

THE PACIFIC NORTHWEST FISHING INDUSTRY, NOAA FISHERIES AND NEWSPAPERS IN EDUCATION PRESENT



Seafood 101

Celebrating the Journey from Sea to Market to Table



Seafood 101

Welcome to Seafood 101: A Journey From Sea To Market To Table

Take a journey under the sea, on fishing boats, into fishing ports and back to your dinner table to follow the path of seafood.

Have you ever wondered why seafood is so healthy, or how the fresh seafood meals we enjoy make their way to our dinner table? Let's find out.

First, jot down what you know about seafood and what you want to know about seafood. You'll fill out the last section when your journey is complete.



What I know about seafood

What I want to know about seafood



What I learned about seafood



What's the big deal about U.S. seafood?

Seafood is good for your health. The United States has the third-largest per capita consumption of seafood in the world. Americans eat 15 pounds of seafood per person per year, which is good news because seafood is a healthy source of protein, vitamins and minerals. That's why the USDA recommends eating seafood at least twice a week.

Seafood consumption is good for the economy. Commercial, sport and subsistence fisheries — those where the fish caught are consumed directly by the families of the fishermen — contribute significantly to the local and national economy.

In 2011, seafood harvested by U.S. fishermen at ports in the 50 states was valued at \$5.3 billion. The U.S. is the largest importer of seafood in the world, valued at over \$16.6 billion, and the fifth-largest exporter, valued at over \$5.4 billion. That's a lot of fish and a lot of job opportunities. Do you know anyone who has a job because of seafood?

Seafood on our plates

It takes a lot of people to get seafood from the ocean to your plate. Think about all the different types of seafood: fish (such as cod, pollock, halibut and salmon), shellfish (Dungeness crab), oysters. Also think about the different ways seafood is packaged before getting to the market. It may be packaged fresh, frozen, whole, filleted, smoked, pickled, canned or processed into frozen meals.

However you like your seafood, increasing your knowledge with Seafood 101 will help you ask the right questions and make the best decisions when at the market or restaurant.

PRESENTING SPONSORS



National Fisherman



SPONSORS



FRIENDS

- Alaska Fisheries Development Foundation
- King County Maritime
- North Seattle Industrial Association
- Pacific Marine Expo
- Seafood Nutrition Partnership
- Seattle Propeller Club
- University of Washington Center for Ecogenetics and Environmental Health
- Washington Sea Grant
- Washington State Department of Health

SUPPORTING SPONSORS



Seafood 101 is a unique partnership between government, businesses, the Seattle Times' Newspapers In Education program and maritime organizations that celebrates the journey from sea to market to table. Through a school curriculum program, free cooking demonstration and tours and other activities throughout the region, Seafood 101 showcases how government, business and community leaders are working together to achieve a sustainable, safe and strong fishing industry.

For more information: www.PacificNorthwestSeafood101.com.

How does NOAA Fisheries help bring healthy seafood to my plate?

Fisheries have always been important to the U.S. as a key source of food, as well as for trade, economic opportunities and quality of life. Government officials recognized early on that all of these activities put increasing demands on our fish populations, and that it would be critical to balance these demands with the health of our fisheries. NOAA Fisheries has been working to maintain that balance.

Highlights in Pacific Northwest and Alaska fisheries

1900s: First federal fish hatchery opens in Alaska. Gala celebration held in 1914 to dedicate Fishermen's Terminal.

1910s: World War I food shortages spur research into aquatic food supplies and health benefits of fish oil. Ocean Beauty Seafood Company starts as a storefront on Seattle's waterfront.

1920s: Large Pacific herring fishery develops in Aleutian Islands.

1930s: Exploration of crab resources in the Bering Sea begins.

1940s: Growing demand for protein during World War II fosters research on ways to preserve seafood longer. Tagging of fur seal pups begins in Alaska.

1950s: Exploratory cruises in North Pacific Ocean lead to discovery of vast Alaskan groundfish fishery, the largest in the world. Alaska becomes the 49th U.S. state.

1960s: State of Alaska takes over management of salmon.

1970s: Scientists develop process for making surimi. NOAA Fisheries is established. Magnuson Fishery Conservation and Management Act passes in 1976, paving the way for fully domestic fisheries in U.S. waters. Fishery observers are placed on foreign vessels in 1973. Trident Seafoods Corporation is founded with the launching of the F/V Billikin, the first king crab catcher-processor.

1980s: Pioneering research on chemistry of fish oils leads to better understanding of health benefits in human diet. Development of PIT tag technology for tracking salmon migration revolutionizes fisheries research. Alaska Seafood Marketing Institute is created. First Whole Foods Market opens. American Seafoods Company is founded.

