

SUSTAINABLE SEAFOOD

OVERVIEW

This workshop explores sustainable seafood from selection to preparation. Attendees will participate in hands-on preparation of seafood while learning best practices and techniques.



LEARNING OBJECTIVES

By the end of this day you will be able to:

1. List and discuss the rationale and importance of sustainable seafood.
2. Develop strategies for local sourcing of sustainable seafood.
3. Create inspiring and delicious seafood recipes.
4. Understand common terminology used in the fishing industry.
5. Understand a variety of cooking methods.
6. Be able to identify the 4 types of seafood.

Sustainable seafood can be described as seafood that is caught in the wild or farmed in Aquaculture systems, using methods that consider the short- and long-term well-being of harvested species and their oceans.

While considering the livelihoods of fishery dependent communities. When done correctly, it prevents overfishing and minimizes by catch. It also identifies and protects essential habitats and endangered species.

SUSTAINABLE ORGANIZATIONS



There are many organizations that participate in this effort worldwide including, but not limited to:

- NOAA: Fish Watch
- National Geographic: Sustainable Seafood
- Monterey Bay Aquarium: Seafood Watch
- Marine Stewardship Council
- FDA- Seafood regulations
- Oceana: Protecting the World's Oceans
- World Wildlife Foundation

These groups working together manage a variety of issues such as:

- Fishing seasons, yearly permits, limits on size and quantity being harvested.
- Equipment being used: long lines, purse seine nets, trolling nets, gillnet, pole and line, pots and traps, dredging rakes, divers and spearing, fishing.
- Fish population and breeding practices.
- Monitor companies that produce and process a variety of species, operating in several oceans.
- Aquaculture farming, their impact on the environment, species being produced, their food and antibiotics used to maintain the health of their product.
- Policing of illegal fishing operations.

SUSTAINABLE SEAFOOD COMMON TERMINOLOGY

- **Aquaculture**- The farming of fish, plants, mollusks, or crustaceans
- **By Catch**- Fish, birds and mammals that become trapped, entangled, or hooked in fishing gear that fisherman discard.
- **Catch Shares**- A management strategy that guarantees fishermen a specific number of fish that is harvested allowing them to pursue their catch when they want.
- **Day Boats**- Describes fish or seafood that is caught and brought to the shore on the same day.
- **Estuary**- A semi-enclosed coastal body of water with one or more streams flowing into it.
- **Fisheries**- An area where fish are raised and caught for commercial and recreational purposes. They can be fresh or salt water.
- **Hatchery**- The process of cultivating and breeding a large number of juveniles in an enclosed environment then released to mature.
- **IUU Fishing**- Illegal, unreported and unregulated fishing. This describes a wide variety of activities that violate regulations and undermine responsible legal fishing.
- **Longlines**- A long fishing line with many short lines carrying hooks. These can be several miles long with thousands of hooks.
- **Magnuson- Stevens Act**- Primary law that governs marine fisheries in U.S. Federal waters passed in 1976.
- **Migration**- The movement of fish or mammals from one area to another, often involving feeding and reproduction cycles.
- **Purse Sein**- A fishing technique used to harvest large amounts of fish. This technique involves using large nets and surrounding the fish.
- **Red Tide**- The discoloration of surface waters caused by large concentrations of micro-organisms often causing harm to an ecosystem.
- **Trawling**- Fishing with a large bag like net that is dragged behind the boat.
- **Trolling**- Fishing where lines are baited and slowly dragged through the water at a specific depth.

SUSTAINABLE SEAFOOD BUYING TIPS

Fresh Fish should smell like the ocean and look shiny. The eyes of the fish should be clear, have red gills, flesh should be firm to the touch and the bloodline should be bright red.

Old Fish will have a fishy, sour, or ammonia-like smell. The eyes will be sunken in and cloudy. The gills would be brown and torn, and the flesh would be soft to the touch.



Buying Tips:

- When buying a whole fish, look for clear eyes, shiny skin, and firm flesh.
- When buying fileted fish, always look for bright color and firmness, avoid dull coloring, and the filet shouldn't look dry around the edges.
- When buying frozen fish, look for well packaged items with tight seals and without ice or liquid around the product. You should always check the dates on the fish and buy your fish from a reputable producer.

ABUNDANT SUSTAINABLE ROUND FISH

This type of fish has an oval or rounded rib cage, eyes on either side of the head and swim in a vertical position.



Pink Salmon



Red Snapper



Mahi Mahi



King Mackerel

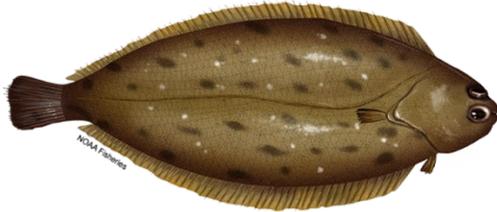


Black Sea Bass

Source: NOAA Fisheries

ABUNDANT SUSTAINABLE FLAT FISH

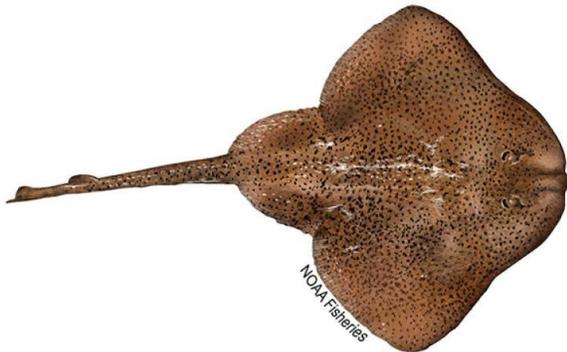
Swim on their side with both eyes on the upper side usually living near the bottom of the seabed.



