Pacific tomcod

Microgadus proximus

ID notes

- Barbel on chin
- Three spineless dorsal fins

Predators

- Seals, sea lions, large fish

Fun fact

Tomcod, and other polar teleosts (a large group of ray-finned fishes), have an antifreeze protein that prevents them from freezing in cold waters. The glycoprotein binds to ice crystals and inhibits their growth.

Sources

Fish Identification, identifyfish.blogspot.com, 2010

Zhuang, X., & Cheng, C. H. C. (2021). Propagation of a De Novo Gene under Natural Selection: Antifreeze Glycoprotein Genes and Their Evolutionary History in Codfishes. Genes, 12(11), 1777.

Bill Knauer, alaska.net

Starry flounder

Platichthys stellatus

adult

juvenile

ID notes

- Dark striations on dorsal and anal fins

Predators

- Birds, marine mammals, sharks

Fun fact

Starry flounders can change their coloration to camouflage with the seafloor.

Sources

Marine Science Institute Blog, sfmsi.wordpress.com, 2012

Pacific sandfish

Trichodon trichodon

ID notes

- Upturned face
- Dorsal side has brown and silver spots

Predators

- Seals and predatory fish

Fun fact

Sandfish will bury everything but their head in sand to lie in wait to catch prey.

Sources

Kelly Fretwell, Biodiversity of the Central Coast, 2016

Burke Museum, burkemuseum.org

iNaturalist,

Pacific cod

Gadus macrocephalus

ID notes

- Large barbel under chin
- Pointier fins than other cod species

Predators

- Halibut, sharks, seabirds, and marine mammals
- Commercially harvested by people

Fun fact

Pacific cod is the most common fish for making fish and chips.

Sources

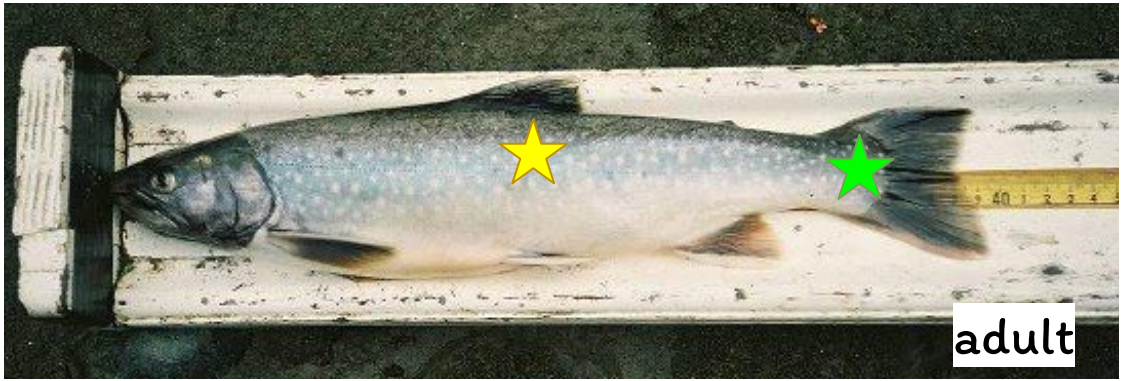
Fish Identification, identifyfish.blogspot.com, 2010

Danilo Alfaro, thespruceeats.com, 2022

Fish Choice, fishchoice.com, 2020

Dolly varden

Salvelinus malma



ID notes

- Many small, light spots
- Thick caudal peduncle (body area right before caudal fin)

Predators

- River otters, eagles, beluga whales

Fun fact

Juvenile dolly varden are different colors based on what waters they're in. Young dollys in glacial streams will be light silver-gray; in other streams and lakes, they will be olive brown.

Sources

Alaska Department of Fish and Game, adfg.alaska.com

Will Mann, Animal Diversity Web, 2019

Gallagher et al., 2021

Great sculpin

Myoxocephalus polyacanthocephalus

ID notes

- One long dorsal spine
- Black facial band through eye

Predators

- Predatory fish, herons, otters and raccoons

Fun fact

The great sculpin's genus name, "*Myoxocephalus*," comes from the Latin roots "myos," meaning muscle, and "kephale," meaning head. This guy is a muscle head!

Sources
Emerald Diving, emerlanddiving.org
Seattle Aquarium

Buffalo sculpin

Enophrys bison

ID notes

- Gill covers have long spines
- Row of large spines along lateral line

Predators

- Predatory fish, herons, otters and raccoons

Fun fact

When you hold a buffalo sculpin, putting them under stress, they will hum. Handle with care, though, because their spines are poisonous!