1990s: Scientists assess damage from Exxon Valdez oil spill. Genetic tools help protect several West Coast salmon populations. North Pacific Groundfish Observer Program is formed, creating the largest fishery observer program in the U.S. Alaska pollock and Pacific whiting catch-share cooperatives are created, forming one of the largest private catch-share programs in the world. Congress passes American Fisheries Act in 1998.

2000s: Toxic hot spot for harmful algal blooms is discovered in Puget Sound. Contaminant sampling after Hurricane Katrina ensures seafood safety.

2010s: Bering Sea flatfish gear, developed by Alaska Seafood Cooperative and NOAA Fisheries, is required on all vessels fishing flatfish. F/V Northern Leader, the largest and most innovative vessel in the U.S. freezer longline fleet, is delivered.



Protecting, conserving and managing ocean life

Scientists are busy continuing the long tradition of studying ocean life in the Pacific Northwest and Alaska. These scientists provide information to sustainably manage our fisheries, and are pioneering new studies on how contaminants from human activities affect the ocean environment and human health.

Advanced technologies — such as scanning electron microscopes, unmanned aircraft systems, submersibles (underwater vehicles similar to submarines) and remotely operated vehicles — help us learn things about ocean life that our predecessors could scarcely imagine.

Managers work closely with Alaska Natives, tribes, the fishing industry, other government agencies and the public to help minimize or avoid human impacts to our resources.



Trident SEAFOODS

www.TridentSeafoods.com

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100% POLLOCK. CRUNCH KIDS LOVE.

AVAILABLE AT SELECT GROCERY AND CLUB STORES THROUGHOUT WESTERN WASHINGTON

Seafood 101

EAT SEAFOOD: IT'S GOOD FOR YOU

Seafood is a low-fat, high-quality protein packed with nutrients that keep you healthy.

Seafood, especially fish, is an important source of omega-3 fatty acids and vitamins such as D and B2 (riboflavin). Fish is rich in calcium and phosphorus, and is a great source of minerals including iron, zinc, iodine, magnesium and potassium. The American Heart Association recommends eating fish at least two times per week as part of a healthy diet.

Two omega-3 fatty acids found in fish are EPA and DHA, which are essential nutrients that keep our heart and brain healthy. Our bodies don't produce these fatty acids, so we must get them through the food we eat. Omega-3s are in every kind of fish, but they are especially high in fatty fish. Some good low-contaminant and high-health-benefit choices: salmon, trout, sardines, herring, canned mackerel, canned light tuna and oysters.

What about pollution?

The Earth, its oceans and our atmosphere receive pollution that begins in places like factories, industrial parks and even your neighborhood streets. The pollutants enter the soil, oceans or lakes directly or through the water cycle. Chemicals in the atmosphere dissolve into clouds that rain down on our land into our rivers and streams, which flow into our lakes and oceans. Some of these pollutants make their way through the food chain and end up in the food we eat.

A pollutant to watch out for in seafood is mercury. Mercury is a natural element found in very small quantities in the air, water, soil, and all living things. Over the last decade, concern over mercury levels in seafood has been the subject of much research and discussion, causing unwarranted alarm about all seafood and general confusion about what is safe to eat. Researchers have found that - for most people - the risk from mercury by eating fish and shellfish is not a health concern, even though all seafood has trace amounts of mercury. The levels in seafood vary widely and most species have very low amounts, usually less than one tenth of the U.S. established guideline for the allowable level of mercury in fish and seafood products. The EPA and FDA, though, do advise women who are or might become pregnant, nursing moms, or anyone that feeds fish to babies and children to avoid eating shark, swordfish, tilefish and king mackerel.

For more information on healthy fish choices in Washington state, visit www.doh.wa.gov/fish.

For information on seafood health, visit www.seafoodhealthfacts.org.



Nutritional values for Pacific Northwest Seafood

Serving size: 3.5 oz/100g

Species, Calories	Protein (g)	Fat (g)	Saturated Fat (g)	Sodium (mg)	Cholesterol (mg)	Omega-3s (mg) (EPA+DHA)	Vitamin D (IU)
Halibut, 140	27	3	<0.5	70	40	460	N/A
Cod, 100	23	<1	<0.5	90	45	280	N/A
Alaska Pollock, 110	23	1	<0.5	115	95	470	0
Rockfish, 120	24	2	<0.5	75	45	450	310
Sole, 120	24	1.5	<0.5	105	70	500	120
Black Cod/Sablefish, 250	17	20	4	70	65	1800	N/A
King salmon (Chinook), 230	26	13	3	60	85	1700	N/A
Sockeye (Red), 220	27	11	2	65	85	1200	930
Alaska King Crab, 100	19	1.5	<0.5	1100	55	400	N/A

*More information on seafood nutrition can be found at www.alaskaseafood.org

Choose Wisely: Make sure seafood is safe to eat

We have a vast array of fish, shellfish and fishery products to choose from. Seafood is most often cooked, but some people consume raw seafood. Fish may be caught in the wild or raised on farms. Seafood may be available locally, but it is often imported from other countries.

