

ALASKA

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SPECIAL REPORT • Fall 2016

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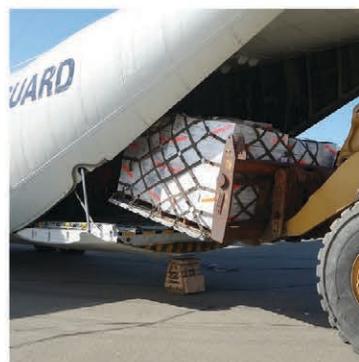


SeaShare and PSPA

Proud partners in the fight against hunger

When it comes to nutrition, seafood packs a punch, but is a rare commodity in food banks. SeaShare is the only nonprofit dedicated to filling this essential need.

SeaShare works with PSPA seafood processors across the state, and their associate members, to donate over 800,000 servings of high protein seafood in Alaska every year.



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SEAFOOD

Sustainable • Renewable

It's the ultimate sustainable resource for Alaska.

If it is nurtured, meaning responsibly managed, there should be no end to the billions of pounds of seafood harvested in Alaska waters every year that help feed the world with healthy, clean protein.

Seafood employs thousands of Alaskans and pours billions of dollars every year into the state's economy (\$5.9 billion in total economic activity, average 2013/2014), and families, communities and businesses depend on it. "Responsibly managed" are the operative words. Fishery stocks must be protected, harvest optimized, and overfishing prevented.

Alaska has been good at this. The state and federal fisheries off Alaska are considered among the best managed in the world. Other nations, and other states, are not as fortunate. In many places overfishing and habitat degradation have depleted stocks and harmed communities.

Sustaining this bounty has been difficult at times. There are cycles in fish runs, with booms one year and lows the next. None of this can be predicted with absolute certainty. The resources put into scientific research help identify how much we don't know, such as how changes in ocean conditions affect fisheries. The comprehensive monitoring and stock assessment programs that support Alaska's fisheries are key to addressing risk and uncertainty when managing these critical resources, and thus far have provided a model for the rest of the world.

As a globally traded resource, prices are just as unpredictable. Seafood is influenced by world markets, currencies, energy costs, and events beyond Alaska's control, just as with oil, another important Alaska resource.

In a down cycle there can be real economic stress for Alaska's fishing families and the coastal communities and businesses that are engaged in seafood.



Over time, strategies have been developed to cope with these uncertainties, mainly in diversification and development of new markets, and to their credit, Alaskans have held firm on the principles of science-based, sustained-yield for both state and federal waters.

The result is a seafood business that not only sustains communities but pays its way for public services. Companies and individuals in Alaska's seafood business contribute about \$139 million in taxes, fees, and self-assessments every year. It also makes the cost of living lower for all Alaskans. Without the volume of seafood shipments that help pay for the transportation infrastructure Alaskans rely on, especially in communities not connected to the road system, economists have estimated transportation costs would be 10 percent higher.

*Seafood is a gift that keeps giving—
if it is cared for.*



Cover photo:
Holly Enderle, captain of the
FV Pacific Dream fishes out of
Elfin Cove in Southeast Alaska
Photo by Chris Miller

All other photos courtesy
Alaska Seafood Marketing Institute

Fall 2016

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How to cope with an unpredictable, changing industry:

Diversification, flexibility and risk



Alaska's seafood community seems to defy the norms of normal business. Prices and quantities are unpredictable and can vary sharply year to year, says Gunnar Knapp, long-time dean of Alaska's fisheries economists. "Unlike oil or minerals, the resource doesn't stay still – it moves around, and changes from year to year," he said.

The complexity is mind-numbing, too. The dynamics of pink salmon in Southeast Alaska are different from those of Prince William Sound or Kodiak. Bristol Bay's huge sockeye fishery is different from that in Cook Inlet or Prince William Sound. And salmon are vastly different from pollock, crab, or halibut.

Fish show up at different times or they may not show at all. Sometimes they are early or late, and sometimes in huge numbers or very small runs. Fishermen and processors have to gear up to be ready for big runs, but then pay the bill if the fish don't show.

"There are big risks for harvesters, processors and everyone in this business," Knapp says. "The way to deal with risk is diversification. For salmon processors that means having plants in different parts of the state and across salmon species so strong salmon runs in one area can offset weak runs in others."

For larger processors, having plants in different regions allows workers to be shifted from one area with a weak salmon run to another with a strong run.

"Diversification across fisheries is also extremely important. Experienced companies will be in salmon, halibut, ground-fish, like cod and pollock, and crab," Knapp said. "All of these require different kinds of fishing gear and processing technology and support different markets."

The seafood businesses must also be able to absorb losses when prices or runs are low. Building and operating plants in remote areas, like Akutan or St. Paul, takes a tremendous investment. All of this requires financially strong companies.

"Diversification is also important for harvesters," Knapp said. Most who are successful have fishing permits and sometimes gear types that allow them to fish in different regions. If things are bad in one area they can shift to another.

"People take it for granted that there will always be fish in the ocean and people around the world who will buy them, but economics in the middle are fragile," said Matt Moir, Kodiak manager for North Pacific Seafoods.

"Harvesters have to have access to the resource and more and more regulation makes this difficult. Seafood companies have to have access to markets, but unpredictable factors like currency changes and political events can block markets. The financial risk is extremely high every year." 

**Dealing with uncertainty:
"We have to plan for a big harvest, fill our
bunkhouses and hire up to 30 tenders.
Then we just sit and wait."**

– Rick Issacson, Prince William Sound operations manager,
Trident Seafoods

Science-Based Fisheries Management



Alaska gets kudos from around the world for science-based fisheries management systems for both state and federal waters. These have sustained fish stocks and harvests for decades, and provided waters off Alaska with a well-deserved reputation of having the best-managed fisheries on earth.

