

REINTERPRETING AN ANCIENT ISLAND



DESIREE MARTINEZ

Students survey the hills above the USC Wrigley Marine Science Center.

For decades archaeologists have excavated California’s Santa Catalina Island, a place where people intermingled and traded goods over the course of thousands of years. The Pimu Catalina Island Archaeology Project is using ethnographic evidence and sophisticated technology to reevaluate existing data and make new discoveries.

BY LINDA MARSA

“*This* was a series of native settlements where the Tongvas lived for thousands of years,” says archaeologist Wendy Teeter, making a sweeping gesture across a vast expanse of lush ravines and rolling hills deep in the interior of Santa Catalina Island. “But it wasn’t a bunch of separate encampments—this whole canyon was used by the people who lived here.”

We’re standing on a flat patch of land on a high ridge that runs almost the length of the island, which is 26 miles off the coast of Los Angeles. The rugged terrain is home to thousands of unique native plants and animals, and most of the interior remains largely unchanged since the Pimu people, who were the ancestors of the Tongva, called the 76-square mile island home.



Wendy Teeter (right) and several students record rock art located in one of the island's many drainages.

We had driven up here one hazy Saturday morning, rattling along rock strewn dirt roads with vertiginous drops on the edges of the canyons, inching our way up to the pinnacle of the 1,600 foot incline, far above the bustle of the thousands of tourists who flock to the quaint seaside town of Avalon 10 miles away. But only a handful of them venture into the 42,000-acre interior, which is strictly controlled by the Santa Catalina Conservancy, a private nonprofit founded in 1972 by the Wrigley Family—the chewing gum magnates who bought the island in 1919—to preserve its natural beauty.

There are more than 40 soapstone quarry outcrops in this valley alone and another 150 or more scattered across the island, Teeter tells me, as she points to a large gray boulder that's flecked with white streaks and still bears the tool marks where natives chipped off chunks of soapstone to create bowls, grinding stones, and other utensils. The outcropping is so well preserved it could have been chiseled yesterday instead of hundreds, perhaps even thousands, of years ago. "You can still see the tool marks. The ancient inhabitants apparently noticed this was easy to carve and it also has asbestos, so it's a high conductor of heat."

The sheer density of the mining activity on this outcrop and others in the valley suggests it had been a communal production area site that, according to ethnographic evidence, was also used by people from neighboring regions. "We

informally call this the 'industrial complex' area because there's nothing but manufacturing going on here," Teeter says. "The whole valley is made up of soapstone." The soft Catalina soapstone, which is composed primarily of talc, was likely highly prized because it didn't crack when put on an open fire. The Pimu people traded the sturdy bowls fashioned from these stones to people on neighboring islands and villages on the mainland.

Called Pimu or Pimungna by the original inhabitants, Santa Catalina is one of three southern Channel Islands, which include Kiiikepar (San Clemente) and Xaraashnga (San Nicolas), that the Tongvas' ancestors first inhabited at least 8,000 years ago. Archaeological evidence indicates that, in addition to settlements on the mainland, they had villages all over Catalina, the largest of which sat on natural bays. By the time the Europeans arrived in the mid-1500s, it

is estimated that about 2,000 to 3,000 people lived on the island, which was part of an extensive trade network that extended throughout the American Southwest and as far north as Oregon.

In addition to soapstone items, the Pimu people traded dried fish, marine mammal pelts and meat for mainland goods like furs, skins, seeds, and obsidian, according to René Vellanoweth, an archaeologist at California State University, Los Angeles. They used large canoes, called ti'ats, which were made of redwood planks and lashed together with plant fibers, to carry up to 30 people to the other Channel Islands and across the Pacific to the mainland.

Teeter, who is curator of archaeology at UCLA's Fowler Museum, has co-directed the Pimu Catalina Island Archaeology Project (PCIAP) since 2007. She and the PCIAP team, which includes descendants of the first people who lived here, have embarked on a herculean task. They're doing an exhaustive analysis that incorporates and reevaluates past work done by other archaeologists—"We have all these sites, but they're not well defined," says Teeter—and they're augmenting this with their own extensive research that includes discovering hundreds of new sites.

