

As sea ice melts, some say walruses need better protection

October 13 2018, by Dan Joling



This photo provided by the United States Geological Survey shows a female Pacific walrus resting, Sept. 19, 2013 in Point Lay, Alaska. A lawsuit making its way through federal court in Alaska will decide whether Pacific walruses should be listed as a threatened species, giving them additional protections. Walruses use sea ice for giving birth, nursing and resting between dives for food but the amount of ice over several decades has steadily declined due to climate warming. (Ryan Kingsbery/U.S. Geological Survey via AP)

Given a choice between giving birth on land or sea ice, Pacific walrus

mothers most often choose ice.

Likewise, they prefer sea ice for molting, mating, nursing and resting between dives for food. Trouble is, as the century progresses, there's going to be far less ice around.

How well walruses cope with less sea ice is at the heart of a legal fight over whether walruses should be listed as a threatened species, giving them an added protection against human encroachments.

The federal government in 2008 listed polar bears as a threatened species because of diminished sea ice brought on by climate warming. That year the Center for Biological Diversity petitioned to do the same for walruses.

However, the U.S. Fish and Wildlife Service concluded in October 2017 that walruses are adapting and no one has proven that they "need" sea ice.

"It is unknown whether Pacific walruses can give birth, conduct their nursing during immediate post-natal care period, or complete courtship on land," said Justice Department lawyers in defending the decision.

A federal judge in Alaska will hear the center's lawsuit challenging the government's decision not to list the walrus as threatened. There is no court date set for the lawsuit.



This July 15, 2012, photo provided by the U.S. Geological Survey shows a female Pacific walrus and her young on an ice floe in East Chukchi Sea, Alaska. A lawsuit making its way through federal court in Alaska will decide whether Pacific walruses should be listed as a threatened species, giving them additional protections. Walruses use sea ice for giving birth, nursing and resting between dives for food but the amount of ice over several decades has steadily declined due to climate warming. (S.A. Sonsthagen/U.S. Geological Survey via AP)

Pacific walrus males grow to 12 feet (3.7 meters) long and up to 4,000 pounds (1,815 kilograms)—more than an average midsize sedan.

Females reach half that weight. Walruses dive and use sensitive whiskers to find clams and snails in dim light on the sea floor.

Historically hunted for ivory tusks, meat and blubber, walruses since 1972 have been shielded by the Marine Mammal Protection Act. Only Alaska Native subsistence hunters may legally kill them.

An Endangered Species Act listing would require the U.S. Fish and Wildlife Service to designate critical habitat for walruses and plan for their recovery. Federal agencies, before issuing permits for development such as offshore drilling, would be required to ensure walruses and their habitat would not be jeopardized.

Inaccessibility protected walruses for decades, but a rapid decline in summer sea ice has made them vulnerable.

In the Chukchi Sea between Alaska and Russia, where Pacific walrus females and juveniles spend their summer, ice could be absent during that season by 2060 or sooner, according to the Fish and Wildlife Service.



This June 12, 2010, photo provided by the United States Geological Survey shows Pacific walrus resting on an ice flow in the Chukchi Sea, Alaska. A lawsuit making its way through federal court in Alaska will decide whether Pacific walrus should be listed as a threatened species, giving them additional protections. Walrus use sea ice for giving birth, nursing and resting between dives for food but the amount of ice over several decades has steadily declined due to climate warming. (S.A. Sonsthagen/U.S. Geological Survey via AP)

Since 1981, an area more than double the size of Texas—610,000 square miles (1.58 million square kilometers)—has become unavailable to Arctic marine mammals by summer's end, according to the National Snow and Ice Data Center.

By late August, as sea ice recedes beyond the shallow continental shelf, female walrus and their calves face a choice: Stay on ice over water too deep to reach the ocean floor for feeding—or come ashore for rest periods, where the smallest animals can be crushed in stampedes triggered by a hunter, airplane or bear.

More open water already has meant more ship traffic. Walrus also could find more humans in their habitat with a reversal of U.S. policy on Arctic offshore drilling. Former President Barack Obama permanently withdrew most Arctic waters from lease sales, but President Donald Trump in April 2017 announced he was reversing Obama, a decision being challenged in court. The administration's proposed five-year offshore leasing plan includes sales in the Chukchi Sea.

