

## ARCHAEOLOGY

## Ancient points suggest Asian roots for early American tools

Finds may support coastal route hypothesis for first settlers

## **Bv Michael Price**

hirteen razor-sharp projectile points found along a river in southwestern Idaho appear to represent the oldest evidence so far of toolmaking in the Americas-and may bolster the idea that the first people to reach the region migrated from Asia in boats along the coast of the Pacific Ocean.

Likely deposited into pits by a group of hunter-gatherers, the points were recently dated to between 16,000 and 15,600 years ago, according to a study in Science Advances last month. The tips are examples of "stemmed point technology," which allowed ancient people to fashion weapons from a wide range of available stone. Based on the objects' similarities to even older points found in East Asia, the blueprint for making the Idaho points may have come with the Americas' original settlers, the study authors propose.

A lot more work will need to be done to prove that, says Heather Smith, an archaeologist at Texas State University, but "it looks like a really interesting agenda to pursue."

The site where the points were unearthed a few years ago is on the banks of Idaho's Salmon River. The Nez Perce people, who have inhabited the region for thousands of years, refer to it as Nipéhe, for an ancient village there. In English, it became known as Cooper's Ferry.

Sixteen thousand years ago, the river sat

in an ice-free corridor. At the time, an overland route into the North American continent from the Bering Strait would have been blocked by massive ice sheets. But some researchers have proposed that the earliest migrants from Siberia boated along the shore of an ice-covered Bering Strait. "If you're coming south along the Pacific coastline entering North America ... the first major left-hand turn south of the ice is the Columbia River, and if you head upstream, you can get to Cooper's Ferry," says Loren Davis, an Oregon State University, Corvallis, archaeologist who led the new study.

Devastating floods and avalanches destroyed or buried nearby valleys, but Cooper's Ferry was relatively unscathed, he says. "As far as we can tell, people early on decided this was a really great place to live, and they kept coming back over and over and over again." That tracks with Nez Perce history, says Nakia Williamson-Cloud, cultural resources program director for the tribe, on whose lands the artifact-filled site sits. Stories passed down over thousands of years tell of a young couple founding the village after a catastrophic flood destroyed their previous home across the river.

Davis began working at Cooper's Ferry in 1997 as a graduate student and never left. In 2019, he and colleagues published a paper in Science that included tentative radiocarbon dates of between 16,560 and 15,280 years for bits of animal bone and charcoal excavated in collaboration with the Nez Perce Tribe,

Found on the banks of an Idaho river, these ancient points resemble even older ones from Japan.

making it one of the earliest known humanoccupied sites on the continent.

For the new work, Davis's team-including interns from the Nez Perce Tribe-went 25 meters upriver from previous digs and unearthed three cylindrical pits that contained the spear points and hundreds of bits of bone, likely from animals, that an outside lab radiocarbon dated to between about 16,000 and 15,600 years ago, firming up the dates reported in the earlier study.

Smith says the new analysis brings "needed rigor" to the previous Cooper's Ferry dates. But Ben Potter, an archaeologist at the University of Alaska, Fairbanks, remains unconvinced, arguing the artifacts from the pits are too jumbled to conclusively link them to any of the animal bone dates. "Their precise age remains unclear, in my opinion."

Although no genetic evidence connects the ancient toolmakers to modern Nez Perce people, Williamson-Cloud says he believes "these are truly our ancestors. ... It's a place where our lineage came from-people who are alive today."

Davis and the study's other authors, who include Japanese and Chinese archaeologists, think there's a good case to be made that the first migrants from Asia brought with them the rough-and-ready stemmed point technology, with fluted ends that were wedged into spear tips. The points at Cooper's Ferry, they say, most closely resemble

projectile points made by people who lived near modern-day Hokkaido, Japan, some 20,000 years ago. Genetic studies show these people were not ancestors of modern Native Americans, but Davis believes they may have passed technological traditions on to other Asian groups that did migrate through northeastern Siberia and into the Americas. "[Those travelers] didn't invent this stuff when they got to the Americas," he says. "When they left northeast Asia, they had a whole set of technological ideas in their minds."

Davis's scenario makes sense to Matthew Des Lauriers, an archaeologist at California State University, San Bernardino, who studies stone tool technologies. David Meltzer, an archaeologist at Southern Methodist University, remains skeptical. He says the similarities between the two regions' stemmed points appear generic. Finding more evidence of human artifacts at sites in between Japan and the U.S. Pacific Northwest would help make the authors' case, Meltzer adds, but "detecting actual links between populations so distant in space and time can only be done reliably with ancient genomics."



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