Sources

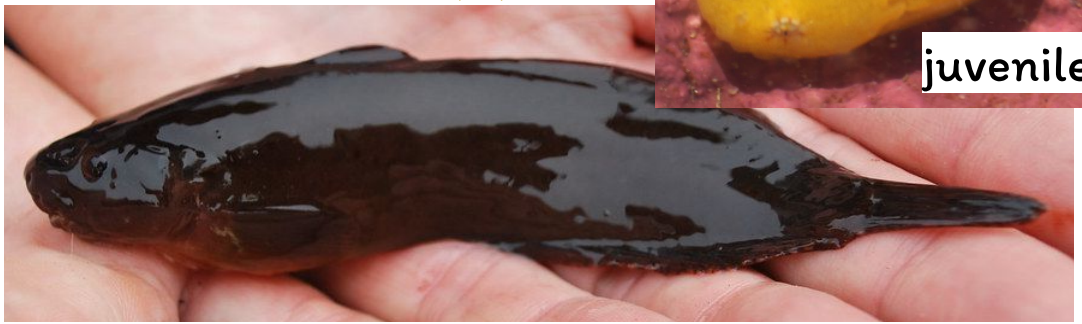
Pier Fishing in California, pierfishing.com, 2021

Coastal Fisheries Ecology Lab, annebeaudreau.com, 2017

Tidepool snailfish

Liparis florae

adult, different color



ID notes

- Vary in coloration - usually brown, but can green, yellow, or almost any other color

Predators

- Unknown

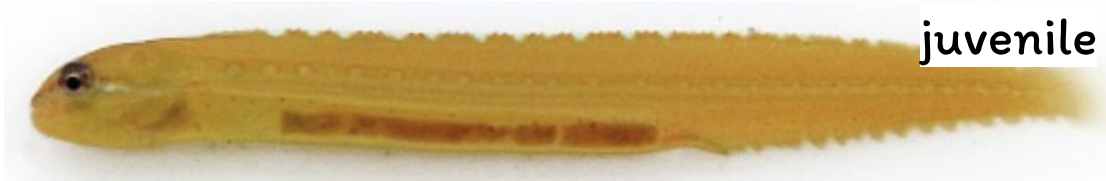
Fun fact

Snailfish ecology is mostly a mystery as the species is incredibly understudied.

Sources
Emerald Diving, emeralddiving.com
"The Reef Liparid Fishes Inhabiting the West Coast of the United States,: Hubbs & Schultz, 1934
UC Berkeley, calphotos.berkeley.edu

Crescent gunnel

Pholis laeta



ID notes

- Distinctive dorsal row of crescent markings

Predators

- Heron, pigeon guillemot, otter, mink, and subtidal fishes

Fun fact

Crescent gunnels use their skin and gills to breathe both in air and water.

Sources

Alaska Department of Fish and Game, adfg.alaska.gov

On the Trails in Juneau, https://onthetrailsjuneau.wordpress.com

Pacific sand lance

Ammodytes hexapterus

ID notes

- Long, narrow body form
- No teeth
- Forked caudal fin

Predators

- Seabirds, predatory fish (including salmon, halibut, rockfish), marine mammals

Fun fact

Sand lance are a crucial, high-energy forage fish! Their abundance has been linked to the ability of seabird populations to reproduce enough and recover from crashes.

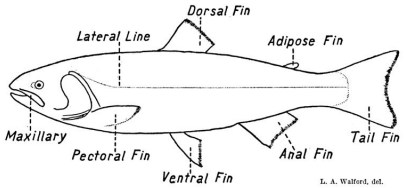
Sources
Alaska Department of Fish and Game, adfg.alaska.gov
Piatt and Anderson 1996
Golet et al. 2002

Pacific herring

Clupea pallasii

ID notes

- Solid body without markings
- Large scales that fall off easily
- No adipose fins



Predators

- Fish, birds, marine mammals

Fun fact

Like many pelagic (open ocean) fish, herrings have light undersides and dark tops. They camouflage with the dark seafloor when viewed from above, and with the bright sky when viewed from below.

Sources

Alaska Department of Fish and Game, adfg.alaska.gov

Walleye pollock

Gadus chalcogrammus

ID notes

- Two anal fins
- Lower jaw juts out

Predators

- Marine mammals, fish and seabirds

Fun fact

Walleyes are semidemersal - this means that they sometimes live and feed at the seafloor, and sometimes within the water column.

Sources

Alaska Department of Fish and Game, adfg.alaska.gov

FishWatch, fishwatch.gov

Threespine stickleback

Gasterosteus aculeatus

ID notes

- Two to four sharp spines in front of dorsal fin
- One anal spine extending downwards from belly

Predators

- Herons, sea birds, larger fish

Fun fact

Two varieties of threespine stickleback exist. The first is anadromous, meaning that it spawns in freshwater and lives in the ocean. The other is freshwater, living in lakes and streams for its whole life.

Sources

Fuller & Sturtevant, USGS NAS - Nonindigenous Aquatic Species, https://nas.er.usgs.gov, 2019