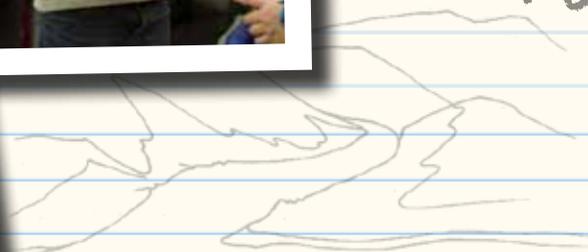




Photo: James Poulson

It is awesome! The fish is definitely wonderful, I mean I have always been a fan of seafood, and the fact that I can get seafood at school for kinda cheap is pretty awesome. I eat it whenever I can.

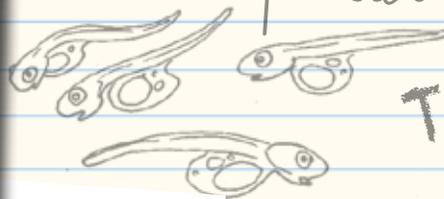
It is delicious!



A Guide to Serving Local Fish in School Cafeterias



I choose local fish because it helps our brain.



Thank you fishermen!

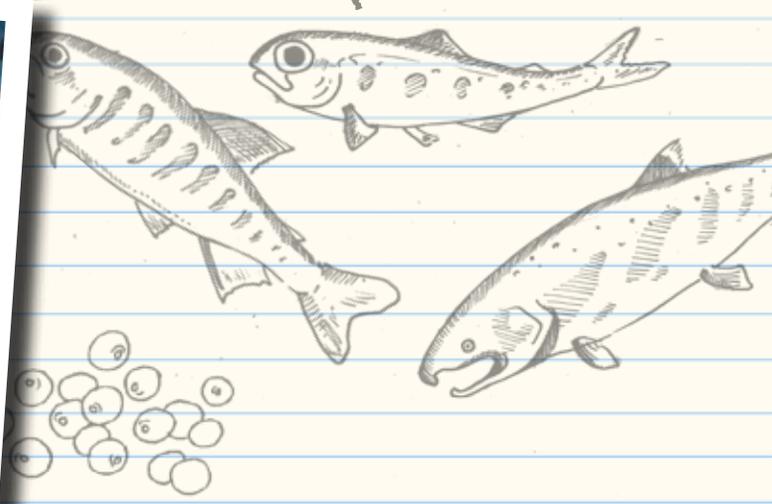


Photo: James Poulson

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Crossett Fund**

Alaska Farm to School

Alaska Obesity Prevention and Control Program

The Sitka Conservation Society

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Thank you Stacey Wayne for your time shaping this unit from notes on paper into proper lesson plans. Special thanks to Rebecca Himshoot for your constant feedback and creativity; to Chris Bryner for taking a chance on Fish to Schools and implementing the program in your classroom, and for providing innovative ideas for improvement; to Ann Walter, Jasmine Shaw, and Marian Allen for editing the lessons and to Courtney Bobsin and Mary Wood, who taught these lessons with me side-by-side in the classroom!

About us

The Sitka Conservation Society has been protecting the environment and supporting sustainable communities since 1967. Strengthening our local food system is integral to our mission--eating locally supports healthy people, communities, economies, and our environment. We became intimately involved with the Fish to Schools program after the 2010 Sitka Community Health Summit. We recognized this as an opportunity to support the development of a program that promotes sustainable communities and dedicated staff time to ensure program success. To learn more about the Sitka Fish to Schools program or check out our other programs visit our website:

www.sitkawild.org



Introduction

Serving wild Alaskan seafood in the school lunch program is a recent development for Sitka and the entire state of Alaska. This is surprising for a state that boasts one of the largest commercial fishing fleets in the nation and is a global leader in fisheries management.

Fish to Schools, a term we've coined in Sitka, is an effort to get local fish into school lunches. Our goal is to connect youth to their local food system in order for them to understand the impact of their food choices on their health, the economy, and environment. We see this as an opportunity to:

- create local markets
- build connections between local producers and consumers
- build a more resilient food system
- provide place-based learning opportunities
- improve student nutrition.

There have been challenges along the way but it hasn't stopped us. We have done a lot of research and have asked a lot of questions to understand food service and fishery regulations. We've learned a lot and want to share with you our stories, ideas, and resources.

