

## Penguins and sea lions help produce new atlas

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Southern elephant seals were fitted with GPS collars to help provide data for the new atlas. Credit: Valeria Falabella?Wildlife Conservation Society

Recording hundreds of thousands of individual uplinks from satellite transmitters fitted on penguins, albatrosses, sea lions, and other marine animals, the Wildlife Conservation Society (WCS) and BirdLife International have released the first-ever atlas of the Patagonian Sea - a globally important but poorly understood South American marine ecosystem.

The atlas contains the most accurate maps ever assembled for this ecosystem revealing key migratory corridors that span from coastlines to deep-sea feeding areas off the continental shelf hundreds of miles away.



Data for the atlas was gathered by a team of 25 scientists working over a 10-year period - many of them supported by the National Research Council of Argentina (CONICET). The team tracked 16 species of marine animals, which produced some 280,000 individual uplinks of data over the Patagonian Sea, a huge area ranging from southern Brazil to southern Chile.

Called Atlas of the Patagonian Sea: Species and Spaces, the 300-page book was edited by Valeria Falabella and Claudio Campagna of the Wildlife Conservation Society, and John Croxall of Birdlife International.

The atlas, which is in English and Spanish, will be used to help inform potential policy decisions in the region such as managing fisheries and charting transportation routes of oil tankers. This vast region, which spans 3 million square kilometers (1.1 million square miles), is becoming increasingly threatened by burgeoning development and overfishing.

"This unprecedented atlas was essentially written by the wildlife that live in the Patagonian Sea," said Dr. Claudio Campagna who runs the Wildlife Conservation Society's "Sea and Sky" initiative. "The atlas helps fill in many gaps of knowledge and should serve as a blueprint for future conservation efforts in this region."

"This is an exceptional collaborative achievement; now that we know where some of the region's most important marine areas are, they need to receive appropriate protection and management," said John Croxall, Chair of BirdLife's Global Seabird Programme.

The atlas underscores the need to establish a new network of marine protected areas that would include open-sea environments that are linked to key coastal areas. Many of the species tracked travel vast distances between coastal breeding grounds and feeding areas. For example,



satellite data revealed that southern elephant seals travel more than 10,000 kilometers (6,200 miles) during an average season at sea, and an additional 10,000 kilometers in repeated vertical dives for food.

"The Patagonian Sea is a remarkable intersection of global physics, marine biodiversity, and climate and economic change," said Dr. Steven E. Sanderson, President and CEO of the Wildlife Conservation Society. "The Atlas of the Patagonian Sea will advance conservation of this region and can serve as a roadmap for the creation and management of future marine protected areas - of which there are precious few worldwide."

The list of species tracked for the atlas includes five species of albatross, three species of petrel, four varieties of penguin, two fur seal species, the South American sea lion, and the southern elephant seal.

The completion of the Atlas of the Patagonian Sea is due in large part to the generosity and long-standing support of the Liz Claiborne and Art Ortenberg Foundation for the WCS "Sea and Sky" initiative. Additionally, WCS's conservation work in this region has been supported by the Mitsubishi Foundation for the Americas and Mr. and Mrs. James M. Large, Jr.

Source: Wildlife Conservation Society (<u>news</u> : <u>web</u>)

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