Many state and federal agencies (e.g., U.S. Food and Drug Administration, U.S. Department of Agriculture and U.S. Department of Commerce) work together to ensure that our seafood, whether domestic or imported, is safe to eat. Here are some ways to tell.

- **Smell:** Fish should smell fresh and not have a sour, ammonia-like smell.
- **Look:** If you are lucky enough to see the whole fish, look at its eyes; they should be clear and not cloudy (a little bulge is OK). If it is a fillet or steak, make sure the edges are not dry.
- **Feel:** The flesh should be firm and should spring back when pressed.

Food-handling basics

- **Clean:** Wash hands and surfaces often.
- **Separate:** Separate fish from other foods; don't cross-contaminate.
- **Cook:** Cook to the right temperature.
- **Chill:** Refrigerate promptly.

For more safe seafood-handling tips from the FDA, visit www.fda.gov/food/resourcesforyou/consumers/ucm077331.htm.



Make smart choices at the market

In the Pacific Northwest, we are fortunate to have access to some of the finest seafood sold anywhere in the world. Quick-cooking seafood is a healthy, delicious choice for families on the go.

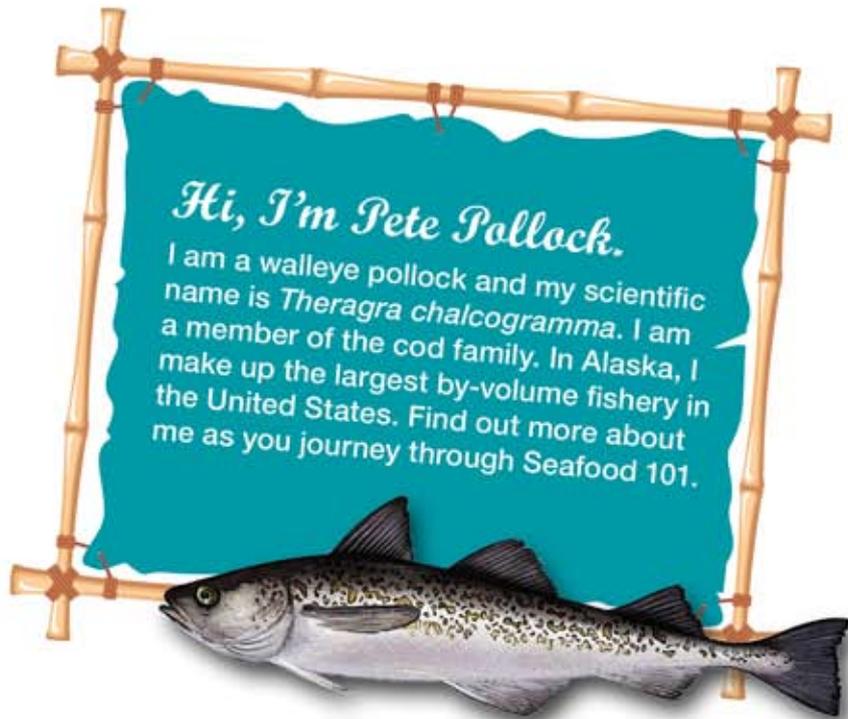
When eating with your family, you want to enjoy seafood that tastes great and is of the highest quality. In 1999, Whole Foods Market became the first U.S. retailer to offer certified seafood. Its seafood standards include:

- No use of antibiotics, added growth hormones or byproducts in feed.
- Traceability that allows tracking of farmed seafood (where it came from and how it got to the stores).
- Requirements that producers minimize the impact of fish farming on the environment.
- Strict protocols to ensure that farmed seafood is not escaping into the environment and that nearby wildlife is protected.

All products sold in Whole Foods Market stores are third-party verified to ensure that suppliers meet these standards, and the company's color-coded rating program makes it easy for you and your family to understand sustainability status information. For more information on sustainability status, visit www.wholefoods.com.

Through its Seattle-based seafood company, Select Fish, Whole Foods Market is able to offer its customers in the Pacific Northwest a range of delicious choices. Every store has a full-service seafood department with fishmongers available to customize your order.

When you and your family don't have time to cook, try one of Whole Foods Market's frozen prepared seafood entrees. Just thaw the marinated, seasoned or stuffed seafood, cook and serve with your favorite sides.



★ ★ You're ★ ★

NOT SEEING RED

AT WHOLE FOODS MARKET, WE BELIEVE THAT SUSTAINABLE SEAFOOD COMES FROM MARINE FISHERIES AND RESPONSIBLY MANAGED FISH FARMS THAT MAINTAIN HEALTHY FISH POPULATIONS AND ECOSYSTEMS.

