

How winter storms stress San Luis Obispo County elephant seals in the midst of birthing season

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The late December morning rain left droplets on Christine Heinrichs'



glasses as she stood among a throng of tourists and watched dozens of elephant seals tussle and sleep on a beach just south of the Piedras Blancas Light Station.

Perched above the seals on a boardwalk viewpoint along Highway 1, Heinrichs pointed out newborn elephant seal pups nestled among their resting mothers, mature adult males fighting for dominance and breeding rights, and juveniles who had likely surrendered after earlier fights.

Heinrichs is one of many dedicated docents with Friends of the Elephant Seal, a <u>nonprofit organization</u> that works to protect and educate the public about the massive pinnipeds, which can grow to more than 4,000 pounds and 13 feet in length.

As she watched, a big wave rushed up the beach, slamming into many of the seals and causing mothers to call out to their pups, who likely hadn't yet been alive long enough to build adequate blubber to withstand the cold water.

At the time, unusually high surf generated by a distant storm was causing massive and destructive waves to crash along California's coast, inundating beaches and flooding streets along the shore.

The ocean conditions were just one of the challenges facing the baby seals in their fight for survival. More of the youngsters won't make it to adulthood than will, experts say.

That sight of cold waves battering newborn babies certainly isn't pleasant, but Heinrichs was quick to put it into context: "They live in water the rest of the year. They're adapted to this," she said.

Indeed, the numbers bear that out.



The elephant seal population in San Luis Obispo County has been deemed a "conservation success" by researchers and experts who have carefully watched the animals recover from the brink of extinction.

The <u>local population</u> has grown so significantly from near zero in the early 1990s that it is now considered the largest United States mainland breeding population, according to Cal Poly biology professor Heather Liwanag, who studies the seals with a team of students in coordination with California State Parks and Friends of the Elephant Seal.

Roughly 22,000 <u>elephant seals</u> were counted in recent years on the beaches in the Piedras Blancas rookery, according to Liwanag.

"People had thought we made them go extinct," Liwanag said. "But our population is really robust now."

How elephant seal population recovered from near extinction

In the 1800s, hunting elephant seals for their blubber—used as fuel by humans—decimated the global population.

In 1922, the Mexican government prohibited elephant seal offspring hunting. Fifty years later, the United States prohibited harassment and hunting of the seals under the newly established Marine Mammal Protection Act.

That kickstarted recovery of the species in North America.

By the 1950s, elephant seals began to show up during the winter breeding and birthing season in the Channel Islands, although fewer than 200 were counted, according to research by the National Oceanic and



Atmospheric Administration, Smithsonian Tropical Research Institute, U.S. Geological Survey, National Park Service, Point Blue Conservation Science and UC Santa Cruz.

The next decade, thousands of the mammals began populating the Channel Islands as well as showing up on Año Nuevo Island and later the South Farallon Islands off the San Francisco coast, the researchers found.

In 1992, one elephant seal was born at a beach near the Piedras Blancas Light Station, according to the researchers.

The next year, 54 births were counted. And by 2010, about 4,500 newborn elephant seals were counted during the winter season.

Today, the Channel Islands host the largest breeding population of elephant seals in North America, with Piedras Blancas coming in second, according to Liwanag.

Conservation work creates safe elephant seal viewing space

Careful <u>conservation work</u> by State Parks has helped the Piedras Blancas population thrive.

In 2006, a 1,700-foot-long boardwalk was constructed by State Parks just south of the lighthouse.

The boardwalk is accessible via Highway 1 and provides one of the only places in the world where humans can safely observe elephant seals at close distances without disturbing them. Informational signs and Friends of the Elephant Seal docents help educate the public on the behavior of



seals.

From that boardwalk, people can see the trials and tribulation of the natural world up close.

"With the king tides, we saw some pups be washed out to sea," said Katie Drexhage, a senior environmental scientist with State Parks. "It's shocking to see, but it is something we can't interfere with. Nature is brutal, and the elephant seals are tested."

About 5,000 pups have been born each season in recent years at Piedras Blancas, Liwanag said.

"We estimate that more than half don't make it," she added.

The elephant seals that do survive the winter migrate away during the summer to feed. Females swim to the middle of the Pacific Ocean in search of deep-water fish, while males go north toward Alaska, Liwanag said.

Elephant seals expand range as population grows

Drexhage and Liwanag said they don't believe the destructive storm events in late December and king tides in early January will have a devastating, population-wide impact on the elephants seals.

But it is something they are monitoring, especially as scientists predict human-caused climate change will make destructive surf events like the Central Coast experienced in late December more common.

"The elephant seals don't come here in search of food," Liwanag said.
"They come for the space."



Elephant seals need plenty of beach space to spread out, give birth and breed without crushing each other, Liwanag said.

If human development or rising sea levels shrinks that space, the mammals face a problem, she said.

As the Piedras Blancas elephant seal population has grown over the past 30 years, their range has expanded north and south along the Piedras Blancas State Marine Reserve as seals search of beaches not so crowded with their relatives.

"It's really important that people respect beach closures to protect the elephant seals," said Robyn Chase, an interpretive manager for State Parks. "Human harassment can cause moms to leave their pups and cause those pups to starve."

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