

SEAFOOD HARVESTING



Huge groundfish harvests boost overall job numbers

By **JOSHUA WARREN**

Alaska's commercial fishing employment grew by 0.7 percent in 2014, primarily driven by increased groundfish¹ harvests. Groundfish harvesting employment grew by 24.8 percent, or about 350 jobs, with gains in every month of the year.

¹Although sablefish (or black cod) is considered groundfish, it is categorized separately in this article. Here, groundfish refers primarily to walleye pollock and Pacific cod.

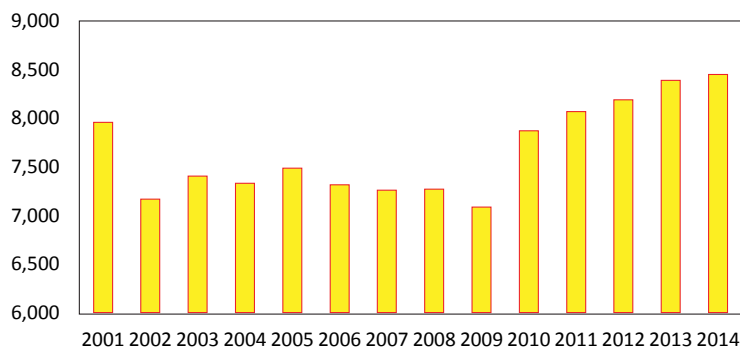
Although 2014's total statewide increase was smaller than prior years, the industry has gained jobs every year since 2009. (See Exhibit 1.)

Stellar groundfish year offsets salmon job losses

Most of the employment growth of the past few years was in salmon fisheries, which lost 37 jobs in 2014, or 0.7 percent. There were ups and downs from month to month but substantial decreases in the July peak.

1 Total Jobs Have Continued to Climb

AVERAGE MONTHLY SEAFOOD HARVESTING JOBS, ALASKA



Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section

These losses were more than offset by gains in groundfish harvesting and — to a much lesser extent — crab.

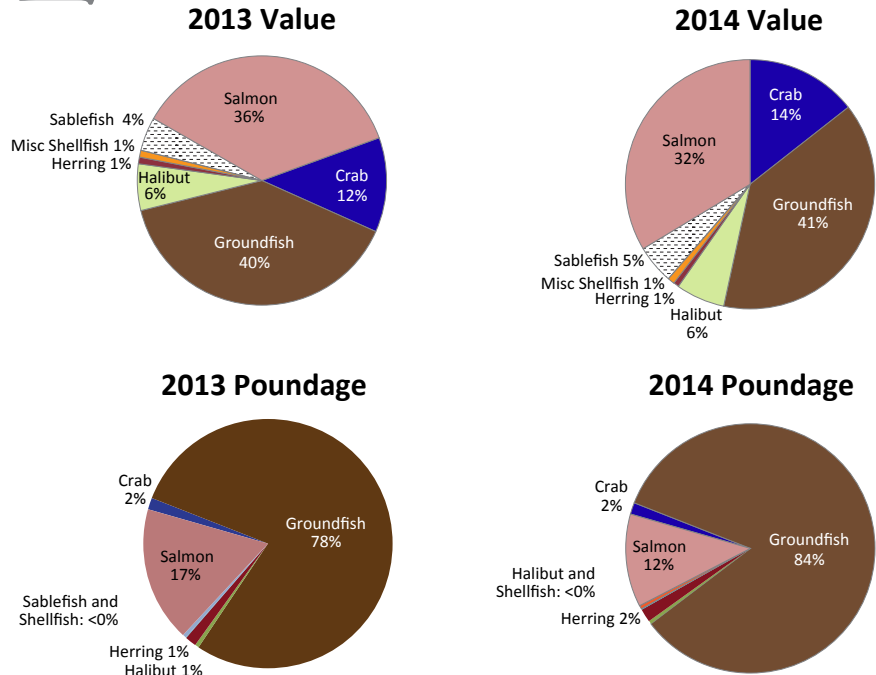
Groundfish, which already dominated poundage and value for all Alaska fisheries, increased its share of both in 2014. (See Exhibit 2.) The increased harvests bumped groundfish from 78 percent of Alaska harvest poundage in 2013 to 84 percent in 2014.