OUR PORT BUYERS, KEITH AND ANTHONY, SPEND 4 MONTHS IN ALASKA EVERY YEAR TO HAND-SELECT THE HIGHEST QUALITY SALMON.

AS OF EARTH DAY 2012, WE NO LONGER CARRY RED-RATED, WILD-CAUGHT FISH IN OUR SEAFOOD DEPARTMENTS. IT'S OUR WAY OF SUPPORTING OUR OCEANS AND HELPING TO REVERSE OVERFISHING TRENDS. NOTHING FISHY ABOUT THAT.

WHOLE FOODS MARKET

FOR MORE ABOUT OUR SEAFOOD SUSTAINABILITY RATINGS GO TO: WHOLEFOODSMARKET.COM/SEAFOOD

Seafood 101

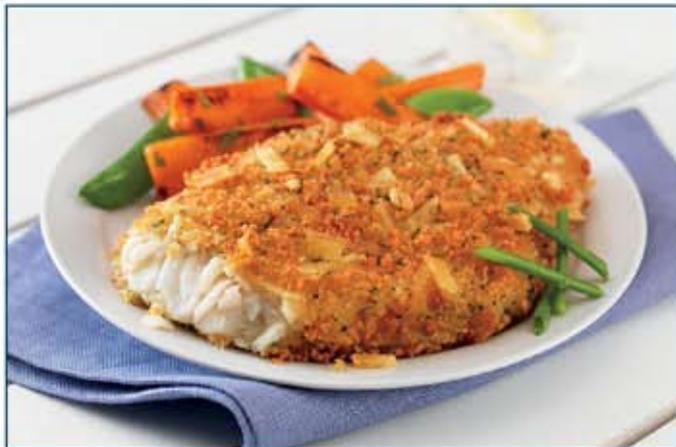


Do fish have fingers?

Well, not exactly — and they don't carry sticks, either. You probably like to eat them, though. Fish sticks, sometimes called fish fingers, are made from blocks of whole pollock fillets or minced pollock. While still frozen, the fish blocks are cut into stick shapes and then breaded, packaged and placed back into cold storage.

You can find fish sticks in the freezer aisle of your favorite grocery store. They can be cooked right from frozen — baked in the oven, fried in a pan or zapped in the microwave — for a healthy, tasty meal.

How do you eat your fish sticks? Alone, with just a dipping sauce like ketchup or ranch dressing? In a wrap or a taco? Whichever way you choose, fish sticks and fish portions made from Alaska pollock are a quick, easy way to enjoy nutritious Alaska seafood.



SEAFOOD TASTES GOOD

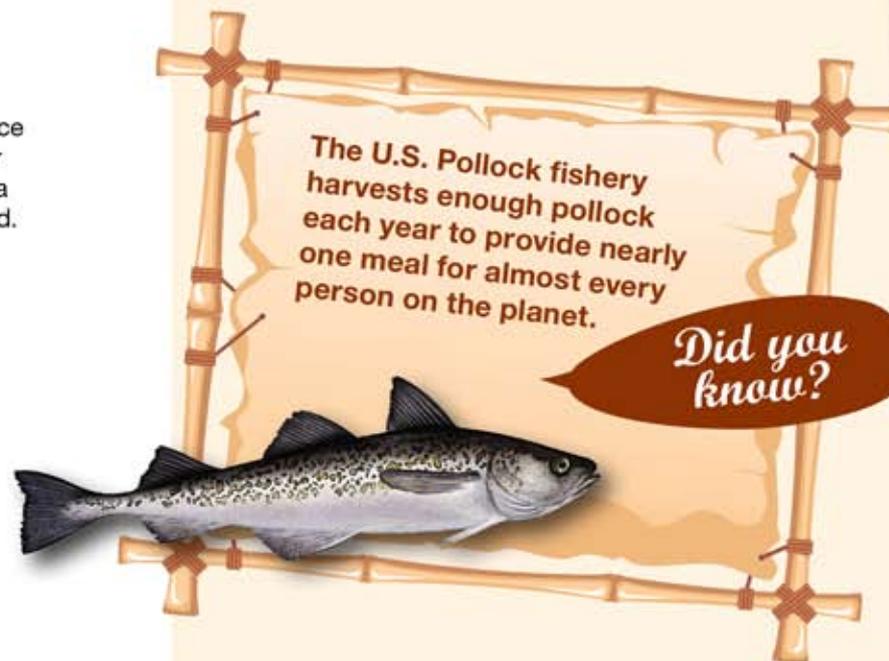
Alaska pollock: a healthy white fish

What is Alaska pollock? It is a mild-tasting white fish that's found in fish and chips, fish sticks, fish-fillet sandwiches and fish tacos. Pollock is also the main ingredient used to make surimi seafood, a product that is used worldwide. This versatile fish is a great source of natural protein and vitamins, and is loaded with healthy omega-3 fatty acids, important for developing brains and bodies.