Since the 1890s, various archaeologists have found more than 2,000 sites on Catalina, but much of the research focused on coastal villages and their connections to the

mainland. “We know relatively little about the island because the work that has been done was sporadic and there’s a big black hole in our knowledge of Catalina’s archaeological record because all these disparate pieces of information haven’t been synthesized,” says Vellanoweth, who has done extensive excavations on nearby San Nicolas Island, but is not part of the PCIAP. “Teeter and her team are in the initial stages of doing exactly that.”

“The PCIAP envisioned bringing together multiple disciplines and different communities to understand the past in a more holistic and scientifically rigorous way,” according to Teeter. Toward that end, the researchers have adopted what is called an indigenous archaeology approach, partnering with descendant communities to interpret the archaeological record with the help of ethnographic accounts and oral histories gathered from Southern California tribes with traditional connections to the Channel Islands. “The project was first conceived with members of the Tongva community who were interested in a less pre-conceived notion of the past that incorporated some of their traditional explanations of their past as hypotheses,” Teeter says. Informed by ethnographic, archaeological, and environmental data, the researchers’ ultimate goal is to paint a more complete picture of what daily life was like for the Pimu people over time.

PCIAP co-director Desiree Martinez, an archaeology doctoral student at Harvard and a member of the Tongva tribe, notes that “because my community was under missionization, we’ve lost a lot of that history and knowledge. But there are stories, not only within our community, but also in other tribal communities, about the specialness of Catalina. We’d like to link these stories to what we’re seeing in the archaeological record.”



Intricate designs are often found carved on soapstone plaques such as this one housed in the Catalina Island Museum.



Native American student Priscilla Naylor inspects an artifact while surveying near Two Harbors.

Several miles away from the airport, 19 students who are participating in a field school sponsored by California State University, Northridge, sit hunched over workbenches in a classroom at the USC Wrigley Marine Science Center. They laboriously go through zip lock plastic bags containing bone fragments, shells, and other artifacts that have been unearthed over the past century by other archaeologists. The students identify, label, and catalogue these items, which are part of the Catalina Island Museum’s collections. Teeter notes that five students are doing master’s theses that focus on their analyses of the artifacts.

The museum also houses some of the artifacts found by the notorious amateur archaeologist Ralph Glidden, who was hired by George Gustav Heye in 1919-20 to recover items that would be displayed in Heye’s Museum of the American Indian. Glidden excavated hundreds of sites on the island between 1919 and 1928, digging up cemeteries that contained numerous human skeletons as well as thousands of artifacts, including mortars and pestles used for preparing food, cooking stones, bone and stone knives, arrowheads, war clubs, and fishhooks. He displayed some of them in a makeshift museum that was a sensationalized



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Students identify some of the artifacts in the Catalina Island Museum's archaeology collections.

tourist attraction in the first half of the 20th century.

Organizing and analyzing all this material from past excavations helps the researchers to better understand the island's past. This information is put into a computer database that will also be available to other researchers. "There's a long history of archaeological research on Catalina where there was more collecting going on than report writing, and inventories and catalogues have been lost over time, or were simply sitting in the back rooms of museums or collections and were just overlooked," says Karimah Kennedy Richardson, a staff archaeologist for the Autry National Center/Southwest Museum of the American Indian and the PCIAP's third co-director. "Synthesizing and cataloguing all this information gives us a better idea of what we have." Kennedy Richardson and her colleagues are also combining this information with data from Tongva sites on the other Channel Islands and the mainland in order to get a regional picture of the lives of the ancestral Tongva.

What they've discovered so far upends some long held beliefs about the island's original inhabitants and their settlement patterns. The density of the settlements has surprised the archaeologists. Virtually none of the island lacks evidence of human occupation. The Pimu people also appear to have been more sophisticated than was previously thought. It had been assumed by cultural ecologists that, as their population increased, the Pimu people depleted their food supply, which consisted primarily of seafood, and were struggling to survive.

