

Karen Telleen-Lawton: Who Were the First Californians?

Research on the Channel Islands suggests the Chumash were direct descendants



Chumash arrive at Santa Cruz Island after rowing from the mainland aboard a traditional tomol. (Karen Telleen-Lawton / Noozhawk photo)

By Karen Telleen-Lawton, Noozhawk Columnist | [Published on 07.23.2012 6:12 p.m.](#)



Traipsing around the [Channel Islands](#) for the [Channel Islands Naturalist Corps](#), I help visitors understand the effects of isolation on the botany, archaeology and history of the islands. Even with full summer campgrounds, the islands feel isolated, but they are always an active locus of research. Scientists study everything from kelp health to the recovery of native species.

Now, there's progress on a front that has piqued my curiosity over the years. Who were the first Californians, whose traces are boldly evident on the islands?

The oldest human remains found in North America — a 13,000-year-old skeleton dubbed [Arlington Springs Man](#) — was discovered on [Santa Rosa Island](#) in 1959. Recent radiocarbon dating of pygmy mammoth fossils in the same area suggests that the diminutive mammoths may have been present at the time the first humans arrived.

The [Chumash](#) creation story takes place on the Channel Islands, including a description of how islanders crossed a rainbow bridge to the mainland when their population expanded. About 5,000 Chumash now live in the Santa Barbara area. Some trace their ancestry back to Swaxil, the village that stood where Scorpion Anchorage is now.

But are the Chumash the direct descendants of the earliest Californians? New research suggests the answer is yes.

[Geneticist David Reich of Harvard Medical School](#) led an international team comparing thousands of genetic variations among 52 contemporary Native American populations to 17 Siberian groups. Their comprehensive analysis explored common ancestry across thousands of years.

“Genetic evidence showed that the ‘restless Ice Age nomads’ arrived in three waves beginning about 15,000 years ago or more,” according to a [U.S. News Report by Robert Hotz](#).

The research provides evidence that all Native Americans share some genes from the large first wave. The Eskimo-Aleut Arctic population also includes genes from

a second wave, and the Na-Dene-speaking Chipewyan people of Canada show genetic mixing with a third wave. The two later waves, possibly a few centuries after the first, are more closely related to today's Han Chinese than the Siberian population.

The Western Hemisphere migrations have long been the interest of archaeologists, linguists and anthropologists working with language clues, bits of weapons and butchered animal bones. For example, a study announced this month analyzing spearheads and coprolites (dried feces) in an Oregon cave suggests that two cultures with distinct technologies lived contemporaneously in the New World. But in recent years progress has been made along different lines of molecular biology, population genetics and bioinformatics (applying high-speed computers and statistics to biological problems).

As the dating of the first human migrations is pushed further back into the last Ice Age, the probable method of migration has changed from the Beringia land bridge to coastal migration by boat. Some researchers now refer to the “kelp highway,” which seafarers may have followed along the eastern Pacific coast, utilizing the rich marine resources available in kelp.

From the Beringia land bridge to the Chumash rainbow bridge to the “mobile bridges” that power boats provide for modern people, we are always exploring. Modern science is also building new bridges, enabling us to explore our past. With luck and foresight we can forge new understanding about how to live sustainably on this Earth, our island home.

— *Karen Telleen-Lawton's column is a mélange of observations spanning sustainability from the environment to finance, economics and justice issues. She is a fee-only financial advisor (www.DecisivePath.com) and a freelance writer (www.CanyonVoices.com).*