Companies such as American Seafoods and Trident Seafoods, both based in Seattle, catch and process Alaska pollock at sea aboard catcher-processor vessels. Pollock are filleted onboard using automatic fillet machines. Meat is either processed into skinless, boneless fillets or is minced and mixed with other ingredients and packaged as seafood. Both products are quickly frozen to preserve freshness, and then packaged in cardboard cartons and stored in freezer holds until offloading at port.

Seafood is quick and easy to cook

Enjoy making these simple, yummy seafood recipes with your family. Please ask an adult for help in prepping food and using the oven or stove.



Recipes courtesy of American Seafood Marketing Institute

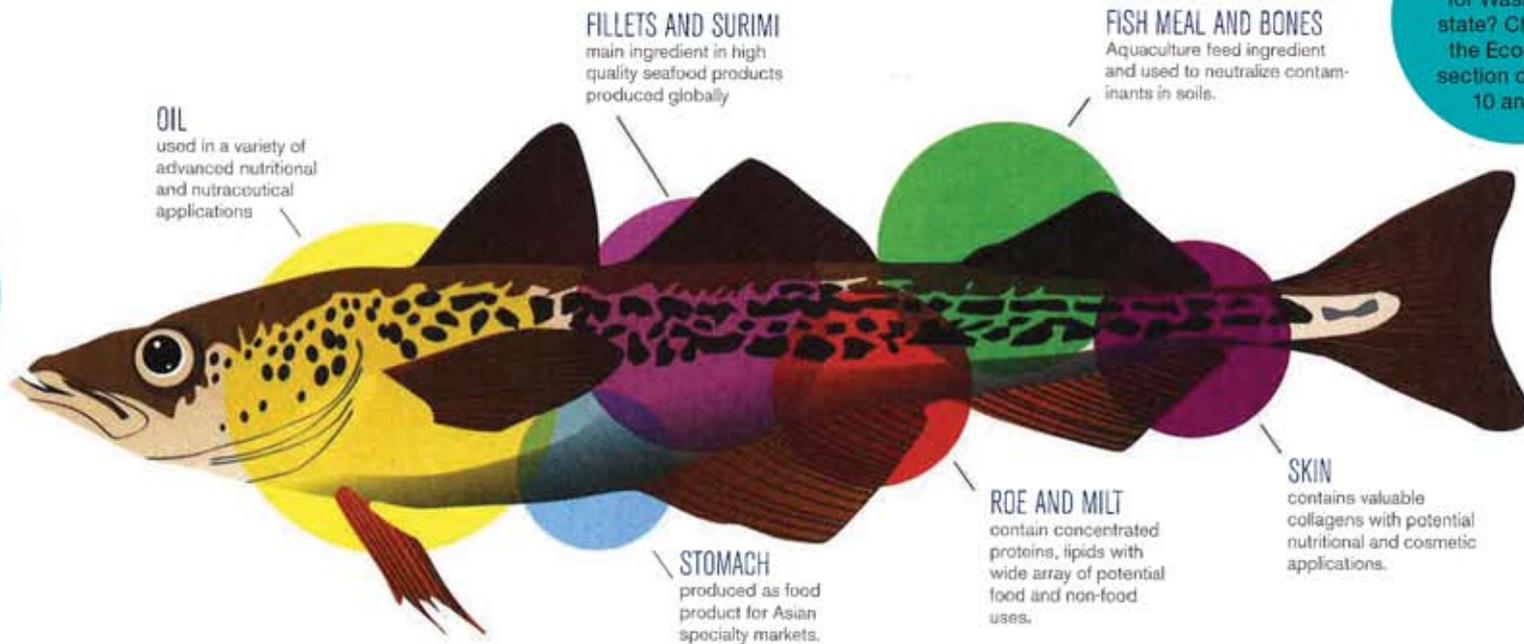
Sole sliders

Prep time: 20 minutes • C



FILLETS, FISH STICKS, AND FISH MEAL

Pollock is 100 percent utilized, meaning every part of the fish is used. What isn't processed into fillets, surimi or roe (eggs) or other frozen products is used for fish oil and fish meal.



Why is Alaska pollock important for Washington state? Check out the Economics section on pages 10 and 11.

