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Radical Theory of first Americans places Stone Age Europeans in Delmarva 20,000 years ago



Bonnie Jo Mount/Post - Smithsonian Institute anthropologist Dennis Stanford, left, and University of Exeter archeologist Bruce Bradley examine knives from the last Ice Age.

Brian Vastag
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When the crew of the Virginia scallop trawler *Cinmar* hauled a mastodon tusk onto the deck in 1970, another oddity dropped out of the net: a dark, tapered stone blade, nearly eight inches long and still sharp.

Forty years later, this rediscovered prehistoric slasher has reopened debate on a radical theory about who the first Americans were and when they got here.

Archaeologists have long held that North America remained unpopulated until about 15,000 years ago, when Siberian people walked or boated into Alaska and then moved down the West Coast.

But the mastodon relic found near the mouth of the Chesapeake Bay turned out to be 22,000 years old, suggesting that the blade was just as ancient.

Whoever fashioned that blade was not supposed to be here.

Its makers probably paddled from Europe and arrived in America thousands of years ahead of the western migration, making them the first Americans, argues Smithsonian Institution anthropologist Dennis Stanford.

“I think it’s feasible,” said Tom Dillehay, a prominent archaeologist at Vanderbilt University. “The evidence is building up, and it certainly warrants discussion.”

At the height of the last ice age, Stanford says, mysterious Stone Age European people known as the Solutreans¹ paddled along an ice cap jutting into the North Atlantic. They lived like Inuits, harvesting seals and seabirds.

The Solutreans eventually spread across North America, Stanford says, hauling their distinctive blades with them and giving birth to the later Clovis culture, which emerged some 13,000 years ago.

When Stanford proposed this “Solutrean hypothesis” in 1999, colleagues roundly rejected it. One prominent archaeologist suggested that Stanford was throwing his career away.

But now, 13 years later, Stanford and Bruce Bradley, an archaeologist at England’s University of Exeter, lay out a detailed case — bolstered by the curious blade and other stone tools recently found in the mid-Atlantic — in a new book, “Across Atlantic Ice.”

“I drank the Solutrean Kool-Aid,” said Steve Black, an archaeologist at Texas State University in San Marcos. “I had been very dubious. It’s something a lot of [archaeologists] have dismissed out of hand. But I came away from the book feeling like it’s an extremely credible idea that needs to be taken seriously.”

¹ The Solutrean culture is "upper Paleolithic, from around 22,000 to 17,000 BP (PB=before present). Solutrean culture was preceded by Gravettian and succeeded by Magdalenian cultures.

Other experts remain unconvinced. “Anyone advancing a radically different hypothesis must be willing to take his licks from skeptics,” said Gary Haynes, an archaeologist at the University of Nevada-Reno.

At the core of Stanford’s case are stone tools recovered from five mid-Atlantic sites. Two sites lie on Chesapeake Bay islands, suggesting that the Solutreans settled Delmarva early on. Smithsonian research associate Darrin Lowery found blades, anvils and other tools found stuck in soil at least 20,000 years old.

Displaying the tools in his office at the National Museum of Natural History, Stanford handles a milky chert blade and says, “This stuff is beginning to give us a real nice picture of occupation of the Eastern Shore around 20,000 years ago.”

Further, the Eastern Shore blades strongly resemble those found at dozens of Solutrean sites from the Stone Age in Spain and France, Stanford says. “We can match each one of 18 styles up to the sites in Europe.”

In 2007, Lowery, who also teaches at the University of Delaware, was hired by a landowner to survey property on Tilghman Island, Md., at a place called Miles Point. Almost immediately, Lowery saw a chunk of quartzite jutting out of a shore bank. It was an anvil, heavily marked from repeated beatings, a clear sign that it was used to make stone tools. Lowery dated the soil layer holding the anvil and other stone tools with two methods, radiocarbon dating and a newer technique, optical stimulated luminescence. Both returned an age of at least 21,000 years.

“We were like, geez what the hell is going on here?” Lowery said.

Another site, 10 miles south, Oyster Cove, yielded more Stone Age artifacts. Those too, came out of soil more than 21,000 years old.

Lowery published the finds in 2010 in *Quaternary Science Reviews*, but the report made nary a ripple in the conservative world of archaeology, where new ideas tend to progress at a glacial pace. “People are going to think we’ve clearly gone off our rocker here,” Lowery remembers musing.

One problem: The ancient dates came from the soil, not the artifacts themselves.

“It’s an indirect date,” Dillehay said. “You need a feature like a hearth or something that’s clearly human. But it’s still suggestive.”