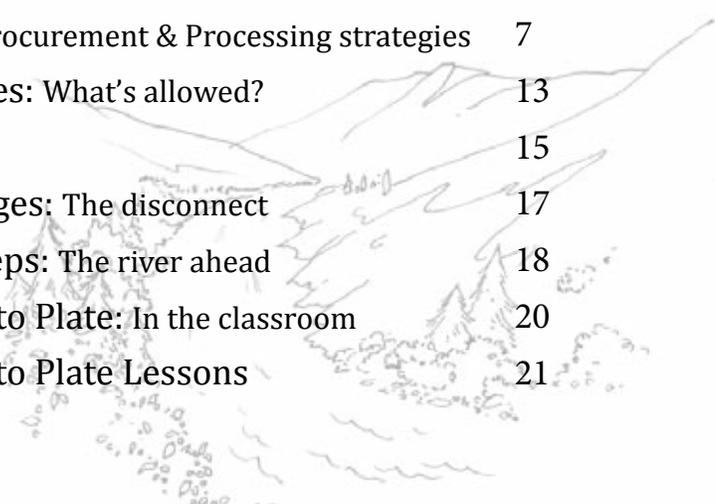
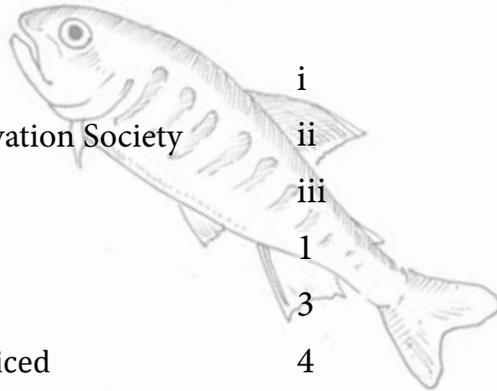
This resource guide provides information on how to get fish into your school, funding opportunities, and case studies on existing programs. It will detail the steps Sitka took to develop its program with the hope that it will give your community ideas for starting your own Fish to Schools initiative.

“ The beauty of Fish to Schools is that it provides a practical, local solution to a multitude of current global issues. In serving local fish in the Alaskan schools, we are nourishing our kids and helping them become stronger and better learners, which is just what our future needs. Local fish is also the most environmentally sustainable choice. Exposing Alaskan kids to the history, traditions and methods of harvesting the bounty of our sea will help keep local culture and economies alive for many years to come. ”

Lexi Fish, Commercial Fisherman &
Co-founder of Fish to Schools

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WHY?

Our Vision

Fish to Schools is an initiative that supports a sustainable food system. Eating locally, especially in institutional meal programs, decreases a dependency on industrially produced foods that travel thousands of miles to get to us. Fish to Schools supports a shift in our current food system that benefits local and state economies. By supporting local producers and processors, we are investing in our communities, creating and sustaining jobs in Alaska.

Fish to Schools is also an investment in childhood nutrition. On average, 53,400 Alaska students participate in the National School Lunch Program annually, consuming up to half of their daily nutrients at school. Replacing hot dogs with locally-caught seafood increases opportunities for students to access highly nutritious foods. Not only is Alaskan seafood a lean protein source and rich in omega 3-fatty acids, it is also prepared from scratch unlike most heat and serve meals common today. With one out of every four Alaskans obese or overweight, serving local foods is a strategic approach to reduce obesity rates. Fish to Schools can have a wide and broad effect, targeting all school-aged children. Regardless of family income, Fish to Schools creates access to nutritious foods that fill hungry bellies, has the potential to increase academic performance, and instills lifelong habits to eat healthy.



MISSION: Working towards a sustainable community that offers all school children the health benefits of locally-caught seafood, equips them to understand how this food source is obtained, and empowers them to one day enjoy the full cultural and economic advantages of local seafood resources.

I choose local fish because it helps our brain.

Keet Gooshi Heen 3rd grader



I'm really excited and fond of the program because not only is it bringing in locally caught, really delicious and nutritious fish to the school, it's also a break away from the normal pizza and chicken nuggets, the essence of school lunches. I think the school body is really interested in it as well.