But the PCIAP researchers have found sufficient remains of seafood, as well as edible plants, which date throughout

the island's occupation, to suggest the Pimu people had an adequate supply of food. Furthermore, analysis of the human bones recovered by Glidden suggests they were healthy and active. "You see the thickening of the bones, where the muscles attach, and they have a much more robust skeleton, and tend to be a little huskier as compared to our modern skeletons," says Martinez. "My ancestors were able to run and climb up and down the hills without a second thought; their skeletons show that. As a modern people we see a hill and it takes us forever to climb. Our project is showing that these heights and distances were not seen as an obstacle to the Pimu ancestors."

With the help of the Catalina Island Conservancy's environmental scientists and the native community, the archaeologists have also found evidence that the Pimu people practiced simple horticulture, growing trees and plants they imported from the mainland that better suited their needs than the indigenous varieties. For example, Catalina is dominated by the island scrub oak, whose acorn is small and has tannic acid that must be leached before eating. So the Pimu people brought over the seeds of a Valley Oak from the mainland and began to harvest its much larger and tastier acorns for food. Indian tobacco, which is identified as a medicinal plant and was apparently used in ceremonies on Catalina, was also brought over from the mainland, as were plants that were particularly good for weaving baskets.

Using information from their own survey work, the archaeologists are incorporating the natural environment—the modern locations of springs, stone outcrops, and the general topography—into their analysis, something that the

previous researchers, to Teeter's surprise, apparently didn't do. This information is fed into a geographic information system (GIS) program that also includes the archaeological data generated by the PCIAP and earlier researchers. "We're looking at the trails and pathways and the landscape alterations that link people and resources, and how these connections were constructed and maintained," she says.

The archaeological literature, which focuses on the coasts and travel by boat, gives the impression that the Pimu people "never walked," says Teeter. But given that soapstone trade goods were produced in the interior, they had to be transported to the coast somehow. To determine how, and where, the goods were transported, the archaeologists are using an analytical model called least-cost path that assumes people will take the easiest route to get from point A to point B. Having identified, say, a soapstone quarry in Catalina's interior (point A), they query the GIS database to determine the easiest way to get to the nearest bay (point B), from which soapstone goods would have been conveyed to other islands or the mainland. Once the GIS gives them the least-cost path, they can determine if the Pimu people did in fact take this route centuries ago by surveying it for artifacts.

Employing this approach, the archaeologists have discovered a prehistoric trail, with a number of associated middens, under a paved road that ran from a soapstone quarry to a bay known as Little Harbor. Discoveries like this prove that, contrary to the literature, the Pimu people "walked around the island a lot," Teeter says.

Furthermore, informed by the GIS data, she and her

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Co-director Karimah Kennedy Richardson helps students record a historic hunting lodge that was built on the island in 1898.



LUCIUS MARTIN

PCIAP co-director Desiree Martinez (center right) teaches students about the different types of artifacts found on Santa Catalina.

colleagues have concluded that a number of occupation areas—some of which are separated by as little as about 150 feet—that other archaeologists recorded as separate sites, are in fact individual sites that contain several activity areas. For instance, in cases where previous researchers determined there are two or more sites, though there's only one nearby source of water, it's more likely that these sites were actually different households or areas where various activities took place that were part of a larger site, according to Teeter. The archaeologists have expanded the concept of what constitutes a settlement, says Martinez, "by identifying areas outside the immediate habitation areas that include food processing areas, food gathering area, soapstone quarrying, etc. This acknowledges a landscape approach that is consistent with how the Island Tongva viewed the space that they lived in."

Though the PCIAP is six years old, it's "just getting started," Teeter says. "There are endless questions and endless avenues to explore, but overall it is way more exciting to undertake this adventure collaboratively with descendent communities, environmental scientists, and archaeology."

Linda Marsa is the author of *Fevered: Why a Hotter Planet Will Hurt Our Health and How We Can Save Ourselves*.