

HELP

PROTECT THE

Suggested age range: Grades 3-8

Illustrations by Amira Maddison

BOCACCIO ROCKFISH

WHAT I LOOK LIKE:

- Baby Bocaccio are a light bronze colour, with brown spots. Adult Bocaccio are orange-red or olive-brown in colour.
- These fish have a large mouth and a knob that protrudes off their lower jaw. 'Bocaccio' actually means 'large mouth' in Italian!
- They can grow to be about 90cm (3 ft) long.
- Note: Bocaccio are often mislabeled as red snapper, Pacific snapper and rock cod in markets and restaurants.

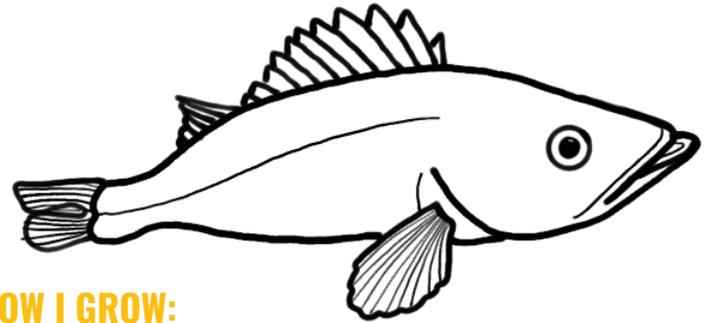
THE PLACES I CALL HOME:

- The Bocaccio is one of at least 39 types of rockfish found in the coastal ocean waters of B.C.
- Bocaccio rockfish live all along the coast of the northern Pacific Ocean from the Gulf of Alaska to Baja California, Mexico. In many of these areas the species has suffered from overfishing.
- They spend their whole lives in one area, often within the same community or "school." They do not migrate.



WHAT MY HOME LOOKS LIKE:

- Young Bocaccio live near the surface of the ocean in a 'nursery' area, often in kelp beds or rocky reefs. Living near the surface keeps the young fish close to good food sources and calm waters.
- Once they grow, Bocaccio feel at home in deep water between 60 and 340m below the ocean surface. They live along rocky ocean bottoms, including coral reefs! These areas are filled with rich and diverse underwater plant and fish communities.
- Trawling (dragging a net along the bottom of the ocean and pulling up whatever the net catches) and warming oceans caused by climate change are harming these places, making it challenging for Bocaccio to thrive in a safe home.



HOW I GROW:

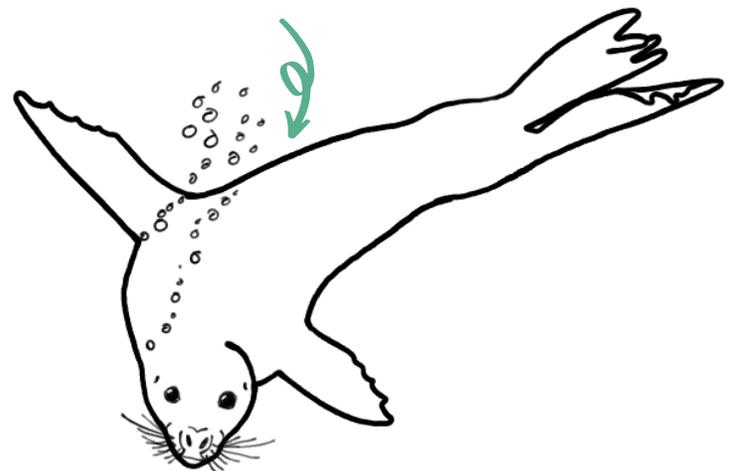
- Unlike most boney fish that lay eggs to reproduce, rockfish fertilize and grow embryos inside the body, and females give birth to live fish!
- Bocaccio rockfish can live up to 57 years. Other species of rockfish can live up to 200 years!
- Bocaccio don't start reproducing until later in life. Late reproduction means that they are often killed by predators or human impacts before they have a chance to reproduce. In this species, the oldest fish have the most potential to reproduce, so when humans catch and kill them, it is very harmful to the population.

WHAT I EAT:

- Bocaccio fit into the food chain by eating smaller fish. This can include anchovies, mackerel, squid and even other rockfish!