Owen Fulton, the President of Sitka High School

Fresh Alaskan
Coho
or
Turkey Hot Dog
with Black Beans
or
PB & J Sandwich



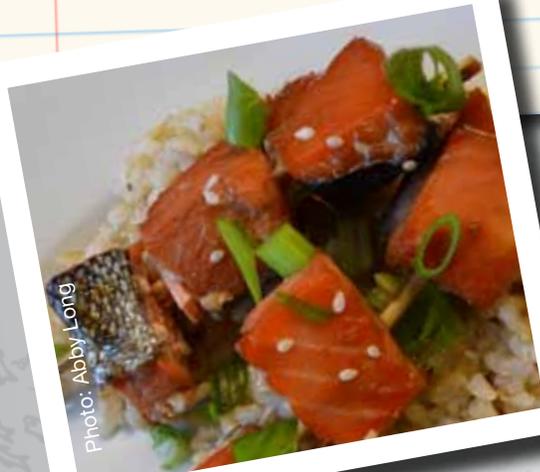
WHAT? A Short History

The Sitka Fish to Schools program is the result of a grassroots effort that spawned out of the annual [Sitka Health Summit](#), a partnership between two local hospitals to build a healthier community. Every year local citizens identify and vote on community health priorities—serving local fish in schools was the goal in 2010. After a pilot meal with stakeholders, local fish was served at the local middle school—just a few months after the Health Summit. Today it is served in every Sitka school serving grades 2-12, reaching up to 1,500 students.

I think it's important to the Sitka School District because it's a local product that we can feed to our students, providing a high level of nutrition and making the Sitka School District more self-reliant. It also really helps our community and our students connect with their environment and connect with different aspects of the community that depend on those resources. It is a great way to educate kids about where food comes from and how important it can be and it's great food.

Lon Garrison, President of the Sitka School Board

Photo: Abby Long



Trends

Our program is young, but we have noticed some trends through data collection and observation. We have seen a small increase of 1-2% in school lunch participation. This may be attributed to the higher rates of participation from students and staff who typically bring home lunch. One elementary school staff member said that at least ten students at the elementary school eat only school lunch when local fish is served.

Fish lunches are one of three options at the Sitka School District. When fish lunches are served, they comprise about 30% of the meals. They have been most popular at the elementary school; anecdotally we have noticed more students choosing fish for lunch after they participate in the Stream to Plate education program.

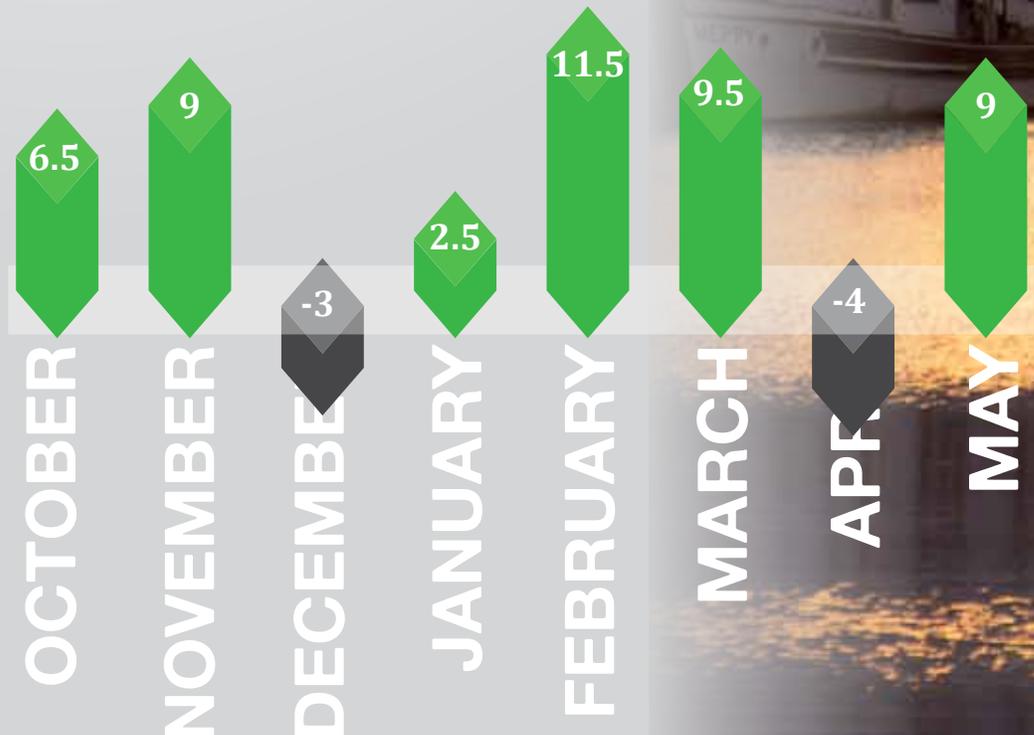
In the fall of 2012 we conducted taste preference surveys at both Keet Gooshi Heen Elementary and Blatchley Middle School in Sitka. 93% of students at the elementary school and 89% of students at the middle school reported liking the fish lunches.

Shaping lunch preferences takes time and change will be slow, especially when students are expecting hot dogs and pizza, or fish just like mom makes it. Be patient.