Groundfish harvests also spurred new employment records for March and December at 4,970 and 1,120 jobs, respectively. Those new winter records are still tiny compared to the July peak of 24,916 jobs, which is mostly salmon harvesters. The number of jobs in salmon harvesting still far eclipses other species. (See exhibits 3 and 4.)

Because of limits on the size and type of equipment salmon fishermen can use as well as the number of fishing days allowed, salmon harvests require more crew and effort to harvest the same value and volume as groundfish. The larger ships that fish the Bering Sea for pollock, for example, can do so with fewer crew members and may fetch higher total value because of the sheer mass of their catch.

2 Value and Poundage by Species

ALASKA, 2014 VERSUS 2013



Source: National Oceanic and Atmospheric Association, National Marine Fisheries Service

A bigger share of the U.S. total

According to the most recent report from the National Oceanic and Atmospheric Administration, Alaska fisheries account for over half of total U.S. fish harvest volume and a third of the value.

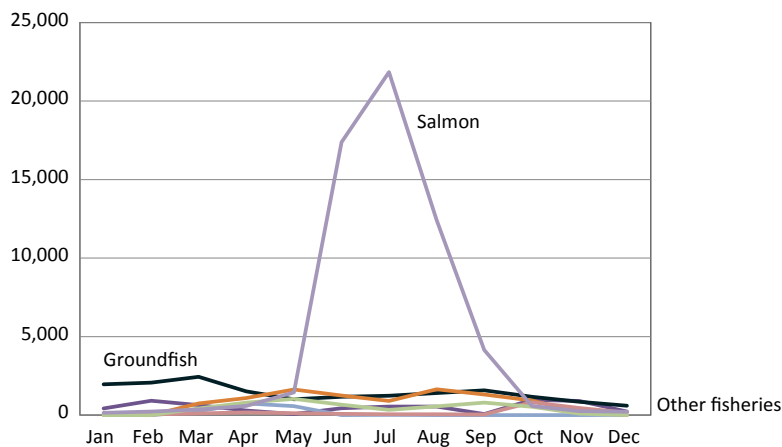
With the stellar groundfish harvests in 2014, Alaska gained a significant share of the U.S. total. In 2013, Alaska groundfish made up 64.3 percent of the total national groundfish harvest, which grew to 67.5 percent. Groundfish hasn't caught up with Alaska's percentage of U.S. salmon, though, which grew from 94.7 percent to 94.9 percent.

A mixed picture in other fisheries

Sablefish, herring, and shellfish fisheries lost a considerable number of jobs in 2014, although these fisheries are smaller and

3 Most Jobs in Seasonal Salmon Harvests

ALASKA, 2014

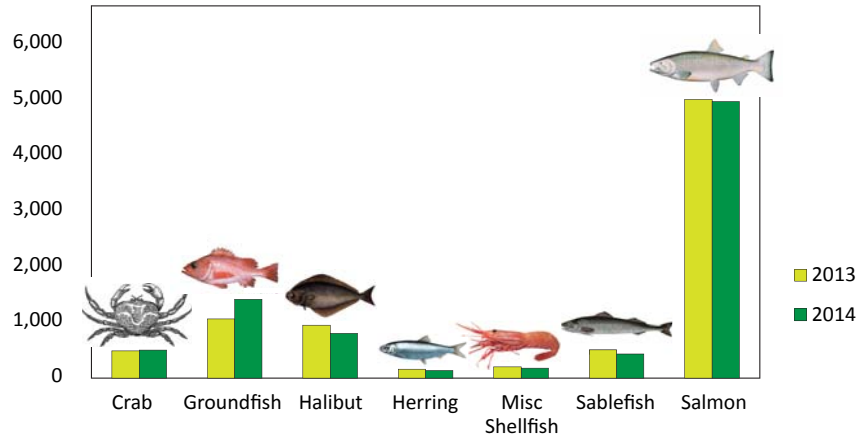


Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section

4

Salmon Top Average Monthly Jobs

ALASKA, 2014 VERSUS 2013



Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section

have less effect on total statewide harvesting employment.