How did this happen?

In the early 20th century, many federal government efforts at fisheries conservation in Alaska had failed for many reasons. Many early efforts were crude; for example, requirements to close salmon fishing at arbitrary points during the salmon run, and without a scientific basis. The hope was to ensure enough escapement to sustain the run. Other measures levied taxes on processors to build hatcheries. None of this worked.

Just after World War II, Alaska salmon processors became alarmed about the sharp drop in salmon runs and asked University of Washington scientist W.F. Thompson to investigate salmon management in Alaska.

Thompson and his team helped develop the principles for science-based management used today, including the idea of regional plans based on field research and escapement goals to sustain salmon runs.

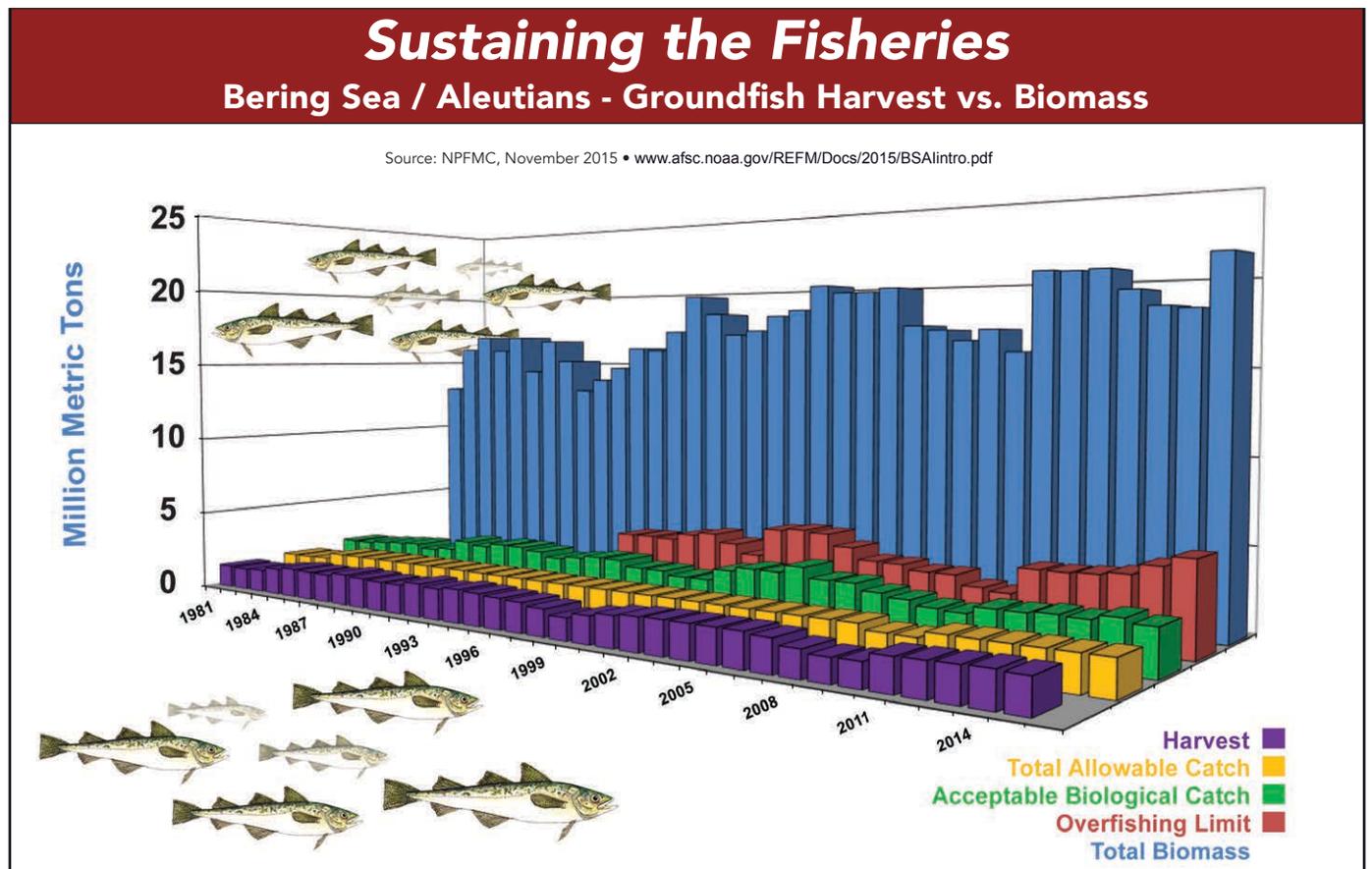
Thompson was already a renowned fisheries scientist with extensive research on Pacific halibut. He founded the University of Washington's Fisheries Research Institute to pursue the Alaska salmon studies. Salmon processors in Bristol Bay, Southcentral, and Southeast Alaska funded most of Thompson's research.

There was an urgency to the salmon decline in the mid-1900s. Annual production of canned salmon, the only verifiable measurement at the time, had declined from 6.9 million cases in 1941 to 1.6 million cases in 1959.

When Alaska became a state, the state Constitution created fundamental principles for sustainable resource management, including fisheries. Thompson's ideas were adopted by the new Alaska Department of Fish and Game, according to a history of Alaska fisheries published by the department in 2005. Alaska's salmon runs were rebuilt, creating a healthy and remarkable nearshore seafood communities. "This science-based management plan remains in place today, with refinements," the department wrote.