Cook time: 15 minutes • Servings: 4 (2 sliders each)

Ingredients:

- 3/4 cup bread crumbs
- 1/2 teaspoon salt
- 1/4 teaspoon dried basil
- 1 pound Alaska sole fillets, cut in 2-inch portions
- Canola oil or olive oil spray, as needed
- 3/4 cup mayonnaise
- 1/2 cup fresh basil, julienned
- 1 lemon, zested
- 2 tablespoons fresh lemon juice
- 2 tablespoons capers, coarsely chopped
- 1/2 teaspoon sea salt
- 8 mini hamburger buns (or dinner rolls), 2 to 2-1/2 inches in diameter, split
- 8 small romaine or butter lettuce leaves
- 2 roma tomatoes, sliced

Directions:

Mix together bread crumbs, salt and dried basil, and press mixture onto each Alaska sole portion. Chill the pieces on a parchment-lined tray for 30 to 60 minutes. Cook in a lightly oiled nonstick pan over medium-high heat until golden brown and opaque throughout. In a small bowl, whisk together mayonnaise, fresh basil, lemon zest and juice, capers and sea salt. Toast the buns and spread about 1 tablespoon basil-mayo aioli on cut side of each bun. On bottom half, place lettuce and a slice of tomato. Top with fish, then the bun top.

Fish stick lettuce cups

Prep time: 10 minutes • Cook time: 20 minutes • Servings: 8



Ingredients:

- 16 frozen Alaska fish sticks
- 3 tablespoons soy sauce
- 1/3 cup rice vinegar
- 1-1/2 teaspoons sesame oil
- 1/4 teaspoon red pepper flakes
- 1/2 teaspoon chili oil
- 1 teaspoon sesame seeds
- 8 large butter/bibb lettuce leaves
- 4 cups (8 ounces) broccoli slaw or shredded carrots
- 1/4 cup chopped toasted peanuts
- 1/4 chopped green onion

Directions:

Prepare Alaska fish sticks according to package directions. While fish sticks are baking, prepare dressing: In a small bowl, whisk together the soy sauce, rice vinegar, sesame oil, red pepper flakes, chili oil and sesame seeds. For each lettuce cup, place two fish sticks in a lettuce leaf and top with 1/2 cup broccoli slaw, 1/2 tablespoon peanuts and 1/2 tablespoon green onions. Drizzle on 1 tablespoon of dressing. Repeat with remaining lettuce.

Seafood 101

SUSTAINABLE SEAFOOD: IT'S ALL ABOUT BALANCE

Conserving our natural resources, whether on land or at sea, is something we all should be concerned about. For this reason, laws were created to ensure that these resources are available for future generations.

The Magnuson-Stevens Fishery Conservation and Management Act (MSA) is the principal law governing U.S. marine fisheries. The MSA mandates that NOAA Fisheries limit the amount of fish harvested, to prevent or end overfishing, in federal waters from 3 to 200 miles off our country's coasts.

Limiting the amount of fish harvested may sound easy, but it is challenging. NOAA Fisheries scientists conduct extensive surveys of ocean waters and collect data independently and from fishermen to best determine how much fish can be safely harvested. Scientists are not only working to maintain healthy fish populations, but also to ensure that the food needs of other animals in the ecosystem are met.

There is a public process that brings in a team of people — including scientists, fishermen, resource managers, tribes and citizens — to work together in what are called Fishery Management Councils. At council meetings, scientists give their recommendation for a harvest limit, and the annual limit is set at or below that level, thus providing for healthy fish populations.

Responsible management's toolbox

Imagine if everyone could fish all they wanted, with no limits and without any knowledge of how much anyone else is also fishing in the same area. Eventually, we'd run out of fish! Fishery managers at NOAA use many tools to prevent this from happening.

- **Annual catch limit:** Sets the maximum amount of fish that fishermen can catch in a year. Sometimes the total catch is divided up among individual fishermen; this is called "catch sharing."
- **Fishing trip limits:** Limits the harvest amount for each "trip" a fisherman takes.
- **Fish size limits:** Requires fishermen to catch only fish of a certain size.
- **Fishing gear restrictions:** Prohibits the use of some types of fishing gear.
- **Area closures:** Restricts access to some parts of the ocean.
- **Seasonal closures:** Specifies days/months when fishing is not allowed.



Cooperative fishing equals environmental benefits

The progressive, environmental ethic in Washington state is reflected in the attitudes and actions of the Seattle fishing community. One example of this ethic is early adoption of catch-share fishery management. A catch-share system allocates the annual fish harvest individually among eligible fishermen, leaving behind wasteful systems where fishermen catch as many fish as possible as quickly as possible.

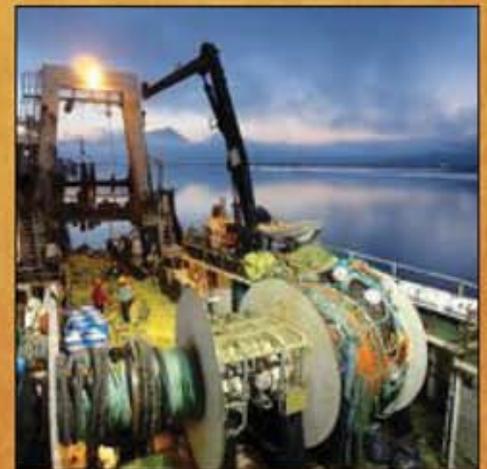
Member companies of the At-sea Processors Association (APA), which catch whitefish used in fish sticks, fish sandwiches and surimi seafood products, pioneered fish-harvesting cooperatives, a form of catch-share management. APA companies collectively agreed on a catch-sharing formula that imposed stiff penalties, deterring any individual company from harvesting more than its share.