In 2008, Lowery toured a tiny museum on Gwynn's Island, Va., at the southern end of the Chesapeake. He asked the curator if the museum had any stone tools. They did: The eight-inch blade, displayed next to a bit of mastodon tusk and a molar, recovered by the Cinmar.

Lowery immediately called Stanford. "He got real excited," Lowery said.

Lowery also contacted the Cinmar's captain, Thurston Shawn. The tusk and blade were so unusual that Shawn had made a point of marking the spot on his charts. It was 60 miles east of the Virginia cape, in 240 feet of water. At the end of the last ice age, when the oceans were low, that spot was land, on the coast.

Stanford carbon-dated the mastodon to 22,760 years old. He and Bradley — two of the world's foremost stone tool experts — also scrutinized the blade. It had not been smoothed by wave action or tumbling. They concluded the blade had not been pushed out to sea but had been buried where the Cinmar found it.

"My guess is the blade was used to butcher the mastodon," Stanford said. "I'm almost positive."

But some question the meaning of the find.

"I'm not going to hang a completely novel interpretation of the peopling of the Americas from something dredged off the sea bottom 40 years ago and not properly documented," said David Meltzer, an archaeologist at Southern Methodist University.

Stone tools recovered from two other mid-Atlantic sites — Cactus Hills, Va., 45 miles south of Richmond, and Meadowcroft Rockshelter, in southern Pennsylvania — date to at least 16,000 years ago. Those tools, too, strongly resemble blades found in Europe.

Little is known about the Solutrean people. They lived in Spain, Portugal and southern France beginning about 25,000 years ago. No skeletons have been found, so no DNA is available to study.

But the Solutreans did leave behind rock art, which showed a diamond-shaped flat fish in delicate black etchings. It looks like a halibut. A seal also appears, an arrow-headed line stabbing through it.

Stanford contends that the art proves that the Solutreans built boats — halibut are deep-sea fish — and knew how to survive at the edge of an ice cap that drooped deep into Europe.

“The reason people don’t like the Solutrean idea is the ocean,” he said. No Solutrean boats have been found. But given that people arrived in Australia some 60,000 years ago — and they didn’t walk there — wood-frame and seal-skin boats were clearly possible, Stanford argues.

His idea faces another challenge: At the end of the last ice age, the polar ice cap may not have extended all the way across the Atlantic, leaving iceberg-strewn gaps of open water for the Solutreans to navigate as they headed West for unknown reasons.

Meltzer is among those still skeptical of the Solutrean hypothesis, citing the scant evidence. “If Solutrean boat people washed up on our shores, they suffered cultural amnesia, genetic amnesia, dental amnesia, linguistic amnesia and skeletal amnesia. Basically, all of the signals are pointing to Asia” as the origin of the first Americans.

Since the 1930s, archaeologists have favored a single migration from Siberia to Alaska as the epic event that peopled the Americas about 13,000 years ago. Stone tools found at Clovis, N.M., and elsewhere, suggested that a single culture spread across much of the continent. This “Clovis first” idea became entrenched.

But starting in the 1990s, archaeologists dated sites in Texas, Chile and the mid-Atlantic region to pre-Clovis times. Few archaeologists accepted those dates at first, said Michael Collins, an archaeologist at Texas State.