Losses for sablefish and shellfish were spread evenly throughout the year, but most of the loss in herring was due to no activity in June versus 258 June jobs the year before. That single month of loss produced a precipitous drop in the annual average for the herring fishery. June 2014's loss was a combination of almost no herring activity in the Northern Region and other regions ending fisheries in May that typically bleed into June.

Of those three fisheries, shellfish and herring are at their 2012 levels, which suggests 2013 could have been an outlier. In 2013, both fisheries had higher job levels than normal in their trailing months, which can greatly change the annual average. When fisheries typically last only two or three months, bleeding over into a fourth month can have a big effect on annual job numbers.

Crab harvesting gained 12 jobs, or about 2 percent. The crab fishery's strong growth in the second half of the year more than offset its losses of the late winter and early spring, although crab numbers are also a relatively small share of total harvesting jobs.

The top-ranking regions

Southeast's share of statewide harvesting jobs declined 2 percent in 2014 due to fewer salmon fishing jobs, but Southeast still has the highest percentage of industry employment in the state. (See Exhibit 5.)

The Aleutians and Pribilof Islands' second-place ranking in 2014 came from a diverse harvest, with triple-

digit average annual employment in salmon, halibut, groundfish, and crab harvesting. The Southcentral Region, which includes the Prince William Sound and Cook Inlet salmon fisheries and a halibut fleet, came in third behind the Aleutians.

Kodiak gains a little

Harvesting near Kodiak increased slightly overall, with its 0.7 percent job growth regaining some of the ground lost the year before. Most of Kodiak's fisheries were stable or growing over the year but that was mostly canceled out by the lack of a crab fishery opening, which would normally provide almost 200 jobs in January. The Department of Fish and Game shut down that fishery because tanner crab stock thresholds were not met.

As in other regions, groundfish fisheries gained a significant number of jobs in Kodiak, with an increase of 16.7 percent over the year.

Bristol Bay season goes long

Bristol Bay gained harvesting jobs again in 2014 after a strong 2013. Salmon provides nearly 98 percent of Bristol Bay's harvesting employment, so job growth was spread almost entirely across June, July, and August.

June and July have been gaining ground every year in recent history, but August employment was also high in 2014, which happens only occasionally depending on how late the season carries on. Bristol Bay's August employment was nearly double that of the previous August.

Small gains for Northern Region

The Northern Region's harvesting employment is small compared to the statewide numbers, so small job gains can produce big percent increases.

Northern Region gained 14 harvesting jobs in 2014, which was a 9.9 percent average monthly increase over 2013. The growth was entirely in salmon fisheries, at 28 jobs over the year. All other fisheries were down jobs from 2013 or closed.

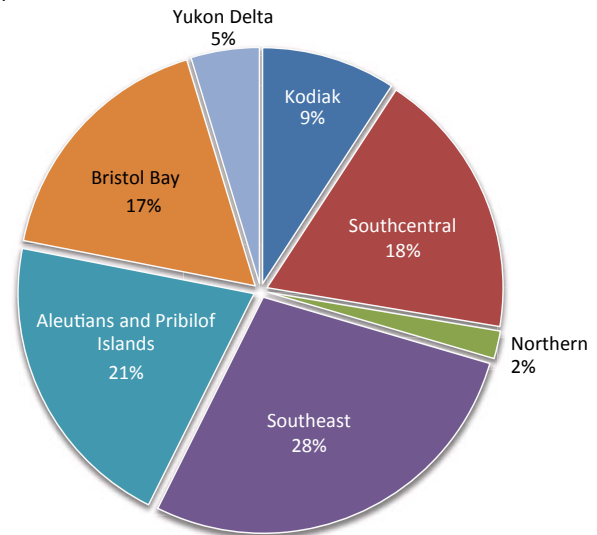
Aleutians gained jobs in 11 months of year

Harvesting in the Aleutians and Pribilof Islands gained more than 230 jobs in 2014. June was the only month that jobs went down, and the off-summer months had the most growth.

Groundfish was responsible for the area's employment gains throughout the year, similar to other Alaska regions. Most of the region's other fisheries lost jobs, especially salmon and halibut, which was the reason jobs fell in June.

5 Harvesting Jobs by Region

ALASKA, 2014



Note: Includes year-round workers only.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section

Southeast loses jobs but remains at typical level

Southeast fisheries lost more than 160 harvesting

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About these numbers

Unlike the "nonfarm payroll employment" numbers published every month by state and federal statistical agencies, fish harvesting employment estimates can't be generated simply by asking employers how many people they had on their payroll in a certain month.