28%
of of all
meals on fish
days were local fish
(2012-2013 average).

Increased participation rates on fish lunch days.



WHO?

Our partners



A group of committed volunteers from the Sitka Health Summit began by identifying local stakeholders. Integral to our program are our local seafood processors: Sitka Sound Seafoods and the Seafood Producers Cooperative. They donated local product in year one, making it financially viable for the Sitka School District to provide local fish lunches. Nana Management Services, the school food service provider, acted outside of their contract agreement to pilot the meals. Surpassing their initial goal at the middle school, they agreed to continue serving local seafood if we could secure the product.

For the 2012-2013 and 2013-2014 school years, the Sitka Fish to Schools program organized a summer coho donation drive, targeting commercial fishermen. Over the course of two weeks, local seafood processors received donations from fishermen as they offloaded their catch. The fish was processed, for a fee, and reserved for Sitka schools. By targeting fishermen directly for donations, we diversified our resource pool and developed relationships with our local trolling fleet. Since 2012, twenty-two fishermen have donated over 2,000 pounds of fish to Fish to Schools.

Integral to the success of our program is the vast network of partnerships we have developed. A strong working relationship with the School Food Service is absolutely critical. Food Service creates the menus, determines what is served, when, how often, and determines how many options are offered. School District staff must be on board as well—they either oversee the Food Service Contract or are themselves the food service providers. They determine food service contract agreements (which can include requirements to serve local foods) and manage food service budgets.

For our “Stream to Plate” educational program, we have worked with the Sitka Native Education Program (SNEP), the Alaska Department of Fish and Game (ADF&G) and the National Park Service. Both SNEP and ADF&G sent representatives to the classroom to provide hands-on class experience to teach both traditional fishing methods and sustainable fisheries management, respectively. Annually, the Sitka Conservation Society partners with the National Park Service on a salmon program at Sitka National Historical Park.

We are also proud to have the support of the Sitka City Assembly, the Sitka School Board, school staff, teachers, parents, and community members.



WHERE?

In Sitka

Sitka includes about 9,000 residents and sits on the outer coast of Baranof Island, making it a prime fishing location. Sitka has a robust fishing community, consisting of small, family operated trollers. The schools that participate in Fish to Schools represent several types of school systems: traditional public schools, an alternative high school, a state run boarding school, and a private school.

SCHOOLS:

School	Grades	Students
Keet Gooshi Heen	2 - 5	376
Blatchley Middle School	6 - 8	312
Sitka High School	9 - 12	330
Pacific High School alternative school	9 - 12	33
Mount Edgecumbe High School State of Alaska public boarding school	9-12	400
SEER School private school	K - 8	23

Data from the Alaska Department of Commerce, Community, and Economic Development.



HOW?

Procurement and Processing strategies

As current legislation stands, only commercially-caught fish can enter school lunch programs. Commercial fish can either be sold or donated to a school meal program.

Options for Purchasing

Allocate money in the school budget for the purchase of local foods.

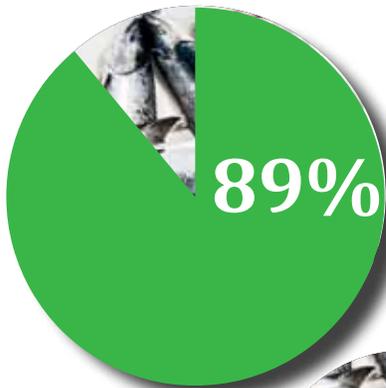
For the 2013-2014 school year, school districts can purchase Alaskan seafood through the [Nutritional Alaskan Foods for Schools \(NAFS\)](#) grant program. NAFS **reimburses** school districts for their Alaska food purchases, including seafood. As of January 2014, this grant is in the Governor's capital budget for Fiscal Year 2015. NAFS funding for the 2014-2015 school year requires annual legislator approval. See [here](#) for reimbursement rates and [here](#) for grant information on how funding can be spent.

[Alaska Farm to School](#) awards [mini-grants](#) to projects that “promote activities that connect students, teachers, community, and school food service with product grown or produced in Alaska.”

Purchase Alaskan fish through the [Child Nutrition Commodities Program](#). School districts can serve [Alaska Pollock](#) or a salmon wrap. The salmon wrap is produced by Taco Loco in Anchorage using commodity ingredients for the tortillas and Alaska sockeye salmon. By using commodity ingredients, Taco Loco gives schools a discount on purchasing the wraps. School districts may use Nutritional Alaskan Foods for Schools to offset costs. When purchasing Pollock or salmon wraps using commodity entitlement dollars, there are no additional shipping charges for the school district or agency. For more information contact Sue Lampert at 907.465.8710 or susan.lampert@alaska.gov.