Escapement goals, ensuring that a portion of a salmon run is not harvested and survives to reach the spawning

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...Science-based fisheries management (continued)

grounds, are at the center of Alaska's management. The system is built around local fisheries managers assessing the salmon run throughout the season, with authority to open and close fisheries to achieve escapement goals.

To Alaska's credit, local fisheries managers' decisions carry the day and harvesters and processors have supported these decisions as painful as they sometimes are.

Local managers also ensure that allocations of fish are made to various user groups, as set out in regional fishery management plans adopted by the Alaska Board of Fisheries. The Board develops the plans in public meetings with information from scientists, harvesters, processors, and other stakeholders. Strong opinions are frequently voiced at Board meetings, but the system has resulted in well-managed fisheries over the decades.

On the federal side, major changes in fisheries management came in 1976 when Congress passed the federal Magnuson-Stevens Fishery Conservation and Management Act, co-sponsored by Alaska Sen. Ted Stevens and Washington Sen. Warren Magnuson. This established and governed a U.S. zone from 3 to 200 miles to ensure domestic control over our coast's fishery resources. Eight regional fishery management councils were formed across the U.S. to guide federal agencies responsible for those fisheries. The North Pacific Fishery Management Council is responsible for federal waters off Alaska.

Stevens made sure that the ideas from Alaska's successful nearshore management programs were incorporated into the act. Stevens was adamant that management decisions

be made as close as possible to the fishing grounds, and not in Washington, D.C. He wanted knowledgeable people, including harvesters and processors, to be on the council and to participate in the decisions. The act sets out that councils must have a fair and balanced apportionment of active participants in the fisheries under the jurisdiction of the council, to contribute the benefit of their experience.

Stevens also made sure that conservation measures to avoid overfishing were at the forefront and required councils to develop fishery management plans and rely heavily on the advice of their scientific advisory committee.

The North Pacific Fishery Management Council's policy never to stray from the scientific committee's advice on acceptable catch levels was so successful it was later mandated for all federal fishery management councils in the U.S. through amendments to the Magnuson-Stevens Act. 2016 celebrates 40 years of the Magnuson-Stevens Act and the vision of healthy fisheries into the future. 

Alaskans had the vision to adopt sustainability as a mandate for the young state of Alaska:

"Fish, forests, wildlife, grasslands, and all other replenishable resources belonging to the state shall be utilized, developed and maintained on the sustained-yield principle, subject to preferences among beneficial users."

– Article VII, Section 4, Alaska Constitution



Bycatch declines as industry tackles a problem

Fishing companies that harvest groundfish like pollock, cod, and flatfish are improving ways to deal with an unwanted problem – bycatch, the accidental catching of fish other than the targeted species. Fishermen in every fishery have this experience. As Alaska’s federal fishing industry has grown so has the focus on reducing bycatch. Under federal rules, bycatch species such as salmon and halibut cannot be sold, it can only be kept if the fish are voluntarily preserved and donated to SeaShare (SeaShare.org) for hunger relief.

Bycatch will never be eliminated completely but it can be minimized as practicable, as required by federal law, says James Mize, director of Government Affairs at Premier Pacific Seafoods, which operates vessels in the Bering Sea pollock fishery. “It’s complicated. Fish mingle with each other in the ocean, and we can’t control where they swim,” he said.

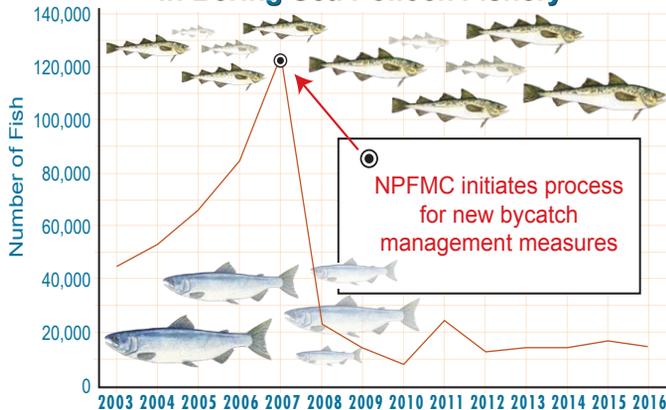
But there are several things fishermen can do about bycatch. First – and most important – vessel captains, competitors that traditionally closely guard their information on the best fishing areas, can cooperate in solving the problem by sharing information on areas of relatively high bycatch to avoid so-called “hot spots.” One practice is for a vessel to

conduct test fishing to determine bycatch rates before the general fleet fishes an area, Mize said. Another practice is to rapidly share bycatch data while fishing and close areas with higher bycatch in real time throughout the season.

Another strategy is to equip the trawl gear with “excluders,” or devices which allow unwanted fish to escape. All Bering Sea pollock vessels now use these to avoid Chinook salmon. There is a lot of research and experimentation underway to improve excluders for all types of vessels, Mize said.

Management changes to the pollock fishery in response to high Chinook salmon bycatch in the mid-2000s established both hard limits on bycatch and incentive plans to reduce bycatch under all conditions. Incentives are more effective than hard limits because they spur innovation. 

**Chinook Salmon Bycatch
in Bering Sea Pollock Fishery**



Using the whole fish

It wasn’t long ago that only part of the fish that was caught could be used in making products and sold. What wasn’t used went back into the ocean.

Now, for many species, almost all of the fish, with its valuable proteins, is used. Government agencies pushed this with strict retention and environmental rules but seafood companies have long wanted to use and sell all of the fish.

The bigger shore-based plants built for the groundfish fisheries in the 1980s, first in Akutan and Dutch Harbor and then other communities like Kodiak and Sand Point, led the way on improved utilization because of the huge volumes involved, says Ken Tameishi, Trident Seafoods’ head of nutritionals and proteins. Pollock has seen a significant increase in utilization since 1999. In addition to fillets, surimi, roe, and other products, many companies also make fishmeal and fish oil.

