there. Their descendants ultimately reached the tip of South America after a footslogging journey begun more than 20,000 miles away. Or so the story goes.

Yet the Heatons' find is the latest addition to a small but increasingly weighty pile of tools and remains

suggesting that the first Americans may have come from Asia not by foot down the center of the continent but along the coast in boats, centuries or millennia before the Clovis people. The evidence, detailed in scientific articles and a new book by journalist Tom Koppel called *Lost World*, has turned up along the Pacific coast all the way from Alaska to southern Chile. So far it does not include any human remains of pre-Clovis age. But a woman whose bones were found on Santa Rosa Island off Santa Barbara, Calif., was only 200 to 300 years more recent. And scientists excavating Chile's Monte Verde site, over 6,000 miles from the southernmost Clovis find, have discovered caches of medicinal herbs, twine, and other artifacts that date back 12,500 years—even older than those of the Clovis people. Still other, more controversial digs near the East Coast may even indicate pre-Clovis travel across the northern Atlantic from Europe.

Such finds have dovetailed with genetic, biological, and climate research to paint a far more complex—and, many scientists believe, more realistic—picture of America's first explorers. Rather than a

single migration of Clovis people, “there were clearly several waves of human exploration,” says Douglas Wallace, a geneticist at the University of California-Irvine. Wallace’s DNA studies of American natives identify at least five genetically distinct waves, four from Asia and one possibly of European descent, the earliest of which could have arrived more than 20,000 years ago. That diversity jibes with research by linguists who argue that the Americas’ 143 native languages couldn’t possibly have all developed from a single 11,500-year-old tongue. And if they had, then the languages would be most diverse along the mainland route the Clovis people traveled.

In fact, the number of languages is greatest along the Pacific coast, adding to suspicions that at least some of the first immigrants came that way. Until recently, many geologists assumed that the Ice-Age shore was a glaciated wasteland. But new studies of fossil records and ancient climates imply a navigable coastline full of shellfish, seals, and other foods, with patches of grassy inland tundra capable of supporting big game—and perhaps seafaring humans wending their way south.

Unfortunately, looking for evidence that could clinch the coastal-migration scenario is akin to searching for the lost city of Atlantis. Warming temperatures since the last Ice Age have helped transform the ancient tundra into thick forests, rendering most signs of early human ex-

ploration all but invisible. And as Ice-Age glaciers melted, the world’s sea level has risen hundreds of feet, submerging most of the coastal campsites where the ancient mariners may have sojourned. “Most of those places are under 300 to 400 feet of water, which makes the searching a bit difficult,” explains Daryl Fedje, an archaeologist with the Canadian park service who has overseen the decade-long search in the Queen Charlotte Islands.

Beginning in the mid-1990s, he traversed the waters off the foggy archipelago on a research vessel, mapping the ocean bottom and dredging up sediments including, in 1998, a 4-inch-long basalt blade that showed telltale flaking from use by an ancient hunter. Retrieved from a site that might have made an ideal beachside camp 10,200 years ago, it was one of the oldest human artifacts yet found in the region and the first inkling of the potential treasure-trove on the sea bottom. The find made headlines and inspired some to call for a comprehensive high-tech search of the seafloor.

Cave diggers. Yet the immense costs of a seafloor survey have prevented the idea from becoming more than a pipe dream. So Fedje and other researchers have instead focused on caves on the nearby islands and in Alaska, where artifacts are protected from weather and decay. “The caves have been a real wind-fall,” says Heaton of the animal bones he has found. He’s confident

that “it’s really just a matter of time” before he and his colleagues find pre-Clovis human remains, “because in almost every cave we put our shovels to, we find something new.”

Archaeologists working on the other side of the continent are also seeking a smoking gun, for a different migration route. Clovis-style spear points recovered from barrier islands near the Chesapeake Bay and inland in Virginia and Pennsylvania bear a striking resemblance to tools made by the ancient Solutrean people of northern Spain, leading some to speculate about a prehistoric crossing of the Atlantic.

“That could explain how DNA from ancient Europeans showed up in some of the first Americans,” says Dennis Stanford, chairman of anthropology at the Smithsonian Institution. In an upcoming book, Stanford and coauthor Bruce Bradley make the seemingly far-fetched case that an adventurous lot of Iberians walked over an ice bridge or boated across open water to Newfoundland during the last Ice Age.

Whether they threaded their way through Pacific archipelagoes or negotiated the ice-choked Atlantic, “we need to open our minds and give these early explorers their due,” says Stanford. The first people to explore the Americas “were modern humans very much like ourselves ... smart, adventurous, and very much capable of making their way in the world.”