Nutritional Alaska Foods for Schools:

Nutritional Alaska Foods for Schools (NAFS) is a state-funded program providing a \$3 million state-wide reimbursement fund for school districts to purchase healthy Alaska Grown produce and fish from Alaska waters. This program creates economic opportunities for farmers, fishermen, and seafood processors while ensuring local product is served in school meal programs.



In its first year, 89% of Alaskan school districts utilized NAFS funding.



Of those school districts, 85% purchased Alaskan seafood amounting to over 137,000 pounds in the first year.



In the first quarter of fiscal year 2014, 65% of NAFS reimbursements have been for seafood amounting to over 26,500 pounds purchased.

NAFS is a viable means to make Fish to Schools a state-wide and sustainable initiative. It enables school districts to prioritize spending on local products, which ultimately creates new and expanded markets and supports local businesses. It's a win for school districts who want to serve healthy foods to students, a win for children, and a win for the state's economy.

NAFS is administered through the Department of Commerce, Community, and Economic Development, Division of Community and Rural Affairs. For more information contact Debi Kruse at debi.kruse@alaska.gov or 907.269.8131.



There is a certain poetry that people eat food from the lands and waters around them. In Alaska, that means fish caught fresh from the Pacific, and not fried chicken from Kentucky. Thanks to the Sitka community for moving forward this important idea.

*Alaska House Representative
Jonathan Kreiss-Tomkins*

Securing Donations

It is legal for commercial fishermen to donate to a nonprofit or school district under regulation [5 AAC 39.010](#). If fish are delivered to a licensed processor, the number and species of fish must be recorded as a donation under personal use (not sold) under disposition code 95. Commercial fishermen may also apply for a free [catcher-seller permit](#), which allows them to record the transaction on a fish ticket. This allows them to sell directly to the public or donate some/all of their catch. While cash donations are tax deductible, fishermen should consult a CPA or tax preparer for information regarding fish donations.

Here are some ways to get seafood donations:

- Ask for donations from a local seafood processor.
- Partner with a Department of Environmental Conservation (DEC) permitted seafood processor and organize an annual fish drive. Allot a period of time where fishermen can donate directly to the program when they offload their catch at the seafood processor or tender.
- In some cases donated bycatch and overage fish has been used successfully in school meal programs. Consult your Alaska Department of Fish & Games resource managers for potential opportunities.

Salmon for Schools: Dillingham City School District

3 Schools **534** Students

Dillingham has the most robust seafood donation program in the state, receiving over 8,000 pounds of sockeye salmon donations every year for the Dillingham City School District, West Region School District, Head Start, and the Senior Citizens Center.

Their [“Salmon for Schools” program](#) began as a conversation between a Board of Fish Board Member and PeterPan Seafoods Manager. PeterPan Seafoods would allow fishermen to donate salmon for the school meal program and process the fish free of charge. This would allow the district to replace farmed fish with a local product without any financial barriers.

The program continues to be led by PeterPan Seafoods who puts a call out for donations every summer. Here’s how it works: PeterPan Seafoods begins each summer with a target poundage determined by the school district for the upcoming school-year. The fleet manager subtracts from the target poundage with every donation and keeps a running tally—just like the balance in a checkbook. Fishermen can donate to any tender and will receive a fish ticket for their delivery. The weight is recorded on the fish ticket with “Fish for Kids donation.”

Donations are tracked by permit holder name, vessel name, and number of pounds donated. Donated fish is not processed separately but pulled from daily production to streamline the process. PeterPan Seafoods donates the processing labor and packaging materials and delivers the final product to the school district.

Outreach is key to the success of the program. PeterPan Seafoods advertises the donation drive on the local radio station, puts up flyers around town, and has it broadcasted during the local ADF&G announcements. Once donations have been made, public recognition of fishermen is key. This is done at the time of delivery over the company vhf radio channel—which serves as both a public thank you, builds friendly competition with other fishermen, and also allows PeterPan to track deliveries. Additionally, at the end of the season, fishermen are publicly thanked in the local newspaper.

A final suggestion? It’s key to target one species of fish for a donation drive. This allows processors to streamline processing on their end and ensures a quality product for the schools.



Processing

Seafood must be processed in a [DEC permitted facility](#). When no such facility exists in your community, you may turn your school kitchen into a temporary site through the [Exemption to Obtain Seafood From Permitted Processor or Other Approved Source](#). See [guidelines](#) on handling donated seafood.