What used to be salmon waste – heads, fins and offal – were initially made into animal nutritional supplements and fertilizer, and sometimes used as fuel, but their use in human nutritional supplements is growing.

Juneau businessman Sandro Lane led the way with his company, Alaska Protein Recovery. Lane developed a barge-mounted waste processing plant that could be moved to different fishing areas and new processes for extracting oil from salmon waste that led the Alaska salmon industry into the human nutritional field.

Progress required a lot of research and development and a lengthy government approval process. Lane found a partner in Trident Seafoods, which invested in his company to do the work needed to get salmon oil into the health and nutritional supplement market. Today, you can find Alaska-made fish oil supplements in retail stores.

There are challenges with salmon because of the seasonal nature of the fisheries. “Waste processing plants typically cost \$25 million to \$30 million each, and with salmon there are just a few weeks during the summer to recover that investment,” Tameishi said.

Challenges are being overcome, however, as companies like Trident experiment and push further into the nutritional market. Trident opened a new plant in Naknek in 2015 to convert salmon waste into fish oil and fishmeal-based products. Trident and Silver Bay also added new fish oil plants in Cordova and Valdez in 2016.

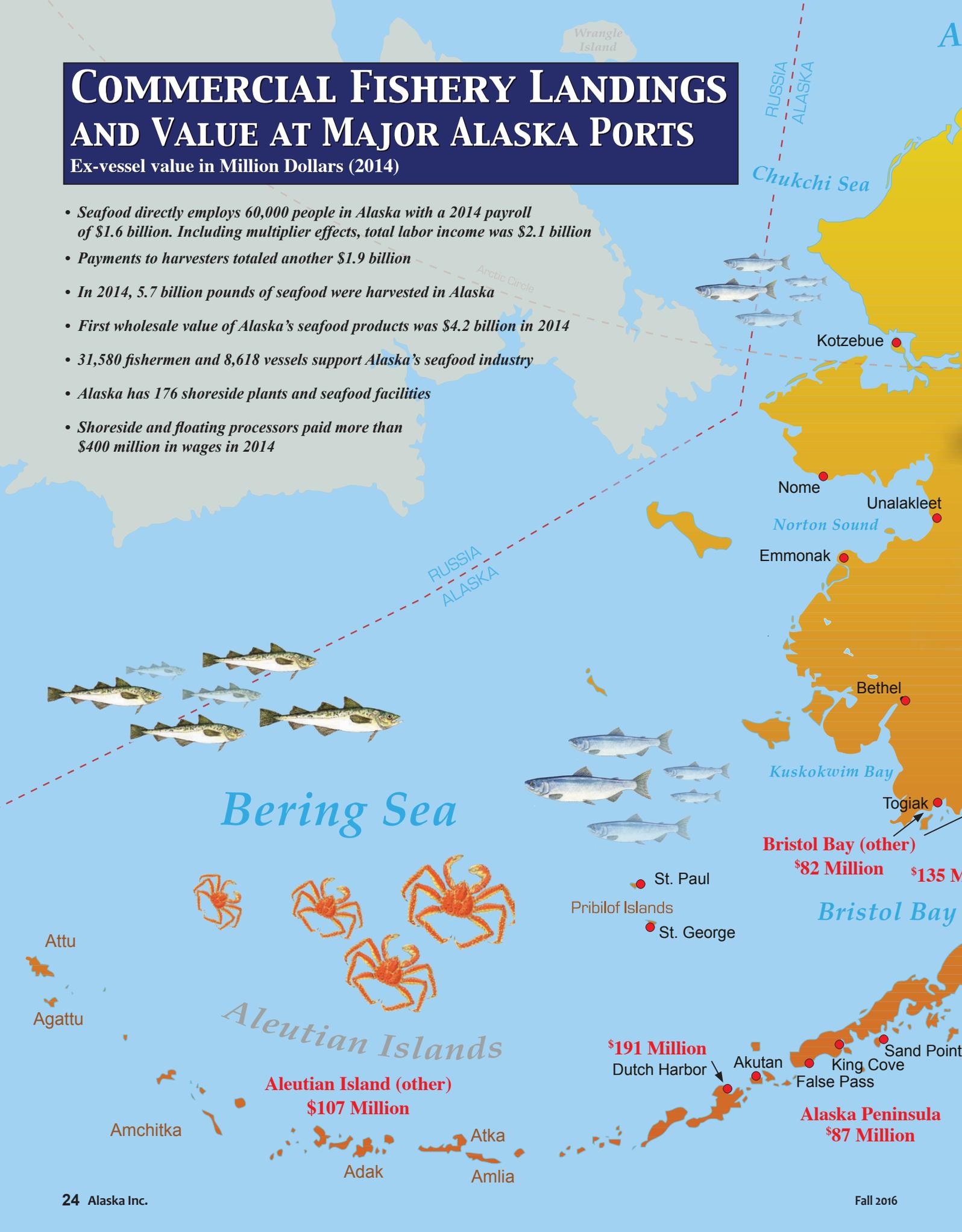
Tameishi said a big selling point for Alaska, in such a highly competitive market, is the sustainability of the resource. Dependability of supply is always a concern for buyers. Assurances of quality control throughout the supply chain are just as important – from harvest to final delivery to retailers, all done within the U.S.

“We’re always going to be more expensive than products from places like China, but many of our customers place a priority on quality, U.S. products, and sustainability,” he said. 

