



National Park Service  
U.S. Department of the  
Interior

Channel Islands National Park  
1901 Spinnaker Drive  
Ventura, CA 93001

805-658-5700 phone  
[www.nps.gov/chis](http://www.nps.gov/chis)

---

## Channel Islands National Park News Release

November 27, 2017

For Immediate Release

Yvonne Menard, [yvonne\\_menard@nps.gov](mailto:yvonne_menard@nps.gov) 805-658-5725

### Ancient Sea Cow Fossil Discovered on the Channel Islands

Ventura, CA —A fossil of an extinct species of sea cow was discovered on Santa Rosa Island, a new find for the Channel Islands and conceivably one of the oldest of its kind on the west coast of North America with an estimated age between 20-25 million years ago.

Scientists think that the fossilized remains of a skull and partially articulated rib cage may represent a new species of sea cow, an ancient relative of dugongs known as sirenians. They anticipate this to be confirmed when the skull is analyzed by Dr. Jorge Velez-Juarbe, a marine mammal taxonomic expert at the Natural History Museum of Los Angeles County.

The discovery was made by United States Geologic Survey (USGS) scientists Scott Minor and Kevin Schmidt as they were mapping faults on the island on July 17, 2017. The find is located in a steep ravine, exposed to the elements and erosion.

A team of volunteers led by paleontologist Dr. Jonathan Hoffman with the Santa Barbara Museum of Natural History are protecting the specimen for the upcoming winter and planning for an excavation next spring or early summer.

“This sea cow may have only been exposed the past few years after being buried for millions of years,” said Hoffman. “It came from a different place and a different time period.”

Scientists believe the sea cow lived in shallow seas when the island’s coastal landscape was situated hundreds of miles south of its current location. Over the course of millions of years the Pacific Plate, the crust on which the land rests, migrated north and rotated, eventually uplifting the ancient sea floor to its current position nearly 1,400 feet above sea level.


The scientific team plans to analyze the sea cow’s skull shape and features to identify its relationship to other sirenians. They hope to find teeth remains, pay dirt used to detect the diet and age of the specimen. Sea cow teeth tend to be heavily worn due to the sand they ingest when feeding on seagrass, their primary food source.

To refine the era in which the sea cow lived, the team has collected marine microfauna fossils (snails, clam shells, and crustacea) within the surrounding rock strata for USGS experts to study. They will

---

**EXPERIENCE YOUR AMERICA**

The National Park Service cares for special places saved by the American people so that all may experience our heritage.



also search for carbon fragments in the fossil rock that could yield valuable information about the sirenian's environment.

The remnants of at least four other sea cow fossils from different individuals were also found in the near vicinity. Samples have been collected to preserve the significant scientific information they may yield.

Sirenians or sea cows are torpedo-shaped aquatic mammals that live in shallow waters and grow to be massive in size, up to 10 feet in length. In some parts of the world their fossil records date back to 50 million years ago.

At one time there were over a dozen different genera of sirenians, a name derived from the mermaids of Greek mythology. The cause of their decline is unclear but may be linked to changes in food availability and environmental and oceanographic conditions.

Their modern relatives include three manatee species and the one remaining direct relative, the dugong, found in the warm waters of the Pacific Ocean and the east coast of Africa. The last remaining dugong on the west coast of North America, the Stellar's sea cow, was hunted to extinction by humans in the 1760s.

This publication is available online at: [www.nps.gov/chis/parknews/newsreleases.htm](http://www.nps.gov/chis/parknews/newsreleases.htm)

- NPS -