School districts around the state get fish processed to varying degrees. In Sitka, our Food Service works with skin-on coho fillets (about 1-2 pounds each) that have been vacuum packed and flash frozen. Other school districts with greater staff capacity might find greater economic value in buying Headed and Gutted (H/G) fish. Fish are required at minimum to be [gilled and gutted](#).

For the 2013-2014 school year, processing of [traditional foods](#), like fish, is covered under the Nutritional Alaskan Foods for Schools (NAFS) grant.



Fish to Schools exposes students to the key components of a healthy seafood industry. We're happy to support a program that is feeding the next generation of fishermen and fish lovers.

Tim Ryan, Controller & Assistant Manager, Sitka Sound Seafoods

Grow Strong: Haines Borough School District

4 Schools **288** Students

The [Haines Grow Strong program](#), a partnership between the Haines School District and the Takshanuk Watershed Council, is a dynamic school meal program that is invested in every part of the food cycle. Local foods, like halibut, smoked salmon, and school garden vegetables, are served weekly in the school meal program. The cafeteria waste is sorted by students and captured for compost; every year over 2,000 pounds of veggie scraps and paper waste are removed from the landfill and upcycled into a rich compost, producing 200 pounds of school-grown produce. The Grow Strong program has strengthened children and community knowledge and attitude about local agriculture and the environment while increasing local market opportunities for farmers and fishermen.

Genevieve Armstrong, the Food Service Director for the Haines Borough School District and Registered Dietitian, offers up a few tips for success:

- Schedule fish lunches on days without orders or deliveries.
- If possible ask seafood processors to remove pin bones.
- Offer only one entrée option. Genevieve offers one choice on Fridays—fish!
- If you're serving commodity Pollock, transform a fish stick into a "Baja fish taco" and use local cabbage in a slaw as an accompaniment.
- Kids relate to what they eat at home. Administer a survey and ask kids how they like to eat fish. You might be surprised how many kids offer up their family recipe.
- If kids are not responding well to a warm smoked salmon dish try serving it cold, food tastes different at different temperatures.
- Remember these are little people with highly functioning senses!

In 2012-2013 Haines Borough School District purchased:

226 pounds of smoked salmon

365 pounds of salmon fillets

280 pounds of crab legs

120 pounds of shelled crab

75 pounds of halibut

240 pounds of pollock

100 pounds of shrimp

1,406 lbs.

of local seafood purchased for 2012-2013 school year using funding from Nutritional Alaska Food for Schools. That is the equivalent of about five pounds of seafood per student!

Legalities

Is it legal to serve seafood in a school meal program?

Yes, it is written into the Department of Environmental Conservation (DEC), [Alaska Food Code 18 AAC 31.205](#). “Except for food prohibited under 18 AAC 31.210, traditional wild game meat, **seafood**, plants, and other food *may be donated to a food service of an institution or a nonprofit program*, including a residential child care facility with a license from the Department of Health and Social Services as required by AS 47.32 and 7 AAC 50, a school lunch program...”

The [Department of Environmental Conservation, Food Safety and Sanitation](#), and [Child Nutrition Services](#) has approved the use of [Traditional Foods](#) in school meal programs. Check out their list of [allowable traditional foods](#) and [best practices](#).

What types of fish can be used?

Only commercial fish can be used in a school meal program. Sport and subsistence caught fish cannot be donated to a school lunch program because the sale of subsistence and sport caught fish is prohibited. The regulations prohibit not only transactions between the original fisher/donor but any later monetary exchanges like a school meal program. See: [AS 16.05.920\(a\)](#), [AS 16.05.940\(29\)](#), [5 AAC 75.015](#).

Preventative Medicine: Galena Interior Learning Academy

217 Students

[Galena gets the award for serving local seafood most frequently.](#) Through the Nutritional Alaska Foods for Schools grant, Galena purchased two tons of chum salmon for their 220 students. The chum is bought headed and gutted, requiring additional processing time in the school kitchen. While seafood is offered multiple times a week in the form of a fillet, dip, soup or patty, Rand Rosecrans, the Head Chef, is quick to say “you don’t put it up against pizza.” In fact he offers only one entree per meal, offering alternatives only to those who have allergies or dietary restrictions.