COMMERCIAL FISHERY LANDINGS AND VALUE AT MAJOR ALASKA PORTS

Ex-vessel value in Million Dollars (2014)

- Seafood directly employs 60,000 people in Alaska with a 2014 payroll of \$1.6 billion. Including multiplier effects, total labor income was \$2.1 billion
- Payments to harvesters totaled another \$1.9 billion
- In 2014, 5.7 billion pounds of seafood were harvested in Alaska
- First wholesale value of Alaska's seafood products was \$4.2 billion in 2014
- 31,580 fishermen and 8,618 vessels support Alaska's seafood industry
- Alaska has 176 shoreside plants and seafood facilities
- Shoreside and floating processors paid more than \$400 million in wages in 2014



Bering Sea

Aleutian Islands

Bristol Bay (other) \$82 Million \$135 Million
Bristol Bay

Aleutian Island (other) \$107 Million

\$191 Million
Dutch Harbor

Alaska Peninsula \$87 Million

Arctic Ocean

Beaufort Sea



Arctic Circle

Anchorage is one of Alaska's top fishing towns!

Almost half of Southcentral Alaska's commercial fish harvesters live in Anchorage and the Matanuska-Susitna Borough

This includes 724 vessel skippers and 1,499 crew. Total gross resident fishing earnings were \$60.1 million in 2013



Pacific Ocean

Seafood Information Sources:

- Alaska Seafood Industry Update, McDowell Group, Juneau, Alaska
- NOAA U.S. commercial landings 2014

Photo: Courtesy Alaska Seafood Marketing Institute

Map: Quality Image Publishing, Inc., www.AmericasPublisher.com

Alaska Seafood

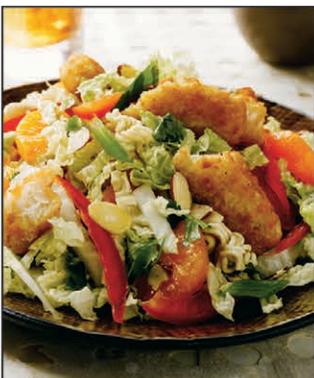
New Products

Dijon Lemon Salmon Burger

Alaska Seafood Bouillabaisse

Asian Fish Stick Salad

Surimi Seafood



Every year millions of salmon return to Alaska waters and for decades the only way to address the large volumes and keep salmon in a shelf stable condition was to put it in a can. It was simple value-added technology for a product that could then be easily shipped, stored, and consumed. Over the years, a reliable, steady market developed for canned salmon in the U.S. and Europe and this market continues today.

There were times, however, when the sheer numbers of salmon overwhelmed canneries, and as reliable electricity and infrastructure became available in more rural communities, freezers were installed so fish could also be headed, gutted, frozen, and shipped for further processing. Later, machinery was developed to make salmon fillets, which utilized new freezing technology.

Today, consumers have a wide array of seafood options from Alaska, including all five species of salmon, halibut, sablefish, Pacific cod, pollock, crab, and more. New processing technology and investments by processing companies contribute to the ability to provide fresh, frozen, smoked and canned products, and many species are available year-round in both retail stores and restaurants. Product diversification and expanding markets have been key to this success.

Seafood choices now come in many consumer-friendly forms that make preparing Alaska seafood more convenient. Salmon portions and burgers, fillets of cod, and fresh halibut are among many options for the modern consumer. Canned salmon continues to be a ready-to-eat item, and crab and shrimp come cooked and ready for preparation. The popularity of Asian cuisine in the U.S. supports many new forms of Alaska seafood, from salmon roe to pollock produced in the form of crab legs. White tablecloth restaurants love serving Alaska seafood, particularly salmon, halibut, and black cod. And chances are that fillet of fish from a value restaurant is made out of Alaska pollock.

The Alaska seafood community has benefited by greatly improved handling practices by fishermen, and production of more "value-added" items in Alaska plants. These allow more direct sales from the Alaska producer to customers. Fishermen and processing companies have invested heavily in quality measures, food safety, and product diversification.

Alaska's wild seafood is part of a global market, however. With increased competition of farmed salmon from other nations, and other protein sources, continuous innovation and marketing are necessary. This includes the development of new geographic markets, product forms, retail outlets, and consumers. Companies continue to invest in making wild Alaska fish more accessible and recognizable.

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In a unique private-public partnership, the Alaska Seafood Marketing Institute (ASMI) has been at the forefront of educating consumers about the benefits of eating wild Alaska seafood. For example, its efforts to distinguish “Wild Alaska” salmon have capitalized on a new demand for wild, healthy fish from sustainable sources. These efforts are paying off – Alaska seafood is now the most recognized brand of protein on U.S. restaurant menus. Product diversification is making Alaska’s seafood industry stronger and more competitive, said Tyson Fick, communications director for ASMI. “It’s a good example of industry and government working together to grow the state’s economy,” Fick said.



A steady improvement in seafood quality

From catching to cutting, everyone involved in sharing Alaska salmon with the world has had an increased focus on producing top-quality fresh and frozen fish in recent years.

In 2016, over 51 million sockeye returned to Bristol Bay in a matter of weeks. It’s the world’s largest sockeye run, and the logistics associated with such a huge volume in a short amount of time are remarkable. The harvest turns up in grocery stores throughout the U.S. and abroad. Increasingly, that fish is being sold as fillets, rather than in cans.

Alaska General Seafoods, or AGS, is one of the many leaders in Bristol Bay promoting quality, and Vice President Gordon Lindquist attributes it in large part to consumer demand. “Today’s consumers are increasingly aware of the desirability and availability of top quality wild salmon products and are demanding this from their retailers,” he said.

To get there, different companies have taken different paths. AGS invested in fillet and vacuum packing machines at Leader Creek Fisheries to improve yield and increase the number of fish that can be processed per minute. The new machines also handle fish more gently.

