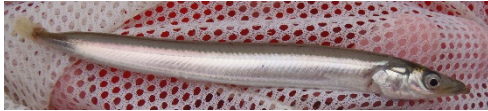




PACIFIC SAND LANCE (*Ammodytes personatus*)



Pacific Sand Lance are small silver fish with long thin bodies with a very long dorsal fin. They are green or blue on their backs and silvery below. They have small upturned mouths. They can form dense schools. Pacific Sand Lance bury themselves in bottom sediments and their scientific name *Ammodytes* reflects that, coming from the Greek for “sand” and “dive”. Like other schooling forage fish Pacific Sand Lance are an energy rich food source for many ocean predators and an important link in the marine food web off our coast.

OVERVIEW

- **Oregon Conservation Strategy Species**
- **Size:** Up to about 11 inches long
- **Weight:** Up to about 3.5 ounces
- **Lifespan:** Up to 11 years
- **Key Strategy Habitats:** Nearshore, Estuaries
- **Similar Species:** Arctic Sand Lance

RANGE AND DISTRIBUTION

In Oregon: Pacific Sand Lance can be found throughout the state’s marine waters and in estuaries.

Everywhere Else: Pacific Sand Lance range extends from western Aleutian Islands up into the eastern Bering Sea north to at least Norton Sound and down to southern California in the eastern North Pacific.

FUN FACTS

Favorite Food: Plankton.

- Pacific Sand Lance are an important link between plankton and larger predators in the marine food web with well over 100 species known to eat them.
- Pacific Sand Lance bury themselves in bottom sediments, both at night or to avoid predators, and seasonally during a winter dormancy period when they may stay buried both day and night.
- Sand lance form dense schools in the water column, mostly during the day when feeding.
- Pacific Sand Lance may use the same spawning locations year after year.
- Pacific Sand Lance may move to deeper waters as they grow older in some locations.

LIFE HISTORY AND ECOLOGY

Pacific Sand Lance spawn between August and April depending on location. They may use the same places to spawn year after year. Spawning can happen during the day or at night. Females lay all of their slightly sticky eggs in a single batch. A female can lay her roughly 1,500 and 16,000 eggs from the shallow subtidal zone to as far as 16 feet above the low tide line in some locations. Eggs are deposited



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in sand or fine gravel. The eggs hatch anywhere from 13 to 67 days depending on water temperature with embryos developing to hatch faster at warmer temperatures. Juveniles and adults can be found in shallow water over eelgrass and algae beds as well as over sand, cobble and bedrock. Juveniles have also been found in waters as deep as about 260 feet in some locations. Pacific Sand Lance live from the intertidal to depths of at least 330 feet. Pacific Sand Lance can live to about 6 or 7 years maturing between about 2 and 4 years old, but they rarely live to be more than 3 years old in Washington. Conditions that affect ocean productivity play a large role in growth rates, body condition and abundance for this species. These conditions vary both over time and with location.

Predators of Pacific Sand Lance include over 100 species of birds, fishes, and marine mammals. They are an important link in the marine food web. Some predators will even pursue Pacific Sand Lance buried in the sand. Examples include humpback whales that can scrape the bottom with their jaws scaring sand lance out of the bottom sediments into the water column to eat them, and a variety of birds have found ways to get at Pacific Sand Lance buried in the sand at low tide. Humans also eat Pacific Sand Lance and use them for bait, but such use seems to be quite limited.

DIET AND FORAGING

Pacific Sand Lance forage mainly on zooplankton in the water column including copepods, amphipods, larvae of other crustaceans and worms. They also occasionally may eat small fishes.

HABITAT CHARACTERISTICS

Pacific Sand Lance live in marine and estuarine waters. They live in the water column and buried in bottom sediments.

CONSERVATION AND MANAGEMENT

Threats: Habitat loss and alteration. Prey availability affects body condition and abundance. Toxic chemicals.

Conservation and management: Pacific Sand Lance are a common ecosystem component species in all four of the fishery management plans administered by the Pacific Fisheries Management Council (PFMC). Development of commercial fisheries directly targeting this species in federal water off the coast of Washington, Oregon, and California is currently prohibited. Oregon also prohibits developing commercial fisheries targeting Pacific Sand Lance.



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