

Anchovy: The Ocean's Superfood



Northern anchovy are small, schooling forage fish found from British Columbia to Mexico. The central sub-population of northern anchovy off California and Mexico is a critical source of food for a vast array of larger fish, seabirds and marine mammals.

California's Fishery

Anchovy is one of the largest fisheries in the state by volume, with annual commercial catches ranging from 5,000 to 20,000 metric tons (mt). Like other forage species, anchovy are a boom and bust fish, subject to rapid population fluctuations. Fishing pressure can exacerbate the degree of decline during natural population decreases, and inhibit the ability of the anchovy population to recover. While a small amount is sold for human consumption, the bulk of the anchovy catch is used as bait or exported as feed for livestock and fish farms.

Ensuring Enough Food for Wildlife

Anchovy are one of the top food sources for humpback whales, dolphins, brown pelicans, California sea lions, other fish, and many other species. Like other forage fish species, anchovy are integral to the health of ocean food webs. Some species rely almost exclusively on anchovy. During recent declines of anchovy, from 2013-2016, thousands of California sea lions stranded on beaches, malnourished and dehydrated. Without enough food to eat, females were unable to produce enough milk to feed their pups and had to spend more time at sea away from their pups in search of food. Over this same period, brown pelicans struggled to reproduce at all and those that did abandoned their chicks by the thousands, resulting in unprecedented nesting failures.



Left: From 2013 - 2016, starving sea lions beached in record numbers.

Top right: A humpback whale feeds on anchovies. **Bottom right:** King salmon rely heavily on nutrient-rich anchovies. Many stocks of king salmon on the U.S. west coast are struggling or endangered.



In some years, more than **90%** of the brown pelican's diet consists of anchovy.



The Problem

Rather than use the best scientific information available, fishery managers have relied on decades-old information to set commercial catch limits in the anchovy fishery. The National Marine Fisheries Service (Fisheries Service) relies on a 1991 model based on data from 1964 to 1990 and an estimated anchovy biomass exceeding 700,000 mt. In actuality, a Fisheries Service survey in 2015 estimated the anchovy population at 31,427 mt—a population decline of more than 90 percent since the 1980s.

In October 2016, the Fisheries Service set an annual catch limit for the central sub-population of northern anchovy at 25,000 metric tons (mt). In setting the limit, the federal agency dismissed multiple scientific sources indicating this catch level would exceed sustainable limits. Setting catch limits without reference to the most up-to-date information puts anchovy at risk of overfishing. This could leave wildlife without enough to eat, sending cascading effects through the ocean food web.



Left: A brown pelican flies over San Francisco Bay. Right: Schooling northern anchovies.

The Solution

The long-term solution to a healthy and robust anchovy population is to manage the population using the most recent, up-to-date scientific data available. This means utilizing the annual population estimates scientists already produce to set an ecosystem-based annual catch limit. The catch rule should account for the needs of predators reliant on anchovy for food, close the fishery when the stock is at low abundance, and include a buffer that prevents overfishing.



A female California sea lion and pup.

For more information visit our website

<https://usa.oceana.org/responsible-fishing/northern-anchovy>

On November 23, 2016 Oceana, represented by Earthjustice, filed a lawsuit in the northern district court of California challenging the proposed 25,000 mt catch limit.

- **January 18, 2018** — A federal judge finds that the Fisheries Service violated the nation's fishery law—the Magnuson-Stevens Fishery Conservation and Management Act—because its anchovy catch limit did not use best available science and failed to prevent overfishing. The judge's decision strikes down current catch limits and requires the agency to issue new limits based on the best available science.
- **February 15, 2018** — The Fisheries Service responds by asking the judge to limit the ruling to the annual catch limit, which would have allowed the agency to continue ignoring two other critical management measures –allowable biological catch and the overfishing limit –that together with the annual catch limit prevent overfishing and ensure enough fish are left in the ocean to sustain anchovy-dependent species.
- **June 14, 2018** — The federal judge confirms the original decision requiring the Fisheries Service to use the best available science when issuing a new catch rule, including allowable biological catch and the overfishing limit.
- **June 2018 -January 2019** — The Fisheries Service and the Pacific Fishery Management Council ignore the court's decision and refuse to propose a new catch limit.
- **January 18, 2019** — In response to the Fisheries Service's failure to issue a new catch limit as ordered in the January 2018 decision, the judge directs the Fisheries Service to issue a new catch rule within 90 days, which is April 18, 2019.