Bristol Bay processors also provide incentives to fishermen, with higher prices for fish that produce the best possible fillets. AGS offers a bonus to fishermen who deliver chilled fish and also helps fishermen with the capital costs of installing refrigeration systems. Bristol Bay Economic Development Corp., the regional CDQ group, is also a player in that effort, and has offered fishermen financial

The salmon burger story:

A relatively recent breakthrough came with the salmon burger, somewhat born out of necessity. In 2003, pink salmon prices were very low and companies like Trident Seafoods were looking for ways to add value. It wasn’t easy; salmon burgers had been tried before with little success.

It took a big investment in research and development, but Trident kept at it over the years, and eventually created a significant new market for frozen pink salmon. The salmon burger introduced an entirely new consumer to salmon, and Alaska salmon burgers are now sold nationwide.

Building on that success, Trident rolled out a pollock burger this year and sales are off to a good start, said John Salle, Trident’s senior vice president of marketing, innovation and corporate accounts. Other new products are being introduced which focus on the needs of the consumer and a new generation of fish-eaters. These include pre-cooked servings of frozen salmon and pollock fillets or snack-sized bites packaged with creative sauces. “Seafood is good for people, but we need to make it convenient, look good, and taste great,” said Salle.



help in upgrading vessels. From 2008 to 2012, the number of Bristol Bay permit holders who reported chilling their fish almost doubled.

The Bristol Bay Regional Seafood Development Association is also encouraging best practices by fishermen, focusing on icing and bleeding fish. That effort included radio PSAs and “chilling ambassadors” who talked to fishermen at the docks. The association also helps fund ice production, which ensures fishermen have access to ice across the fishing grounds. The focus on product quality corresponds with a new branding campaign to introduce consumers that value sustainable, healthy foods like wild Bristol Bay sockeye salmon.

All of these efforts appear likely to continue, with very strong sockeye runs in recent years.



Photo: Sockeye Salmon by John van Amerongen

From Ketchikan to Kotzebue seafood has a big economic punch



Young workers in the roe line in Emmonak
Photo by: Nicole Kimball

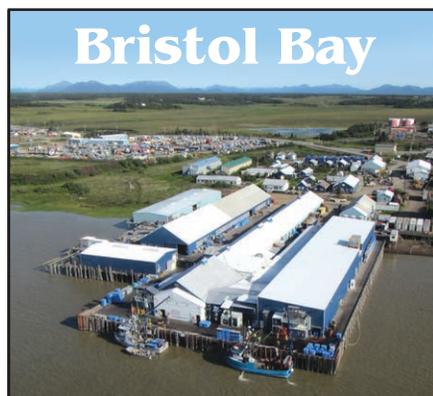
Seafood is a huge economic engine for Alaska, accounting for almost \$6 billion in economic activity, but the numbers don't tell the whole story. Fisheries – both harvesting and processing – are a fabric that holds Alaska coastal communities together, providing a foundation for future growth.

Emmonak: Good news for lower Yukon

Emmonak, one of the larger communities in the lower Yukon, is a bright spot in commercial fisheries this year. 2016 is a record harvest for both lower Yukon fall chum and coho commercial fisheries. That's good news for Kwik'Pak Fisheries, established by the Yukon Delta Fisheries Development Association (YDFDA) in 2001, which operates a modern processing plant in Emmonak and ensures a commercial salmon market to lower Yukon River fishermen. YDFDA is one of Alaska's six Community Development Quota Program groups.

In addition to summer and fall chum and coho, pink salmon were targeted this year for the first time. Yet chum remains the mainstay of the commercial fishery. Yukon River chum have an oil content and flavor that rivals king salmon and markets have developed worldwide. Kwik'Pak ships fresh and frozen salmon as well as frozen fillets and salmon portions.

At the peak of the summer, Kwik'Pak directly employs about 320 people from 15 villages, from the Kuskokwim to Kotzebue, with an estimated \$3.5 million payroll this year, manager Jack Schultheis says. The "school bus", a skiff that delivers residents of Alakanuk, a village 5 miles downriver, commutes daily, and older kids come after school. Kwik'Pak buys salmon from about 440 independent fishermen; combined payroll and payments to fishermen will inject about \$8.9 million into the regional economy this year.



Peter Pan Seafoods has operated its Dillingham plant since 1901

Bristol Bay: Bustling in summer

There's nothing in the world like Bristol Bay, which explodes into action each summer with the world's largest wild sockeye salmon fishery, as well as strong runs of chum, coho, and Chinook salmon.

The fishery is made up of thousands of fishermen, crew, processors, and support businesses. By one estimate, each fishing permit generates \$100,000 of revenue in a good year, and at least twice that in economic activity.

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Seafood keeps this Alaska company moving

The Lynden companies

Lynden International and Lynden Transport moved about 700 million pounds of Alaska seafood last year, and Lynden is only one transportation company serving this industry. Horizon Lines, Northland Service, Tote, Sampson and others move similar volumes.

Within our companies, about 800 Lynden employees and contractors are employed moving seafood. Drivers, mariners, cargo handlers, mechanics, and administrative staff all participate. Our partnership with the seafood industry is vital to making each season a success.

From an Alaska transportation perspective, seafood is both critical to our industry and is challenging:

- It happens all at once
- It involves huge volumes
- It is totally unpredictable
- We must always plan on the biggest season ever
- We may end up with the smallest season ever

By Jim Jansen
CEO
Lynden companies



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Bristol Bay is home to 14 processors, including Peter Pan Seafoods in Dillingham, the oldest continually operating processing plant in Alaska. Dillingham, King Salmon, Naknek, and Togiak are four of the largest communities in the bay; Dillingham alone doubles each summer to about 5,000 with fishermen and processing workers. Local businesses provide necessary services to the fleet, including welding, mechanical work, and net hanging. Dillingham also supports three grocery stores and three fuel providers, and receives seasonal jet service.

