



The Story of the Sea Otter in Chile

Daniel Cáceres

Report 1 of 3



Report 1

Past

The first mammals appeared over 150 million years ago during the Triassic-Jurassic period, but at that time, all were terrestrial. It wasn't until 60 million years ago that the first marine mammals evolved, beginning with cetaceans (whales and dolphins) and sirenians (manatees and dugongs). Fossil evidence suggests that some of these early marine mammals reached as far south as Chile but disappeared with the onset of the cold Humboldt Current.

The last group of marine mammals to evolve were mustelids, which include otters. This group appeared about 15–18 million years ago, with species gradually adapting to semi-aquatic and eventually marine environments. The modern sea otter lineage, including *Lontra felina*, originated less than a million years ago from its ancestor *Lontra provocax*.

The chungungo, or marine otter, became an entirely marine species after the formation of the Isthmus of Panama around 3 million years ago. Unlike most other otter species that rely on freshwater ecosystems, *Lontra felina* adapted exclusively to saltwater environments. It is one of the smallest marine mammals, weighing a maximum of 5 kg and measuring just over 1 meter from head to tail. It has short limbs, strong claws, and webbed feet that make it a highly efficient swimmer.

The species is found along the coasts of Chile and, to a lesser extent, Peru, inhabiting the rocky shores of the Humboldt Current System. Chungungos spend over 70% of their time searching for food, diving up to 40 meters deep to hunt crustaceans and fish. However, their foraging is not always successful, making their survival dependent on the health of their coastal ecosystems.

As a keystone species, the chungungo plays a crucial role in maintaining the balance of marine ecosystems. It helps regulate populations of prey species like crustaceans and fish, preventing overgrazing of kelp forests and sustaining biodiversity.

The evolutionary path of the chungungo is tied to other otters:

- *Lontra canadensis* evolved in North America.
- *Lontra longicaudis* appeared after the formation of the Panama Isthmus, expanding into South America.
- *Lontra provocax* developed in southern regions, eventually giving rise to *Lontra felina* less than 1 million years ago.



Humans arrived in the Americas 15,000–20,000 years ago, reaching Chile around 15,000 years ago. Early coastal communities relied on marine resources, including marine otters. Rock carvings and archaeological evidence suggest that marine mammals, including sea otters, were regularly hunted for food and materials.

Ancient populations viewed animals first as divine beings, later as equals, and eventually as mere resources. Sea otters were not only hunted for their meat but also for their fur and used in fishing practices. The Spanish arrival in the 16th century intensified the exploitation of marine fauna, as European markets demanded sea lion skins, whale oil, and eventually otter pelts.

In 1782, the Chilean Jesuit naturalist Ignacio Molina scientifically described the chungungo (*Lontra felina*), officially introducing it to the scientific community. Despite this recognition, commercial hunting continued until the 20th century, when conservation efforts finally began.

When Charles Darwin visited Chile in 1834, he did not specifically mention seeing a chungungo but noted the region's rich marine biodiversity. At the time, scientific understanding of evolution and ecological relationships was still limited.

In 1950, Chile's Ministry of Economy issued Supreme Decree No. 751, officially banning the hunting of chungungos. While this was a crucial step in preventing their extinction, habitat loss and other human pressures have continued to threaten the species.

This Darwin Leader project was made possible by:



www.instagram.com/cemm_chile/

Thanks to all partners and sponsors that made the DARWIN200 2023-25
Global Voyage Possible.

www.darwin200.com/sponsors



zero
six
zero