WHAT EATS ME:

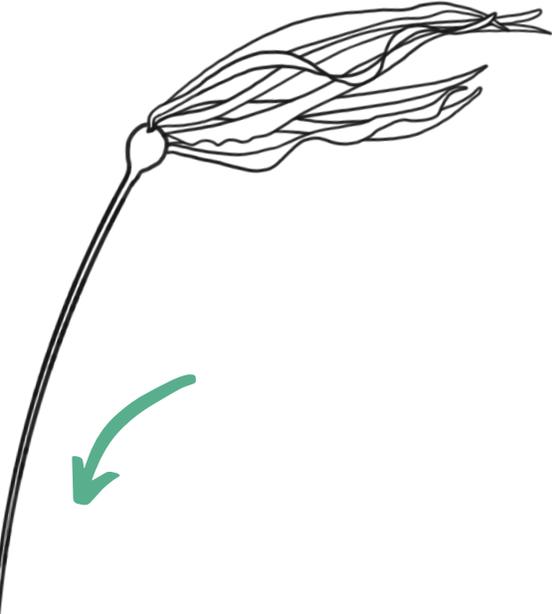
- Chinook Salmon, terns and Harbor Seals rely on smaller Bocaccio as a source of food. Other beings that rely on larger adult Bocaccio as a food source are larger fishes and marine mammals like Harbor Seals and Northern Elephant Seals.



MAKE YOUR OWN BOCACCIO FOOD CHAIN!

Fill in the blank spaces here using the prompts below to create a Bocaccio rockfish food chain!

Use your artistic creativity to add details about their home, who they share this home with and any other details you find interesting. Creating a food chain is a great way to understand how a single being plays a big role in their community!



Draw a Bocaccio rockfish here: ↓



Draw something a Bocaccio rockfish might eat here. ↑

↑ Draw a being that might eat a rockfish to complete the food chain.

↻ A threat to the Bocaccio rockfish

HOW TO TAKE CARE OF THIS BEING

Various impacts on this unique fish and its home have led to the Bocaccio being listed as **“at risk of extinction.”** Here you will find more information on why, and what you can do to help!

Some humans continue to have a negative impact on Bocaccio and other rockfish by using harmful fishing practices. For example, bottom trawling nets often collect the Bocaccio as by-catch (accidental catch). When Bocaccio are pulled up in the nets, the quick change of pressure causes their bladders to expand, often killing the fish.

Traditional Indigenous fishing practices have minimal impact on rockfish homes. For example, spear fishing and hook-and-line practices target specific beings and do not result in by-catch. Unlike trawling and dredging, spear fishing and hook-and-line fishing do not harm the ocean floor ecosystem.

Human-caused climate change continues to impact many marine species including the Bocaccio. For example, kelp forests are threatened by oceans becoming more acidic due to climate change.

Much of the Bocaccio habitat is now part of the Rockfish Conservation Areas that span the B.C. Gulf Islands. These areas are monitored to protect rockfish from overfishing and bottom trawling. A program also educates people through presentations and permanent displays on many of the Gulf Islands.

Coral and sponge reefs and the many lifeforms they support are often damaged by fishing gear used in bottom trawling nets and dredging (large steel cages dragged along the ocean floor).

WHAT YOU CAN DO TO HELP ROCKFISH THRIVE:

- Raise awareness! Many people do not know about efforts to protect rockfish. Share what you know with others so we can work together to help the Bocaccio rockfish.
- Learn about the Rockfish Conservation Area closest to you at: <https://www.pac.dfo-mpo.gc.ca/fm-gp/maps-cartes/rca-acs/index-eng.html>
- Read about traditional Indigenous fishing practices and rockfish species here: <http://traditionalanimalfoods.org/fish/saltwater/page.aspx?id=6436>
- If your family eats fish, ask your parents where the seafood they buy is from. Ask if they can buy fish from local people who fish with care, without bottom trawling. Commercial fishing for lingcod, black cod/sable fish and halibut often involves bottom trawling.
- Look for the Ocean Wise certification on seafood packaging to help ensure that what you and your family eat is not harming rockfish.
- Check out the Galiano Conservancy Rockfish Project for up-to-date info and more ways to get involved at: <https://galianoconservancy.ca/rockfish/>

Find more activities and resources about the beautiful beings we share the planet with (and about our school programs!) at: sierraclub.bc.ca/education

