

Clovis people used Great Lakes camp annually about 13,000 years ago, researchers confirm

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Independent researcher Thomas Talbot and University of Michigan archaeologists have found more than 20 Clovis tools and hundreds of pieces of manufacturing and refurbishment debris at the Belson Clovis Site in St. Joseph County. Credit: Daryl Marshke/Michigan Photography

The earliest humans to settle the Great Lakes region likely returned to a campsite in southwest Michigan for several years in a row, according to a University of Michigan study.

Until recently, there was no evidence that people from the Clovis period had settled the Great Lakes region. The Clovis people appeared in North America about 13,000 years ago, during the geologic epoch called the Pleistocene. During the Pleistocene, sheets of glaciers covered much of the world, including Michigan, making the land inhospitable for human settlers. But a 2021 U-M study confirmed that Clovis people built a camp, now called the Belson site, in southwest Michigan.

Now, the same researchers have confirmed that Clovis people traveled to the site annually, probably in the summer, for at least three but likely up to five consecutive years, according to Brendan Nash, lead author of the study and a doctoral student of archaeology. Tools from the site also show evidence that the settlers' diets included a wide variety of animals, ranging from rabbits to musk ox. The team's results are [published](#) in the journal *PLOS ONE*.

At the Belson site, the researchers discovered tools that were made with a type of stone called chert from what is now western Kentucky, about 400 miles from the Belson site. These tools were then resharpened at the Belson site, leaving behind small pieces for researchers to analyze.

Thomas Talbot, an independent researcher who discovered the first Clovis point at the Belson site in Mendon, Michigan, in 2008, also conducts the group's chert analysis. He discovered some of these chert pieces were from Paoli chert, which formed in northeastern Kentucky.

"It took me a year to identify it, and when I did, it was very surprising," Talbot said. "Then we found a broken base, which we call a diagnostic. The broken base was made from that Paoli material. Once you read the paper and look at the data and maps, there are some patterns that are starting to emerge that are pretty cool."

The tools made in what is now Kentucky were traded to people in central Indiana, who then carried them to the Belson site. Nash says this suggests that the people who settled on the Belson site likely moved there during summers and lived in central Indiana during the winter. They in turn likely traded for the tools from western Kentucky from people who moved from central Indiana to Kentucky on yearly routes.

"In this way, people formed 'links in a chain' with yearly routes that likely connected the whole continent, from Michigan to Mexico," Nash said. "This is likely why technology from the Clovis period is so similar throughout most of North America."



St. Joseph County resident and independent researcher Thomas Talbot found each half of this Clovis spear point 20 years apart. Credit: Daryl Marshke/Michigan Photography

The Clovis period is characterized by distinctive spear points. The points have a very characteristic central channel through the length of the tool, called a flute. A Clovis person would have used this channel as a place to attach a shaft to the spearhead, creating a composite hunting weapon—a spear that was used to hunt prey of all sizes. Also distinctive to the Clovis people is that they struck large flakes of material off the stone to create their points. The large, detached pieces had razor-sharp edges and would be used as expedient knives themselves.

It is currently unclear where in the Americas Clovis technology was invented, but once it was, it spread quickly, according to archaeological standards. Researchers think they are one of the earliest groups of people to settle the Americas, and prior to the 2021 study, Clovis technology had not been reported from the Great Lakes region.

Talbot found the first Clovis point on the Belson farm field in 2008. He recognized it as a Clovis point both from its [distinctive shape](#) and that it was made of Attica chert, a kind of stone found 120 miles from the Belson site, in western Indiana and eastern Illinois. Talbot confirmed his findings with U-M archaeologist Henry Wright.

Wright and Talbot visited the site in 2017, finding finished tools and small flakes of Attica chert, which made them suspect people had lived at the site rather than simply dropping a point or tool cache as they were passing through. Talbot, Wright and Nash's 2021 study described the

surface sampling of the site.

The current study examines excavations of buried flakes—chips off of stone created when the Clovis people were resharpening, or creating, their points—and multiple tools buried in less disturbed sediment beneath the plowed surface layers of the field.

The researchers examined three of the dozens of discovered stone tools for traces of protein. They found evidence of [musk ox](#), caribou or deer, hare and peccary, a Pleistocene relative of the pig. The hare and peccary protein came from the same Clovis point, according to Nash.

"Taken together, the ancient protein data suggests that these people had a broad spectrum diet, eating a wide variety of animals," Nash said. "Our findings are contrary to the popular notion that Clovis people were strictly big game hunters, most often subsisting on mammoths and mastodons."

Nash says the Clovis people would have also eaten plants, but plant material does not show up on protein tests, and unlike animal bones, their remains don't typically last for 13,000 years.

"This site teaches us about a way of life lost to time," Nash said.

"Through the sourcing of stone and the styles of tools, we are tracking a group of people as they live and travel across the Pleistocene landscape of the American Midwest."

In addition to Wright and Talbot, study co-authors include former U-M graduate student Elliot Greiner and Linda Scott Cummings of the PaleoResearch Institute in Colorado.

More information: Brendan Nash et al, Clovis organizational dynamics at a Late Glacial campsite in the central Great Lakes: Belson

site excavations 2020–2021, *PLOS ONE* (2024). [DOI: 10.1371/journal.pone.0302255](https://doi.org/10.1371/journal.pone.0302255)

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