



ROCKFISH

What is It?

- Rockfish, like the name suggests, are fish that live in rocky habitats in the ocean.
- Pacific rockfish are in the *Sebastes* genus, which includes more than 70 species of rockfish.
- Common species of wild-caught rockfish harvested along the West Coast include yellowtail, widow, and canary.
- Rockfish range in color from bright red or orange to dusky olive brown.

Harvest It

- Pacific rockfish are harvested through various methods, including longline, pole and handline, and trawl fishing.
- Longline fishing uses a main fishing line which is anchored to the seafloor. Shorter lines are attached to the long line with hooks at the end of them. This allows many fish to be captured on each long line.
- Pole and handline fishing involves a line with one or more hooks or lures. The line is attached to a pole, which is held by a fisher.
- A trawl is a large funnel shaped net that is towed through the water by fishing boats. As the net moves through the water, fish are collected in the tip of the net.





Make It

Be sure to follow local Food Safety rules and regulations. Learn more here: [Food Safety Rules and Regulations | Washington State Department of Health](#).

Recipe: Algerian Fish Soup
Yield: 20 sample servings (1/4 cup)

Ingredients	Directions
<ul style="list-style-type: none"> • 2–2.5 pounds of rockfish filet • 2 large potatoes • 2 green bell peppers • 1 large carrot • 1 fennel bulb • 2 onions • 1 celery rib • 4 tablespoons tomato paste • 2 liters water or 2 liters vegetable broth • 1 tablespoon cumin • 1 teaspoon ras el hanout spice mix • 1 teaspoon coriander • 2 bay leaves • 1 piece lemon rind • 1 tablespoon harissa (or any hot sauce of your choice) • 4 tablespoons olive oil 	<ol style="list-style-type: none"> 1. Dice the onions and sauté in a large soup pot with olive oil until golden. 2. Cut the bell peppers, potatoes, carrot, fennel and celery into large cubes. 3. Put the vegetables in the pot and stir for 1–2 minutes. 4. Add the tomato paste, sauté for a 30 seconds, then add about two liters of water. 5. Add the bay leaves, lemon rind and the spices. 6. Let it simmer on low heat for about 20 minutes, until vegetables are soft. 7. Cut the fish fillets in cubes and add them to the soup. 8. Simmer for another 15 minutes, until the fish is done. 9. Carefully puree the soup, adding some additional water or broth if necessary. 10. Add extra seasoning to taste and serve with slices of lemon and fresh baguette bread.

This recipe was adapted from adapted from [Sea Grant](#).

Find more rockfish recipes from Sea Grant: [Recipes | Discover West Coast Seafood](#)

Explore interactive taste test resources to encourage participants to try what you made!
[Taste-Testing Event Resources](#)



Ocean Sustainability: What Does It Really Mean?

Learn It

This lesson is suitable for learners 12 years and older in science, who are studying ecosystems and habitats, humans and the environment, reproduction, and sustainability.

Objectives

- Learners reflect on what “sustainable” means to them and come up with their own definition.
- Learners build their knowledge of what sustainability means, through focusing on sustainable fishing.
- Learners play a game in groups to build their understanding of sustainability in practice.

Supplies

- Set of Sustainability Photos on screen or printed ([PowerPoint](#)) (optional)
- Internet access for learners to complete an online exercise
- Access to the story [How My Dad Fishes for the Future](#)
- [Go Fish activity](#), printed and prepared for groups of 4–6 learners to work together (it’s a good idea to read this beforehand)

Directions

Starter (5 –15 mins)

1. Ask learners what they think of when they hear the term “sustainable.”
 - What does it mean to them?
 - Where do they hear it?
 - Do they think it has significance for their lives?
 - Do they do anything they feel is sustainable?
 - Is “sustainable” only about the environment or about other aspects of our lives?
2. Ask learners these questions in groups and get them to create a mind-map or list of what “sustainable” means to them, or if there’s time, use the set of sustainability photos and ask learners to identify which one(s) they think show them an aspect of sustainability and why.
3. Encourage questioning of this term. Some learners may say they hear it associated with particular products or advertisements, or may feel they hear it a lot but don’t understand what it means, or they don’t understand how sustainable principles can be applied. Encourage learners to reflect on the interconnections between people and the environment and to make the link between the three pillars of sustainability—economic, environmental, and social.
4. Refer to some of the following or your own resources to stimulate discussion:
 - www.un.org/sustainabledevelopment/
 - www.bbc.com/future/tags/sustainability
 - [Sustainability | National Geographic](#)
 - [Get to know fishers along the West Coast](#)





Ocean Sustainability: What Does It Really Mean?

Learn It

Directions

Main Activity (35–40 mins)

Explain to learners that they are going to explore what sustainability means in practice by looking at sustainable fishing. Ask them:

- How can fishermen look after the environment as they fish? Is that possible?

Learners then work through the story, [How My Dad Fishes for the Future](#), including completing exercise three. The story includes a short video clip explaining maximum sustainable yield. Ask them:

- What have you learned about how fishers can look after the environment?
- What is Maximum Sustainable Yield and how do fishers use it?

Next, learners work in groups to play Go Fish, a game that explores how Maximum Sustainable Yield (MSY) works. Follow the instructions on the sheets to run the game. The game includes a sheet with an explanation of MSY.

If you are short on time, just run the first few rounds of the game, skip the scenarios, and go straight on to the Maximum Sustainable Yield Challenge.

Plenary (2–5 mins)

Finish up by asking learners what they think about the science behind MSY.

Activity adapted from: [Marine Stewardship Council](#).





Eat It

Rockfish is a good source of omega-3 fatty acids. These important fats support healthy heart, brain, and eyes. Rockfish is also high in protein, supporting muscle growth and repair, and vitamin B12, which supports red blood cell development and nerve function and helps the body convert food into usable energy.

Read It

- The Rockfish Kids Book, by Claudia Makeyev, NOAA Fisheries & The Mermaid Scientist

More About It

- Detailed information about different rockfish harvesting methods, from Sea Grant: [Longline, Pole & Handline](#), and [Trawl](#).
- Preschool and early elementary short activities, by Seafood Nutrition Partnership and Marine Stewardship Council: [Little Seafoodies Activity Kit](#).
- Early learner Fish STEM Activities: [Dive Into Learning](#) | [I'm the Chef Too](#).
- Grades 3rd–5th Classroom Activity from Seattle Aquarium: [The Salish Sea & Me: A Marine Activity and Learning Book](#) (Seattle Aquarium, grades 3rd–5th)
- Grades 6th–8th Lesson Plan by Sea Grant: [How many rockfish can we catch and still have a sustainable fishery?](#)
- Grades 8th–12th Lesson Plan by Sea Grant: [SeafoodScienceCurriculum](#)
- Videos about West Coast Fishing by Positively Groundfish: [Fish Heads: Perspectives from the West Coast](#)