# **Pacific Herring**

# A Model Fishery for One of the Ocean's Most Important Fish

Although small, never underestimate the importance of Pacific herring. Referred to as forage fish, herring—like sardine and anchovy—form the foundation for a healthy ocean food web. Herring are also a healthy source of protein for people, arguably one of the most sustainable fish choices available to Californians.

#### A Vital Food Source for Wildlife

From Alaska to California, Pacific herring are a vital food source for birds, marine mammals and larger fish. In northern California waters, when herring gather to spawn in Humboldt, Tomales and San Francisco Bays an incredible wildlife spectacle often occurs. Humpback whales, killer whales, porpoises, salmon, California sea lions, northern fur seals, and dozens of other ocean animals feast on herring as a rich source of nutrients. Thousands of seabirds and shorebirds, including scoter, scaup, wigeon, harlequin duck, black brant, brown pelican, rhinoceros auklet, and turnstone also feast on the eggs.



Humpback whales lunge feed on forage fish in Monterey Bay. © Chase Dekker/Shutterstock

But herring are in trouble and need our help. Herring spawn in less than 2 percent of the West Coast's estuaries and protected coves. Herring populations from British Columbia through San Francisco have declined due to the cumulative effects of climate change, habitat loss and fishing pressure.

That's why Audubon California and Oceana have fought since 2012 to protect and restore herring by saving spawning habitat in Humboldt and San Francisco bays and promoting sustainable fisheries.

Left: A great blue heron takes flight with a herring. © Roy W. Lowe; Middle: A California sea lion basks in the sun. © NMFS; Right: Black and surf scoters. © Tony Brake











## **New Management Framework**

- Ensure precautionary management of commercial herring fisheries in San Francisco Bay.
  - Catch no more than 10 percent of the total estimated population.
  - Close the fishery if the population falls below 15,000 tons.
  - > Set a maximum catch limit of 3,300 tons.
- Protect spawning areas.
- Adjust catch limits based on ocean ecosystem needs, such as the reliance of marine mammals, fish and birds on herring as food. This would be the state's first Fishery Management Plan to explicitly consider the needs of the ocean ecosystem.
- Keep the fleet of fishing vessels in San Francisco Bay at its current size.
- Protect younger fish from being caught before they spawn by maintaining the current prohibition on purse seine nets.
- Prevent expanded commercial fisheries in areas outside of San Francisco Bay unless and until science shows increased fishing will be sustainable.
- Place daily limits on recreational herring fishing.

### An Iconic Urban Fishery

San Francisco Bay is home to the largest spawning population of herring along the entire U.S. West Coast and the only current hub of commercial herring fishing in California. The San Francisco Bay herring fishery is an iconic part of history and culture in the area, often referred to as one of the few remaining "urban" fisheries because nets are sometimes deployed right off Fisherman's Wharf and the Sausalito waterfront.

#### A New Framework for Protecting Pacific Herring

Years of dedicated work on behalf of Audubon, Oceana, herring fishermen and the California Department of Fish and Wildlife have culminated in the state's first Fishery Management Plan for herring in California. Once adopted by the California Fish and Game Commission, this plan will be a formal agreement to achieve long-



term sustainability of a healthy herring population. The Plan is the first of its kind that complies with the Commission's 2012 Forage Species Policy which aims to enhance protections for these vital species that support the entire ecosystem. The Plan is scheduled to be discussed and adopted by the Commission in late 2019 and will result in a broad set of new and stronger statewide regulations to protect herring.

The completion and adoption of the Fishery Management Plan will be a major victory toward protecting herring as a vital food source for birds, marine mammals and fish; and for ensuring a sustainable herring fishery into the future.

# FOR MORE INFORMATION

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Killer whales cruise along the Pacific coast. © Tory Kallman/Shutterstock; Above: Harbor seals. © Ashley Blacow-Draeger



