Alaska’s rich seafood resources are an important part of the state’s economy and a source of jobs and income for thousands of people. At the beginning of a long economic chain that ends with salmon or halibut on someone’s dinner table are the people who harvest the seafood from the state’s oceans and rivers.

That group is not captured in the most visible government job numbers. Those numbers, usually called “nonfarm payroll employment,” also exclude the self-employed, the military, and other jobs defined as “agricultural” for various reasons, generally because those numbers are harder to come by.

To fill that gap, the Alaska Department of Labor and Workforce Development worked with the Alaska Department of Fish and Game about a decade ago to develop a method to estimate seafood harvesting jobs in 2013.
harvesting jobs that was the most comparable to the nonfarm payroll employment numbers. The comparisons aren’t perfect, but they allow someone to get a sense of how seafood harvesting compares as a source of jobs to other industries for which job numbers are more readily available.

**Seafood harvesting employment grew in 2013**

In 2013, Alaska’s seafood harvesting average monthly employment grew to a level not seen since 2000.

Jobs grew by 2.4 percent, primarily driven by increased salmon harvesting. This brought the year’s monthly average to 8,393, less than 400 shy of 2000’s level. (See Exhibit 1.)

The increase in harvesting and jobs has also produced a larger seasonal swing. Alaska’s seafood harvesting has one of the strongest seasonal patterns in the nation, with a difference of about 25,000 jobs between the highest and lowest months.

Winter employment shrunk or remained stable in 2013 while peak summer employment reached a record 25,859 jobs in July. June alone had 2,500 more harvesters than it had in 2012.

**Large gains in salmon fisheries employment**

Salmon harvesting jobs were the main source of growth between 2012 and 2013, with a gain of 452 jobs, or 10 percent. (See Exhibit 3.) This growth came from a small increase in reported crew sizes by permit holders as well as more fishing. (See the sidebar on page 6.)

Employment increased somewhat in the smaller sablefish, herring, and shellfish fisheries. Herring fisheries grew the most in terms of a percentage at 25 percent, which translated to 32 additional jobs.

Offsetting the growth in these fisheries, groundfish and crab lost employment over the year. Crab harvesting lost around 100 jobs, a drop of 17 percent. These losses were mostly in late spring and early summer, and minor growth in the winter wasn’t enough to offset them. Groundfish job losses were spread evenly across the year with every month but one showing fewer harvesting jobs. The average loss over the year was 187 jobs, or 15 percent.

**Groundfish species continue to dominate catch volume**

The job numbers here have a much lower profile than other fisheries data, such as catch volume and value. State and federal biologists and other experts manage the fisheries as a renewable economic and subsistence asset.

According to the most recent NOAA report, Alaska fisheries produce over half the United States’ total harvest volume and a third of the total value.
Groundfish make up the largest share in terms of volume and salmon in value among all fisheries, with nearly $680 million worth brought to dock in 2013.

Though salmon harvested in Alaska made up about 17.5 percent of total seafood volume, it was 36.5 percent of total commercial fisheries value. In contrast, walleye pollock was well over half the volume — 3 billion pounds in 2013 — but around 25 percent of total Alaska landings value.

The variations in methods, regulation, and markets dictate the effort and employment necessary for each fishery. Limits on size, equipment type, and the number of days allowed for salmon fishing mean more job opportunities and crew are needed. For example, larger ships that fish the Bering Sea for pollock can get by with fewer crew and fetch higher catch prices.

Southeast leads regions

Southeast Alaska has been the regional leader in both volume and value of the high-effort salmon fishery since 2011, thus generating the largest job counts. (See Exhibit 4.)

Southcentral was next in 2013 with its halibut fleet and Prince William Sound and Cook Inlet salmon fisheries. The Aleutians/Pribilof Islands’ employment was third-highest because of its diversity and triple-digit employment in salmon, halibut, groundfish, and crab harvesting.