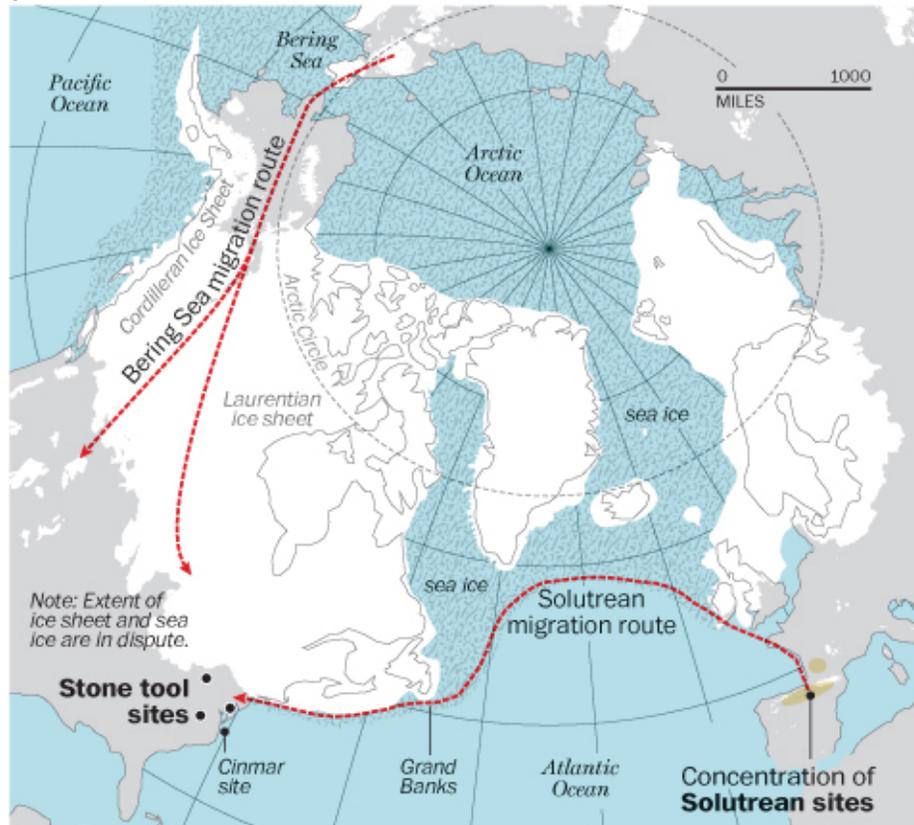
“People learned it in college and built careers on ‘Clovis first,’” Collins said. “They’re unwilling to turn it loose.”

But now they might have to adopt Stanford’s Europe-first slogan: “Iberia, not Siberia.”

However, Stanford acknowledges that his evidence is scant. He calls the Solutrean hypothesis “a skeletal idea.” And he worries that a rising sea might have washed away compelling evidence.

Later this spring, Stanford plans to take a boat to the Cinmar site, where he will dredge for more clues to an ice-age journey that just might have been the first voyage to America.

An established theory says the first Americans walked across the Bering Sea about 13,000-15,000 years ago. But stone tools found in the mid-Atlantic suggest an arrival from Europe about 20,000-22,000 years ago. The tools match those made by the mysterious Solutrean people of ice-age Iberia.



INSTRUCTIONS: After writing out the class heading, write two citations for the article. Then skip one line and answer the following questions in complete sentences. Please skip one line between each answer.

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1. Where are the Smithsonian Institute and the University of Exeter located? What do these institutions have in common? (One person may volunteer to find the locations of the Smithsonian and Exeter by doing a Google search.)
2. Describe the "rediscovered prehistoric slasher".
3. Explain why "the mastodon relic" is causing archaeologists to rethink the peopling of North America.
4. What is the time period of Solutrean culture? What culture did Solutrean succeed and what culture did Solutrean precede? (The answers are not in the reading. See: <http://en.wikipedia.org/wiki/Solutrean>)
5. In what ways were the Solutrean similar to the Inuit? Using "Unique Cultures Develop in different Geographic Regions," (Chapter 6, Section 3, World History), develop a further inferential description of the life of Solutrean culture.
6. Using evidence "spread across North America," identify the culture that archaeologists believe the Solutrean culture "[gave] birth to."
7. Explain the "Solutrean hypothesis".

8. Identify the book which helps to explain the "Solutrean hypothesis".
9. In what way is the Solutrean hypothesis "a radically different hypothesis"?
10. Make a list of the "tools recovered" on "Chesapeake Bay islands".
11. What evidence "strongly" supports the Solutrean hypothesis? (Hint: Spain and France)
12. Identify the "two methods" of dating the stone tools found on one of the Chesapeake Islands.
13. What is the approximate age of the artifacts found on the Chesapeake Islands?
14. What is the "pace...of new ideas...in the conservative world of archaeology"?
15. In what way was the coast line of Virginia "[a]t the end of the last ice age" different than the coast line of Virginia today?
16. Why "don't...people...like the Solutrean idea"?
17. In what decade of the Twentieth Century did the "'Clovis first' idea bec[o]me entrenched"?
18. In what way did the Clovis first idea become questioned "in the 1990s"?
19. What is "Stanford's Europe-first slogan"?
20. On the provided world map, draw in the glacial maximum boundary (Solutrean migration route); label Iberia and the Cinmar site.
21. Using past knowledge, draw on the provided map the route of the established theory of migration to the Americas (please begin in Africa).
22. In one paragraph, explain why the Solutrean hypothesis is controversial. Do you find the Solutrean hypothesis controversial? Please explain your answer.
23. Identify which of the five themes applies to the article and explain why you think that the themes apply