For Rand, serving local is an investment in childhood nutrition; he calls it “preventative medicine.” He believes it is the responsibility of food service to look at the quality of foods, ensuring kids are served healthy, sound meals. “Economics,” he said “is taking over what is good,” meaning smaller budgets and subsidies dictate what is served rather than what is nutritionally sound and traditionally valuable. When you look at the bigger picture and take into account waste and future medical costs, serving healthier foods actually saves money.

Recipes

Fish to Schools is literally shaping the taste buds of future Alaskan fish consumers. It is important that meals are well prepared and visually appealing. School Food Service is integral to the success of a Fish to Schools program. It is important to consider pairing options (grains, vegetables, etc.) to balance the meal. Additionally, if your district offers more than one option for lunch, be mindful of competitive favorites like hot dogs and pizza.

One of our favorite fish recipes was developed by Sitka's Pacific High School for teriyaki salmon. It was written for a 3 oz serving cooked, 4.3 oz raw, which has seemed adequate for high school students. Other favorites include: baked coho with lemon, salt, and pepper and rockfish tacos. Many more USDA standardized recipes can be found on the [USDA Recipe Finder](#) and the [National Food Service Management Institute](#).



Photo: Abby Long



Photo: Abby Long

It is delicious!

Keet Gooshi Heen student

Our goal at Nana Management Services is to offer students healthy and delicious food for lunch. Serving locally harvested fish is an excellent opportunity to enhance our nutritional progress.

James Moormann, Nana Management Services Director of Food Services for the Sitka School District

TERIYAKI SALMON

SERVES 24

SERVING SIZE 1/24th recipe (3 oz cooked)

INGREDIENTS

- 1 ½ C low sodium soy sauce
- 1 ½ C sugar
- 1 ½ tsp. grated fresh ginger
- 3 cloves garlic
- 6 Tbsp. mirin* or water
- 1 ½ tsp. cornstarch
- 6 lbs wild Coho Salmon filets, fresh or thawed
- ½ C sesame seeds
- ½ C green onions, sliced

DIRECTIONS

1. Grate ginger.
2. Mince garlic.
3. Combine soy sauce, sugar, ginger, and garlic in small saucepan.
4. Stir together mirin and cornstarch in small bowl until no lumps remain, and then stir mirin mixture into saucepan.
5. Bring sauce to boil over medium-high heat, stirring occasionally; reduce heat to medium-low and simmer, stirring occasionally, until sauce is reduced to 1 1/4 cup and forms syrupy glaze, about 4 minutes.
6. Pour teriyaki sauce into steam table pan and spread to coat the bottom.
7. Add the salmon filets in a single layer, with the flesh down in the marinade.
8. Cover the pan with a lid or plastic wrap.
9. Put salmon in the refrigerator to marinate for 30 minutes to 2 hours.
10. When you're ready to cook the salmon, flip it so the skin is down. Spoon teriyaki sauce from the pan over the filets, and sprinkle the sesame seeds evenly over the tops.
11. Bake uncovered in a preheated oven at 350°F for 20 minutes, or until salmon flakes with a fork (145°F internal temperature). Don't bake too long, or salmon will be dry!
12. While the fish is baking, thinly slice the green onions.
13. Sprinkle the fish with green onions, cut into 24 even pieces and serve immediately.

*Mirin can be hard to find, so it's optional, but it gives the sauce an authentic teriyaki flavor.

STANDARDIZATION
3 oz meat/meat alternate

Nutrition Facts

Serving Size 151g

Amount Per Serving

Calories 248	Calories from Fat 75
% Daily Value*	
Total Fat 8.3g	13%
Saturated Fat 1.5g	7%
Cholesterol 44mg	15%
Sodium 617mg	26%
Total Carbohydrates 16.8g	6%
Protein 25.9g	
Vitamin A 0%	Vitamin C 1%
Calcium 3%	Iron 9%
* Based on a 2000 calorie diet	

Challenges



Most Fish to Schools programs around the state depend on grants and donations. The long-term goal is to make Fish to Schools financially independent where school districts prioritize local foods in their lunch offerings and fishermen and seafood processors are paid for their labor. This is a challenge when school budgets are shrinking and the cost of local seafood is more than what is allotted for most protein sources. For some districts, the cost of local fish is three times as much as processed meats from the Lower 48.

Locally caught salmon and rock fish are much healthier than what they usually serve and it reminds me of home a lot. Mount Edpecumbe High School student

Salmon is my favorite food because when I grow up I want to be a fisherman. Keet Gooshi Heen 3rd grader

it tastes amazing, it's fresh, and it comes from our local fishermen that spend time and money to go out and get it for us.

