

Study looks at early Navajo use of smoke signals

May 16 2009, By SUSAN MONTOYA BRYAN , Associated Press
Writer

(AP) -- Archaeologists and volunteers armed with special flares will fan out over part of the Four Corners region on Saturday to study how early Navajos could have used smoke signals to warn against invaders.

There are more than 200 pueblitos - usually high on rock outcroppings overlooking the San Juan Basin - that [archaeologists](#) believe were built by Navajos three centuries ago to protect against Spanish explorers and neighboring tribes.

"If you hear an enemy approaching, you climb into these things and pull up the ladder, and you can seal yourself in for a while," said Ron Maldonado, program manager of the Navajo Nation Historic Preservation Department.

The sites in the area where New Mexico, Arizona, Colorado and Utah meet feature the remains of what were once formidable structures made of stacked sandstone. The theory is that Navajos bunkered down inside the pueblitos and possibly used smoke to send warnings across long distances, said Jim Copeland, an archaeologist with the Bureau of Land Management in Farmington.

Copeland said experiments in the early 1990s showed the method of warning could work in general, but scores of new sites have been identified since then and scientists want to know more about how the signals could have been relayed. Improved computer modeling and

analysis has refined the idea of an "early warning system."

"We're still trying to confirm long distance and questionable views," Copeland said. "A lot of them are kind of no-brainers. You can pretty much see from A to B, but A to C was sort of questionable and that's the kind of thing we want to test."

The volunteers planned to reach some of the remote defensive sites by noon Saturday. Their mission: To set off their smoke signals and scan the horizon for other columns of smoke.

Much of the Four Corners area is known as Dinetah, the ancestral homeland of the Navajos. The tribe's traditional creation story centers on the area.

"The Dinetah essentially is the emergence place of the Navajo," said Ron Maldonado, program manager of the Navajo Nation Historic Preservation Department.

Tree-ring dating shows most of the sites are from the early 1700s, said Patrick Hogan, associate director of the University of New Mexico's Office of Contract Archaeology. He researched the sites during the early 1990s, when oil and gas development began to boom and archaeological surveys became necessary.

Overall, Hogan said, researchers are interested in better understanding the early social organization of the Navajos and the connections between their communities.

"One way to think about linking these larger communities is which defensive sites have line of sight to each other," he said. "They aren't going to have line of sight to all of them. They're going to be in clusters, and those clusters might give us a basis for then defining larger

cooperating groups."

While more than 200 defensive sites have been documented, Copeland said he's certain that others are out there, collapsed and hidden under centuries of sand and brush.

"Until you walk up on it or someone points you in that direction, it's just sitting out there waiting," he said.

The sites that are part of the smoke signal experiment are on land managed by the BLM, Copeland said.

Bureau of Land Management: <http://www.blm.gov/nm/st/en.html>

©2009 The Associated Press. All rights reserved. This material may not be published, broadcast, rewritten or redistributed.

Citation: Study looks at early Navajo use of smoke signals (2009, May 16) retrieved 2 July 2024 from <https://phys.org/news/2009-05-early-navajo.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--