Instead, employment of a certain number of people has to be inferred from the fish or other seafood "landings" — the initial sale of the catch.

Because of the way the fisheries are managed — by permits that are generally associated with a specific type of gear, including boat size — a landing under a certain permit requires about the same number of people to be involved in the catch. Those num-

bers are called "crew factors."

For example, a certain permit to fish for king crab in Bristol Bay with pot gear on a vessel more than 60 feet long requires about six people to be involved in the crab harvest according to the survey responses of people who own those permits. So when a crab harvest is landed under that permit in a calendar month, we assume the permit generated six jobs in that month.

The jobs are assigned to a location based on harvest areas rather than by place of residence of the permit holder. That approach approximates what's done with payroll employment numbers, which are categorized by place of work rather than by the place of the workers' residence.

Most permits have a geographic designation for where the specific species can be harvested. Employment generated under permits that allow fishing anywhere in the state is assigned to a region by a different method (a special harvest area code).

The numbers are presented here as annual averages because that comes closest to the way payroll employment numbers are published and analyzed. Like construction and tourism jobs, seafood harvesting employment has much higher employment in the summer than in the winter. Averaging the seafood harvesting employment numbers across all 12 months allows for more meaningful comparisons between job counts in different industries.

far eclipsed by Naknek, about \$2.37 million came just from salmon fishing. That number doesn't include fisheries with fewer than three permit holders, nor does it capture the substantial value of subsistence fishing to the area.

Housing is cheaper, but everything else is high

King Salmon has a lower overall cost-of-living than many rural communities, but that's mostly because of relatively inexpensive housing, an expense that eats up the largest chunk of most households' income.

The Council for Community and Economic Research's latest estimates put the area's costs at about 1.5 percent less than the Alaska average and 3.6 percent less than Anchorage. C2ER measures the area's costs at Naknek, a reasonable proxy for King Salmon, where housing costs are 30.9 percent less than Anchorage.

Most other costs are considerably higher, though — especially energy. Because King Salmon, Naknek, and South Naknek all run on diesel power, utilities in the area run 28.6 percent higher than in Anchorage.

The local electrical cooperative has explored cheaper alternative energy sources since the 1990s, including wind, coal-bed methane, and geothermal due to the area's volcanic activity. After an unsuccessful attempt to drill for geothermal energy, Naknek Electrical Association, which serves all three communities, filed for Chapter 11 bankruptcy in 2011.

As of August 2015, a gallon of propane in King Salmon cost \$11.65, and in July a gallon of heating fuel was \$4.73. Transportation costs are also high, at 34.4 percent above Anchorage. As of the second quarter of 2013, gasoline was \$5.70 a gallon. Groceries were also higher than Anchorage by 16.3 percent.

The military includes King Salmon as one of its "overseas locations," as it does with all Alaska places, in its cost-of-living index called OCONUS. With a value of 100 as the national baseline, OCONUS ranked King Salmon at 140 in 2015. (See Exhibit 4.) OCONUS doesn't include housing costs in its index, which is why it shows King Salmon as more expensive than Anchorage.

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jobs in 2014, with some loss in most species. While this 6.5 percent decrease seems large, it returns Southeast to its typical job levels and to about what they were in 2012.

One exception was Southeast's crab fishery, which gained 29 jobs from the prior year for 19.6 percent growth. This is partially because crab didn't hit a record the year before like most of the region's fisheries, leaving it room to grow. The gains for crab didn't offset salmon job losses, however, as salmon dominates Southeast harvesting.

Southcentral hits record

Seventy-seven percent of Southcentral's harvesting jobs are in salmon fisheries, which grew steadily over the year and hit records in 2014. These gains produced 2.4 percent growth, or almost 30 additional jobs. All of Southcentral's other fisheries registered job losses — even groundfish, which grew almost everywhere else.

Because all fisheries except salmon lost jobs in 2014, the region's harvesting employment levels were down overall. However, like Southeast, Southcentral hit new records during most of 2013, so even with 2014's losses the region is still well above its historical harvesting job levels.

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