Blatchley middle school student

Next Steps

The River Ahead

We want healthy, local foods served regularly in school lunches across the state. Every program may look a little different to meet community needs, but it is our hope that all schools prioritize the use of healthy, local foods in their meal program. Here are some of our thoughts on “next steps.”

1. Advocate for permanent state funding of Nutritional Alaskan Foods for Schools.
2. Identify the demand for sport and subsistence caught-seafood in school meal programs.
3. Create a value-added, minimally processed, product using Alaskan seafood, creating a user-friendly product for food service.
4. Create school policies that mandate the use of local foods through food service contracts and [school wellness plans](#).
5. Identify creative solutions to close the gap between what schools can pay and the cost of local seafood. Determine a system that would make a Fish to Schools program financially viable for school meal programs without grant support or donations.



Wellness Policy: Kodiak Island Borough School District

14 Schools **2,559** Students

School Wellness policies address nutrition and physical activity and are required for schools participating in the National School lunch program. Most schools have fairly standard wellness policies that meet federal nutrition requirements—but [Kodiak's Wellness Policy](#) goes far beyond basic requirements. It addresses both traditional and local foods and even includes a mandate on fish, "*Meals including locally produced foods, i.e. fish, will be pursued and provided when feasible.*" This policy holds the school district accountable to serving local foods and ensures they make it a priority.

The wellness policy is reviewed by the Wellness Coordinator, Kodiak Island Borough School District, and Wellness Advisory Council. It gives the group an opportunity to ensure implementation and assess policy recommendations.

Kodiak Island Borough School District began serving donated fish in the 2011-2012 school year. Through the Nutritional Alaska Foods for Schools Grant, Kodiak is now purchasing local seafood which is served twice a month district wide.

Stream to Plate

Stream to Plate is the name for our Fish to Schools classroom unit, comprising of seven lessons for elementary grades 2-5. These lessons bring the community into the classroom, using real life examples to teach core standards.

The success of Sitka's Fish to Schools program can, in large part, be attributed to the Stream to Plate curriculum. Third graders who participated in this program developed a greater understanding of how salmon connect to their lives and were more likely to choose fish for lunch. This program challenges students to think about the impact of their food choices on their body, community, economy, and environment.

When we began this process we found a number of salmon curriculums that teach the "science of salmon" including life cycle and anatomy (our favorites are linked to our lessons). Using these lessons as a foundation, we wanted to develop new lessons that exemplify the human connection to salmon. It is our hope that students who complete the Stream to Plate unit develop a sense of respect and appreciation for salmon and eventually become future stewards, fishermen, and fish-lovers.

The lessons focus on the human experience and relationship to salmon—their impact on our lives in coastal Alaska. Fishing is the economic backbone in many Southeast Alaska communities and it seemed only appropriate to teach students about what is happening in their own community. By using real life examples and pulling in local experts, we taught students about the fish they catch, eat, and see spawning in their rivers.

Salmon have a rich cultural history and are a keystone species in their environment—meaning they are a crucial part of their ecosystem. We designed the Stream to Plate unit with this idea in mind—lessons explore the habitats in each stage of the salmon life cycle, show how salmon are intimately connected to other species and local jobs, demonstrate the need for a sustainable fishery, highlight fishing methods, and culminate with demonstrations and activities to process, preserve, and cook salmon.

It is recommended that students have a basic understanding of the salmon lifecycle before beginning. For lessons 6 & 7, it would be helpful to have a parent volunteer help in the classroom or act a guest instructor.





Stream to Plate Lessons

Lesson 1: The Lifecycle of a Salmon, 45 minutes

This lesson includes 3 hands-on activities to review the lifecycle and habitats of a salmon from egg to spawner.

Lesson 2: Salmon Food Chains, Food Webs, and Ecosystems, 55 minutes

Students begin by assembling a salmon food chain and end by creating a giant salmon food web showing the connections between salmon, ocean, forest, predator, and prey.

Lesson 3: Local Foods and Economy, 70 minutes

Students create a “job-web” to show the connection between local jobs in their community and salmon.

Lesson 4: Sustainable Fisheries Management, 55 minutes

Students create rules and regulations for a sustainable fishery by fishing for beans with straws.

Lesson 5: Fishing Methods, 60 minutes

Students produce and perform skits to teach their classmates how various commercial fishing methods work.

Lesson 6: Salmon Processing and Preservation, 55 minutes – 100 minutes

Students view a gutting and filleting demo, make a brine for smoked salmon, and smoke fish on or off campus.

Lesson 7: Cooking Salmon in the Classroom, 55 minutes

Invite a local chef or parent to cook in the classroom! Recipes provided.