The sustainability and success of this fishery are significant. Every year, an average of 38 million sockeye return to Bristol Bay, and 2016 saw over 51 million sockeye return and the highest value in 20 years. In July, the two billionth salmon was harvested in Bristol Bay!

Kodiak: Home to a diverse fleet

Kodiak is one of the nation's busiest seafood ports, consistently in the top two or three for both volume and value. It's home to about 1,000 fishing vessels and more shore-based plants than any other Alaska community, many operating year-round. It is the only Alaska port where all commercial fish species are processed onshore, and resident fleets of all types are served – trawl, longline, pot, net, and jig.

Kodiak's larger processing plants typically each employ 200 to 250 people, mostly local. "Ninety percent of our employees live in Kodiak," said Darren Rudger, fleet manager for Ocean Beauty in Kodiak. "Local hire makes for a stable workforce and low turnover."

Matt Moir, Kodiak manager for North Pacific Seafoods, agrees. "We don't depend on a transient workforce. We want our people to be able to work year-round. Resident, permanent employees provide more consistent workmanship," he said.

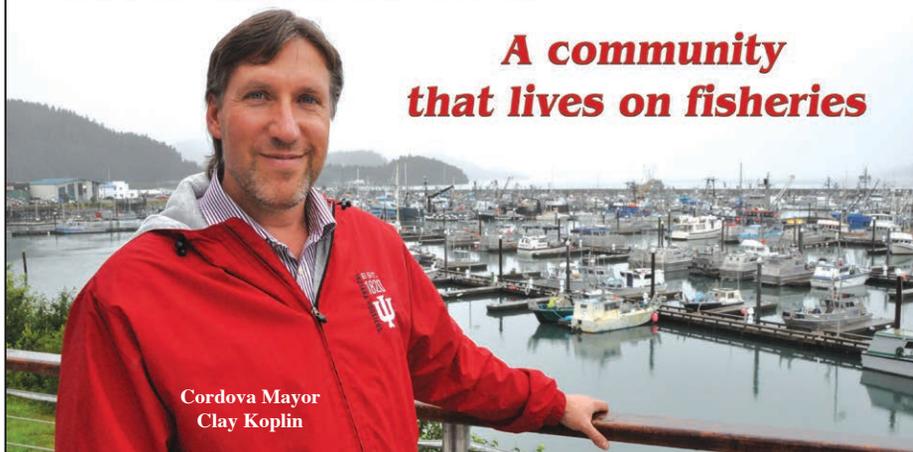
Pollock, cod, and crab keep people employed at the Kodiak plants through the winter, and activity peaks with salmon in summer.

In 2014, seafood accounted for over 3,900 jobs with \$236 million in annual income, which represents 40 percent

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CORDOVA

**A community
that lives on fisheries**



**Cordova Mayor
Clay Koplín**

Cordova, on Prince William Sound, started life in 1906 as a mining-support town at the terminus of the Copper River and Northwestern Railway, which served the rich Kennecott copper mine in the Wrangell Mountains to the north.

Then the mine played out. Cordova turned to the Sound's plentiful fisheries and has done well ever since.

Not that there haven't been bumps. The salmon fishery has rebounded from the effects of the Exxon Valdez oil spill in 1989, but other species like herring have not. There are big swings in harvests – the pink salmon run in 2016 is one of the poorest in years.

Cordova is resilient, however, and sees a solid future in seafood, Cordova Mayor Clay Koplín says. "Cordova is a seafood town. We know what we want and we focus on it," he says.

Half of all households in Cordova have at least one person involved in commercial fishing or processing, and Koplín says that seafood underpins about three-fourths of Cordova's economy.

The fishing fleet mainly fishes the Prince William Sound and Copper River Delta area for salmon, halibut, and black cod but the most economically important harvest is salmon.

Cordova has a great partnership with the industry. Fish processors like Ocean Beauty, Copper River Seafoods, and Trident Seafoods are expanding, adding jobs and expanding the tax base for the community.

Koplín, who is an elected but unpaid volunteer mayor, sees this in his day job as head of Cordova Electric Cooperative, or CEC. Processing plants buy a lot of power from CEC, which spreads fixed costs and stabilizes the cost of electricity for the rest of the community.

The mayor cites a reverse example to illustrate this: In 2001, fire and a lawsuit mothballed a major processing plant, and the loss of local power demand was poised to send electricity rates up 30 percent before another processor bought the plant, he said.

Since then there have been new investments in plants and Cordova has made its own investments in hydroelectric power (thus far for 2016 the community is 87 percent supported by renewable energy) which lowers power costs. A new project, Crater Lake, can add even more hydro power and also boost Cordova's water supply, which processors need to expand.

What Cordova now wants is more seafood industry, and more year-around fisheries to keep plants working year around, and which will maximize local employment. To do this, the community hopes to see a small winter crab fishery in the Sound.

What pleases Koplín the most, however, is new interest by young people in fisheries and seafood. "The demographics of Cordova and the seafood industry are changing, at least for Cordova. And our school population is rising," Koplín says.

That, plus sustainable fisheries, bodes well for Cordova's future.



Many Alaska families do commercial fishing with their children so they learn the trade, like a family farm. Kenny and Chris Holland fish near Kodiak for halibut, cod, and dungeness crab. Their vessel is the Point Omega.

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of Kodiak's employment, according to McDowell Group. About 448 million pounds of seafood were processed in Kodiak in 2014.