Individual allocations slow down the pace of fishing and processing. Now, vessels produce 50% more food from every pound of fish harvested. The companies share catch information to help skippers avoid incidental catches of species reserved for other fishermen. Cooperative fishing has also led APA fishing companies to pool resources to support marine research at local universities.

Learn more about fish-harvesting cooperatives at www.atsea.org.

DID YOU KNOW?

- More sole and flounder (flatfish) are caught off Alaska than any other flatfish fishery in the world.
- In 2012, Alaska Seafood Cooperative (AKSC) vessels retained over 94 percent of the groundfish caught (an incredible improvement from 20 years ago when more than half of the catch was discarded).
- Since 2011, flatfish vessels in the Bering Sea and Aleutian Islands have used improved trawl gear that reduces habitat impacts by 90 percent. This collaboration with NOAA scientists has helped to responsibly manage the ocean's resources.
- Flatfish vessels have high levels of monitoring, including carrying two Federal observers.
- AKSC companies have a long track record of collaborating with NOAA scientists to responsibly manage the ocean's resources.



To learn more, visit alaskaseafoodcooperative.org



What does science have to do with sustainable seafood?

The goal of fishery science is to determine the amount of fish to harvest that minimizes harm to the environment and leaves enough fish in the water for the population to renew itself. This is no easy task. It takes several types of scientists to conduct the research that produces the information necessary to responsibly manage a fishery.

A mathematician works on estimating fish population size; a biologist finds out things like how old a fish gets, or how many eggs survive to adulthood during a fish's life cycle; and a group of scientists including oceanographers, mathematicians and biologists work together to determine what influences an ecosystem.

Using science to decrease impact of bottom trawling

Can sustainable fisheries be improved? You betcha!

Fishermen and scientists have been working together to decrease fishing-gear impacts to habitat, and to decrease bycatch of unwanted species. Let's look at bottom trawling, a type of fishing where ships tow nets to catch fish that live on the sea floor, such as cod, flounder or sole.

Between the ship and the net are long lines of cable that attach to two trawl doors. The doors act like wings to keep the net mouth open so fish can be herded into the net. Trawl sweeps, made of steel cables, connect the doors to the net. Although bottom trawling is the method that most efficiently catches flatfish, it can potentially harm some types of sea-floor habitat. That is, until recently.

In collaboration with NOAA Fisheries, scientists and funding from the North Pacific Research Board, the Alaska Seafood Cooperative developed the Bering Sea Flatfish Trawl. This trawl net significantly reduces bottom contact and habitat effects without the declining catch rates that might be expected.

How did they do it? Research showed that continuous bottom contact was not necessary to move fish into the net. By installing devices that raise the trawl sweeps off the bottom, they pass over most bottom-dwelling animals. Studies showed that this greatly reduced sea-floor impacts without significantly decreasing fishing effectiveness. As of 2011, all Bering Sea flatfish vessels must use these modified trawl sweeps.



Responsible Fishing Inspires Innovation

Fishermen share a commitment to sustaining our oceans fisheries for future generations. This is reflected by innovations within the fishing industry to improve sustainability. A great example is the construction of new, greener vessels by members of the Freezer Longline Coalition (FLC). FLC members sustainably harvest Alaska cod with hook-and-line gear that produces little-to-no impact on ocean habitat while maintaining the highest-quality product. The introduction of the new vessels to the FLC fleet increases the sustainability of the fishery through new efficiencies in harvesting operations.

How are they more efficient? One vessel now under construction has a power management system that stops or starts generating energy based on the needs of the vessel. The system uses up to 20 percent less fuel than those on older generation freezer longline vessels. This and other new vessels, including one completed this summer, will also have the capability to utilize most, if not all of the fish they harvest, minimizing waste. Innovations such as these help ensure the long-term health and sustainability of our fisheries.

Freezer Longline
COALITION



Premium Alaska Line-Caught Cod!

www.freezerlonglinecoalition.com

SUSTAINABLE

LINE-CAUGHT

ECO-FRIENDLY

Seafood 101

Did you know?



The Alaska pollock fleet's homeport is Seattle's Pier 90 and 91. The pollock fishery is the largest by volume in the U.S.

ECONOMICS, JOBS AND COMMUNITY

Do you know someone who works in the maritime industry? Seafood is not only a food source, but also an important part of the community, as it provides jobs and economic revenue to our state and cities. Whether driving boats, processing fish into food products, loading cargo ships as a longshoreman, working as a fisheries scientist or cooking seafood as a restaurant chef, the economic impact of our fisheries is global.