Kodiak loses jobs

Employment in Kodiak fisheries dropped 12.6 percent overall in 2013, but still remained higher than 2011 levels. Like most of the other regions, Kodiak’s salmon fisheries grew — but employment dropped in halibut and various other groundfish fisheries because of an overall decrease in the number of landings and a reported decline in the number of crew members necessary to fish each permit.

Bristol Bay pattern differs

The Bristol Bay Region’s employment growth pattern differs in methods, regulation, and markets dictate the effort and employment necessary for each fishery. Limits on size, equipment type, and the number of days allowed for salmon fishing mean more job opportunities and crew are needed. For example, larger ships that fish the Bering Sea for pollock can get by with fewer crew and fetch higher catch prices.

Southeast leads regions

Southeast Alaska has been the regional leader in both volume and value of the high-effort salmon fishery since 2011, thus generating the largest job counts. (See Exhibit 4.)

Southcentral was next in 2013 with its halibut fleet and Prince William Sound and Cook Inlet salmon fisheries. The Aleutians/Pribilof Islands’ employment was third-highest because of its diversity and triple-digit employment in salmon, halibut, groundfish, and crab harvesting.

Kodiak loses jobs

Employment in Kodiak fisheries dropped 12.6 percent overall in 2013, but still remained higher than 2011 levels. Like most of the other regions, Kodiak’s salmon fisheries grew — but employment dropped in halibut and various other groundfish fisheries because of an overall decrease in the number of landings and a reported decline in the number of crew members necessary to fish each permit.

Bristol Bay pattern differs

The Bristol Bay Region’s employment growth pattern

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 numbers 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 is also what comes closest to the way payroll employment numbers are published and analyzed. Like seafood harvesting employment, construction and tourism jobs have much higher summer employment levels than they do during the winter. Averaging the seafood harvesting employment numbers across all 12 months allows for more meaningful comparisons between job counts in different industries.
differed from the rest of the state, with salmon employment flat.

The salmon job count was stable mostly because of how the harvesting seasons and landings meshed with calendar months. In 2013, June and July had record employment but August employment was half what it had been the prior year. August employment swings wildly depending on whether the harvest season continues that long into the year. Salmon generates 98 percent of the region’s harvesting jobs.

Northern a small piece

Northern Region has a comparatively small harvesting employment level, but the jobs are important to the area. The region gained an average of just four yearly jobs, largely from a strong herring return. Herring harvest employment was five times higher than it was the year before, but the yearly average doesn’t reflect that because the herring season lasts just one month, diluting the annual average with months of inactivity.

Aleutians area loses 150 total jobs

The Aleutians and neighboring Pribilof Islands lost 150 jobs in 2013. Only August and November gained jobs, with the other 10 months reflecting varying declines.

Aleutians salmon harvesting employment rebounded to its 2011 level, which was a 20 percent increase from 2012. The declines in the region’s other fisheries overpowered the rebounding salmon employment, because salmon is such a small share. (See Exhibit 6.)

Southeast sets a record

Southeast fisheries gained more than 210 harvesting jobs in 2013, reaching a level not seen since 2000. Most species showed employment growth from the prior year, with the exceptions of groundfish and crab, which had negligible losses.

The area’s longest continuous growth has been in its salmon fisheries. Salmon harvesting reached new highs since in 2000 in 2010, 2011, and 2013.

Southcentral has a big summer boost

Salmon harvesting is almost as dominant in Southcentral as it is in Bristol Bay, at 73 percent of all harvesting jobs. (See Exhibit 6.)

While salmon fisheries across Alaska gained jobs on an average monthly basis, Southcentral gained the most in its peak months. The region’s average increase was only 197 for the year, but...
June alone was up 1,515 jobs from the year before.
Harvesting jobs for all the other species in Southcentral mostly remained stable. Steady overall job increases have been the norm for this region in recent years.

For more information, see our Web site at laborstats.alaska.gov.

Josh Warren is a Department of Labor economist in Juneau. To reach him, call (907) 465-6032 or e-mail him at Joshua.Warren@alaska.gov.

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