Designating walrus as threatened would mean oil exploration companies would have to consult with federal wildlife officials to make sure drill rigs don't endanger the animals. However, Trump's Interior and Commerce departments in July proposed administrative changes to the species law that would end automatic protections for threatened plants and animals and set limits on designating habitat as crucial to recovery.

Walrus are notoriously difficult to count—and population estimates range widely. A preliminary one in 2017 put the number at 283,213, with the caveat that it could be as low as 93,000 or as high as 478,975.



This photo provided by the United States Geological Survey shows a female Pacific walrus resting, Sept. 19, 2013 in Point Lay, Alaska. A lawsuit making its way through federal court in Alaska will decide whether Pacific walruses should be listed as a threatened species, giving them additional protections. Walruses use sea ice for giving birth, nursing and resting between dives for food but the amount of ice over several decades has steadily declined due to climate warming. (Ryan Kingsbery/U.S. Geological Survey via AP)

The array of stresses and uncertainty about the walruses' future are enough evidence for listing them as threatened, the Center for Biological Diversity argues.

In the last decade, walruses that gathered on shores have suffered hundreds of stampede deaths, and the loss of ice floes has pushed them away from feeding areas, said Shaye Wolf, climate science director for the nonprofit conservation group.

"They're not adapting. They're suffering," Wolf said.

Scientists advising the Fish and Wildlife Service say the answer is not so clear cut, and much is unknown about how [sea ice loss](#) will affect walruses.

Chad Jay of the U.S. Geological Survey said it's unknown, for example, why female walruses give birth on ice instead of land.



In this July 17, 2012, file photo, adult female Pacific walruses rest on an ice flow with young walruses in the Eastern Chukchi Sea, Alaska. A lawsuit making its way through federal court in Alaska will decide whether Pacific walruses should be listed as a threatened species, giving them additional protections. Walruses use sea ice for giving birth, nursing and resting between dives for food but the amount of ice over several decades has steadily declined due to climate warming. (S.A. Sonsthagen/U.S. Geological Survey via AP, File)

"One of the thoughts is that ... there's more protection for the young from predators," he said. "They're offshore, and it's a cleaner environment, too, for giving birth. But those are hypotheses that are difficult to prove."

A nursing [walrus](#) needs to consume more than 7,800 clams per day, according to a federal assessment. And summer is the usual time for animals to fatten up.

When ice melted in alarming quantities, forcing females and their calves to shore in herds as large as 40,000, government scientists in 2008 tagged and tracked walruses to see how the changes affected their feeding.

They learned that females, forced to rest on beaches instead of ice, were still visiting their favorite feeding areas. However, the longer swims drew down fat reserves critical for lactating.

The walruses should be fine, the study concluded, if they can replace calories with additional feeding in winter, but whether that's happening is unknown.



In this Sept. 2013 photo provided by the United States Geological Survey, Pacific walruses gather to rest on the shores of the Chukchi Sea near the coastal village of Point Lay, Alaska. A lawsuit making its way through federal court in Alaska will decide whether Pacific walruses should be listed as a threatened species, giving them additional protections. Walruses use sea ice for giving birth, nursing and resting between dives for food but the amount of ice over several decades has steadily declined due to climate warming. (Ryan Kingsbery/United States Geological Survey via AP, file)

Undernourished females produce smaller offspring less likely to survive. The declining size of polar bear cubs in the southern Beaufort Sea was a factor in the decision to list them as threatened.

Endangered species law does not require perfect science to demonstrate adverse effects, Wolf said. When there's uncertainty, she said, the benefit of the doubt goes to the species.

There have been previous geological time periods when [walruses](#) experienced a lack of sea ice, said Jay.

"Maybe they can get through that sort of an environment. Maybe they can't," he said. "No one really knows."

© 2018 The Associated Press. All rights reserved.

Citation: As sea ice melts, some say walruses need better protection (2018, October 13) retrieved 3 May 2024 from <https://phys.org/news/2018-10-sea-ice-walruses.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.