Fishermen's Terminal: ready for the next 100 years

For 100 years, the Port of Seattle's Fishermen's Terminal has been the homeport of the North Pacific fishing fleet. And there's every reason to expect that relationship to continue for the next hundred years.

About 400 boats — from seiners and gillnetters to longliners, trollers, trawlers and crabbers — call Fishermen's Terminal home. Those boats ply the pure, clean waters of Alaska and the North Pacific to bring salmon, halibut, cod, squid, herring, sardines, tuna and shrimp to consumers the world over. Why do you think so many different types of boats are used?

The Port of Seattle and its partners are committed to supporting the fishing economy and all of the benefits it brings to the Pacific Northwest. Over the past decade, the port has built concrete floating docks, upgraded utilities and replaced a seawall and other structures at the terminal. These investments ensure that the facility will continue to meet the needs of an evolving industry.

In addition, the port's strategy to help recruit and educate skilled workers to build, repair, maintain and operate fishing vessels will help Fishermen's Terminal remain the vital homeport it is today. What type of job at Fishermen's Terminal might interest you?

Ready for
**THE NEXT
100 YEARS**



portseattle.org

Grand Opening, Fishermen's Terminal, January 10, 1914.

Hi, I'm Floyd Flatfish.

There are many species of flatfish around the world. We may be called flounder or sole. Halibut are the largest flatfish in the world and live off Alaska and the West Coast. I am a yellowfin sole and my scientific name is *Limanda aspera*. I am the most abundant flatfish species in the Bering Sea.



The reach of the seafood industry is far and wide

The Puget Sound region is an important hub for the seafood industry. Alaska seafood, which accounts for more than half of the U.S. wild-caught seafood production by volume, travels through our region before heading throughout the U.S. and internationally.

Shipyards service large and medium-sized vessels that fish off the West Coast and Alaska. Seattle businesses also provide important financial services, such as banking and insurance, to the industry.

Alaska seafood:

- Produced \$1.6 billion in landings revenue (in 2010)*
- Provides 34,000 jobs in Washington state, or 1 percent of all jobs held by Washington residents**
- Creates \$15.7 billion of direct and indirect economic output in the U.S.**
- Provides 2,640 jobs in the wholesale, grocery and restaurant sectors of Washington**

Washington seafood:

- Has the highest landings revenue on the West Coast — \$255 million (in 2010)*
- Includes key species such as albacore tuna, Dungeness crab, flatfish, squid and hake (squid and hake made up 61 percent of total landings on the West Coast in 2010*)

*NOAA Fisheries' Fisheries of the U.S. Report, 2012
**Alaska Seafood Economic Impact Report, 2013



THE REACH OF THE SEAFOOD INDUSTRY IS FAR AND WIDE



Seafood 101

October is National Seafood Month!

*Saturday,
October 19*

11 a.m.–12 p.m.

*Cooking demonstration
with Steven Vincent*

Whole Foods Market Bellevue
888 116th Ave. N.E., Bellevue



*Saturday,
October 26*

10 a.m.–1 p.m.

*Seattle Kitchen with Chefs Tom
Douglas and Thierry Rautureau*

Whole Foods Roosevelt Square
1026 NE 64th St., Seattle

Join Chefs Tom Douglas and Thierry Rautureau during a special recording of KIRO Radio's Seattle Kitchen show. Seattle Kitchen, a foodie's dream, is broadcast on Saturdays and Sundays.

*Saturday,
October 12*

11 a.m.–12 p.m.

*Cooking demonstration
with Steven Vincent*

Whole Foods Market Bellevue
888 116th Ave. N.E., Bellevue



*Saturday,
November 16*

10 a.m.–12 p.m.

Fishermen's Terminal Walking Tour
3919 18th Ave. W., Seattle

A walking tour of Fishermen's Terminal, home of the North Pacific Fishing Fleet. Since 1914, the fishing fleet has operated their vessels from this historic Interbay location. The walking tour will include meeting fishermen and tenants, hearing about the fishing industry, viewing the different fishing vessels at the docks, and touring the boat maintenance repair yard and the businesses at the terminal. The tour is limited to 40 participants.



*Wednesday,
November 6*

Terminal 91 Tour
2001 W. Garfield St., Seattle

The tour is limited to 40 participants.

November 20-22

Wed.–Thurs.: 10 a.m.–5 p.m.

Friday: 10 a.m.–3 p.m.

Pacific Marine Expo
CenturyLink Field Event Center

If you are in the fishing or workboat industries, this is your trade show. With more than 450 exhibitors, Boatyard Day and a full conference program, Pacific Marine Expo is the West Coast's largest commercial marine trade show. To register, or for more information, visit www.PacificMarineExpo.com.



For details, visit www.PacificNorthwestSeafood101.com.

All events subject to change.