Onshore plants have operated in Kodiak since the late 1880s. Ocean Beauty's plant is one of the state's oldest, opening in 1911.

Southeast Alaska: 20% of region's workforce

Processing plants in Southeast have operated since the 1880s, and seafood is still an economic backbone for the region, accounting for 20 percent of employment in 2013 and 2014, according to McDowell Group.

Rain Coast Data, another research firm, estimates there were 4,365 resident Alaskans working in Southeast seafood in 2015, with \$255 million in wages and payments to resident

harvesters. Shore-based plants processed 238 million pounds of seafood in that year.

Top Southeast seafood communities include Sitka, Petersburg, Ketchikan, Juneau, and Wrangell. Others with fishing and processing activity include Yakutat, Craig, Hoonah, Haines, and Kake.

Shelly Wright, executive director of the Southeast Conference, sees a bright future for southeast communities. "There's a real future in seafood, particularly in infrastructure that supports fisheries," Wright said.

Unalaska, Akutan, and the Aleutians

The groundfish stocks that support communities in the Aleutians are well-managed and healthy. Harvest quotas for pollock and Pacific cod have been stable, while crab has had more cyclical abundance.

Unalaska's economy is based primarily on commercial fishing, seafood processing, fleet services, and marine transportation. Its Port of Dutch Harbor is first in the nation in volume, and often second in value of fish processed.

Three large seafood plants are economic anchors for Unalaska. UniSea, Inc., Westward Seafoods, and Alyeska Seafoods, employ about 2,500, with about 1,200 at UniSea alone during the peak of activity, said Frank Kelty, long-time local resident and member of Unalaska's city council.

The work is steady year-round with winter crab fisheries providing a seasonal boost. Kelty estimates that seafood and transportation companies have invested about \$500 million in processing plant improvements



Large processing plants like that operated by UniSea (foreground) anchor Unalaska's economy

and local infrastructure. "New investments are constantly being made as the plants diversify their products and add freezing capacity," he said.

Unalaska's plants initially specialized in surimi, a pollock product used in imitation crab, but are now diversified into higher-value fillets and other products, as well as crab, cod and salmon.

Another of the nation's busiest seafood ports lies east of Unalaska. Akutan hosts a new boat harbor and tremendous seafood capacity. Trident Seafoods' Akutan plant is the largest in the U.S., employing over 800 year-round workers and with a processing capacity of up to three million pounds of seafood daily.



Kodiak is home-port to 1,000 fishing vessels and several onshore plants

Workforce solutions in the seafood industry

A recognized concern for Alaska's seafood industry is the renewal of its workforce, both in harvesting and processing. Many employees of seafood companies, skippers, and experienced crew are in their 50s or older. The concern is whether enough young people can be engaged and trained to replace those who retire.

There are similar concerns in the maritime industry among businesses that support the state's seafood industry, such as boat builders, marine engineers, and machinists. Maritime Works, a partnership formed by industry leaders, was born of the need to develop and implement the Alaska Maritime Workforce Development Plan, the primary goal of which is to increase the number of Alaskans in skilled maritime positions. Kris Norosz, of Icicle Seafoods, is active in Maritime Works and says that the seafood industry relies on many highly-skilled workers in technical fields like refrigeration, engineering, and quality control, as well as in management. "These are typically year-round, well-compensated positions, and we sometimes have a tough time filling them," Norosz said.

It's similar for harvesters, also. Young people need apprenticeships, hands-on experience, and mentors, not to mention capital and business skills, to advance in the fishing industry. And one needs to be able to weather the down years, as income will always be variable due to fish stock sizes and a global marketplace.

"Maintaining a viable workforce is a huge issue for us, and we're not unique," said Darren Ruder, Ocean Beauty's Kodiak fleet manager.

"We have people fishing for us who are in their 70s, with some set-netters in their 80s," he said.

There is no question that Alaska's seafood economy and its coastal communities depend on the ability to meet the current and future demand for maritime positions.



The processing line at Trident Seafood's plant in Cordova



Pacific Seafood Processors Association

Members of the Pacific Seafood Processors Association (PSPA) produce food for the world from the wildest, healthiest, and most sustainable resource in Alaska: Fish.

PSPA is a nonprofit seafood trade association, founded in 1914 to foster a better public understanding of the importance of the seafood community. PSPA is comprised of both at-sea and shore based operations in 18 Alaska communities, and our members buy seafood from fishermen in virtually all of Alaska's commercial fisheries. They are proud to be among the world's leading producers of high quality seafood, and have been at the forefront of supporting management systems based on sound science and sustainability principles.

From Ketchikan to Unalaska, our member companies purchase, process, and market hundreds of millions of pounds of salmon, pollock, crab, cod, halibut, and other species every year. They have invested hundreds of millions of dollars in communities and facilities across Alaska and provide thousands of jobs in the process. They are committed to continuing their vital role in the Alaska economy and the economies of our coastal communities.



Alaska General Seafoods



Alyeska Seafoods, Inc.



North Pacific Seafoods, Inc.



Trident Seafoods Corporation



Golden Alaska Seafoods, LLC



Phoenix Processor Limited Partnership



Peter Pan Seafoods, Inc.



UniSea Inc.



Westward Seafoods, Inc.

SUSTAINABLE VALUES SUSTAINABLE LIVELIHOODS



Alaska Seafood Marketing Institute

Alaska's fisheries are managed by a simple guideline: that fish be **sustainable and abundant** for generations to come. Sustainable seafood keeps waterfronts working in over 40 Alaska communities, and provides the most private-sector jobs in the state. **Alaska Seafood** sets a sustainability standard for the world and **helps our communities thrive**.

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