Dover Sole



Atlantic Halibut



Skate

Source: NOAA Fisheries

ABUNDANT SUSTAINABLE CRUSTACEANS

Have a body covered with a hard shell or crust, with several pairs of legs and a segmented body.



Caribbean Spiny Lobster



Atlantic Northern Shrimp



Blue Crab

Source: NOAA Fisheries

ABUNDANT SUSTAINABLE MOLLUSKS/ CEPHALOPODS

Have a soft unsegmented body, no spine or bone, usually enclosed in a shell.



Atlantic Surf Clam



Pacific Oyster



California Market Squid



Blue Mussels

COOKING METHODS: SAUTÉ

1. Prepare food items for sautéing (MEP); heat pan
2. Add small amount of oil; sear items - presentation side down first; turn once
3. Finish larger items on stovetop with lid or in an oven uncovered
 - Light meats - golden brown
 - Red meats - browned thoroughly
4. Remove items from the pan and reserve; keep warm



COOKING METHODS: DEEP FRYING

1. Heat fat to proper temperature (350°F)
2. Coat products with desired coating
3. Add main item (usually breaded or batter-coated) to hot fat using appropriate method
4. Turn items during frying
5. Remove main item and finish cooking in an oven, if necessary
6. Drain food on paper towels or on rack
7. Season and serve with appropriate sauce and garnish



COOKING METHODS: GRILLING

1. Thoroughly clean and preheat grill; oil grids
2. Season and/or marinate main item; brush with oil if necessary to prevent sticking
3. Place main item on grill; use a hand grill for delicate foods such as fish
4. Rotate item 90° to produce crosshatch marks, if desired
5. Turn item over and continue cooking to desired doneness



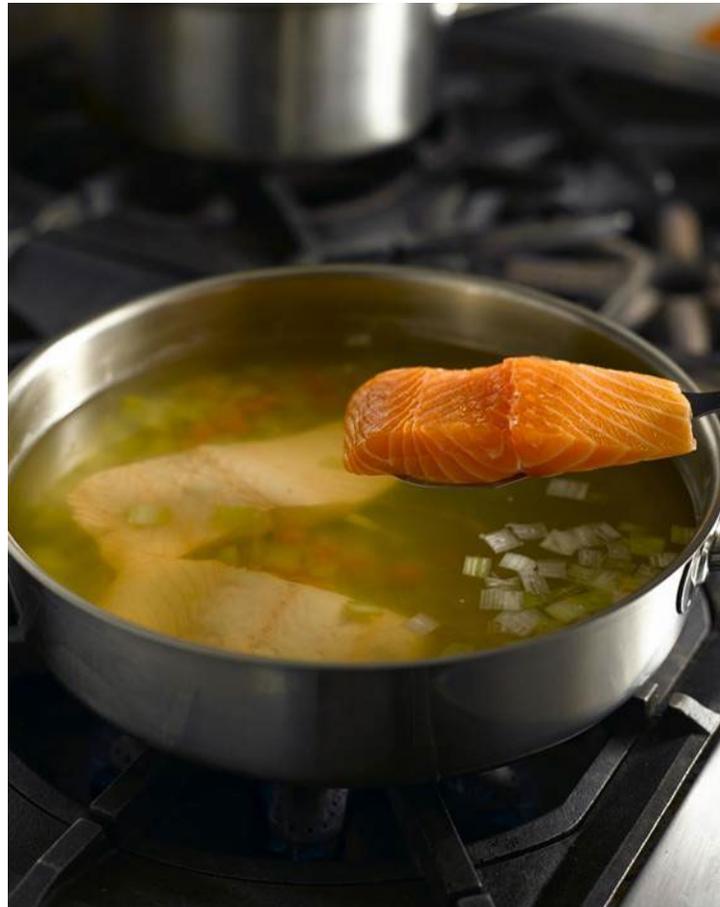
COOKING METHODS: SHALLOW POACH

1. Butter sauteuse, very lightly
2. Add aromatics and seasoned main item in an even layer
3. Add poaching liquid (1/3 way up sides)
4. Bring liquid to between 165° - 175°F
5. Cover sauteuse with buttered parchment paper or lid
6. Finish over direct heat or in oven
7. Remove main item, moisten, and keep warm
8. Reduce cuisson and prepare sauce as desired
9. Serve main item with sauce and appropriate garnish



COOKING METHODS: DEEP POACHING

1. Heat cooking liquid (court bouillon) to 165°F
2. Add main item, using a rack if necessary (item must be fully submerged)
3. Finish food over direct heat or in oven - do not let liquid boil
4. Remove main item, moisten, and keep warm while preparing sauce or cool in liquid, as appropriate
5. Cut or slice main item (if appropriate) and serve with appropriate sauce and garnish



COOKING METHODS: STEAMING

1. Bring liquid to a boil or preheat steamer
2. Add main item to steamer and arrange on a rack in a single layer
3. Cover steamer
4. Steam food to desired degree of doneness
5. Serve food immediately with appropriate sauce and garnish

