

Small job decline for fishing in 2022

Harvesting jobs down overall each year since 2020

By JOSHUA WARREN

While most Alaska industries have fully or partially rebounded from their pandemic job losses — including construction and tourism, which are also seasonal — seafood harvesting has continued to lose jobs. The number of harvesters fell by 118 in 2022, or about 1.8 percent.

Since 2019, seafood harvesting employment has dropped 17.3 percent, a decline that the summer peak also reflects. In 2019, July peaked at more than 23,000 fish harvesters. By last July, the annual high only reached 20,241, which was almost 400 below the previous summer. (See the sidebar on page 8 for how we estimate jobs.)

When COVID precautions were in place, vessels slightly reduced their crew numbers, but that level has returned to normal. However, some vessels stopped fishing during the pandemic and haven't returned. In 2019, nearly 4,600 boats fished for salmon, Alaska's most labor-intensive harvest. In 2022, it was just under 4,100.

Share of Alaska jobs dipped to 6%

Seafood harvesting still represents a significant share of Alaska's employment, although its weak performance relative to other sectors pulled the July share from 7.3 percent of statewide jobs down to 5.7 percent. (See the graphs at the bottom of the next page.)

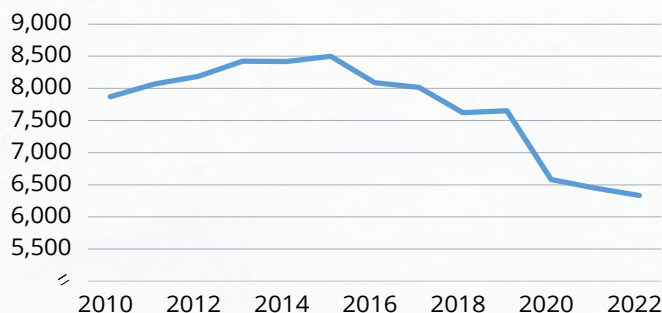
Still, when fishing and processing are combined, 10 percent of all summer jobs were directly related to seafood last year, and it's even higher when including jobs that indirectly support or are supported by the seafood industry.

Harvesters by species

Big drops for crab and other shellfish; halibut harvester count jumps 14 percent

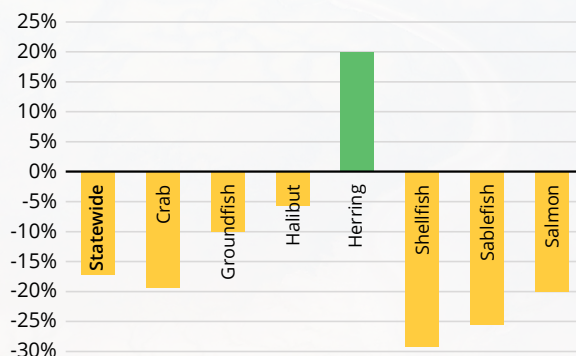
While all species' harvesting workforces were down

Alaska fishing jobs, 2010-2022



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

How jobs by species line up with pre-COVID levels*



*Percent change in jobs from 2019 to 2022
Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section

from their 2019 levels except the small herring fishery, just three of the seven lost harvesters from 2021 to 2022.

The halibut fishing workforce jumped 13.9 percent from 2021, which was the biggest gain. Two in the loss category, crab and miscellaneous shellfish, shed over 20 percent of their workforces in a single year.

Halibut's nearly 14 percent increase in jobs was its

biggest in recent history. Halibut fisheries' average of 1,011 jobs in 2022 was just 60 shy of its pre-pandemic count.

Before 2021, the number of crab harvesting jobs had been rising since the late 2010s and was nearly unscathed by the pandemic. Crab harvesting employment declined slightly in 2021 and then dropped precipitously after closures hit in 2022, shrinking the crab harvesting workforce by nearly 21 percent. The annual average job count in 2022 was just 346.

While crab harvesting is relatively steady throughout the year, the minor peak in February was about 18 percent lower than the year before.

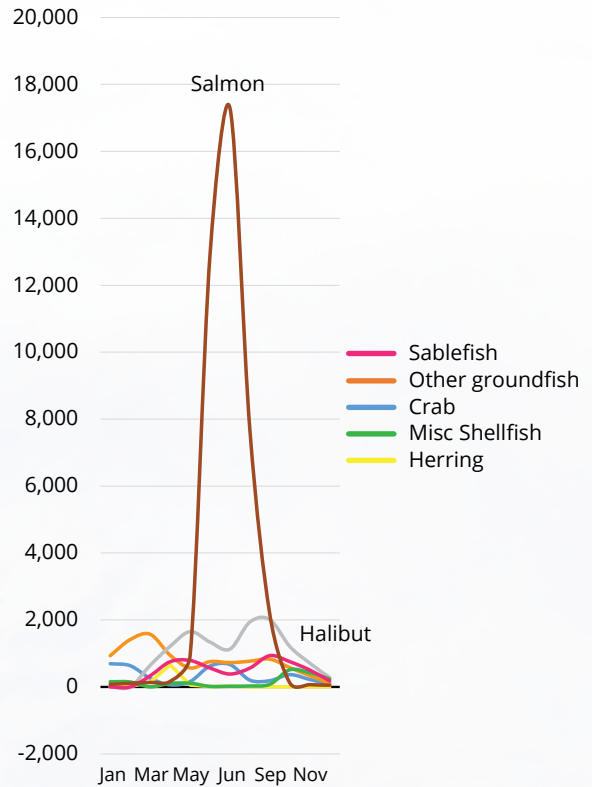
This pattern is unlikely to break in 2023, as we have yet to see the full impact of the snow crab closures that continued into this year, prompted by warming waters. That closure was announced in October 2022, shuttering the fishery for the winter and the season that followed. Fisheries managers had already closed the Bristol Bay red king crab fishery the year before after stock estimates plunged, and experts have estimated area king crab could take six to 10 years to recover to normal levels. Fishery managers recently approved a conservative opening for 2023, however.

Jobs harvesting other shellfish — mostly sea cucumber and shrimp — fluctuate most years. The yearly average depends on whether the harvest spreads into the edge months. Last year's 22.5 percent drop was outside that norm, however. The late-fall peak fell from almost 800 jobs to just over 500. October's shellfish harvesting workforce hadn't fallen below 750 jobs in at least 12 years.

Steady decline in salmon jobs since 2020

Salmon harvesters, the largest category by far, also decreased in 2022 and have been on a steady decline since the initial plunge that came with the pandemic.

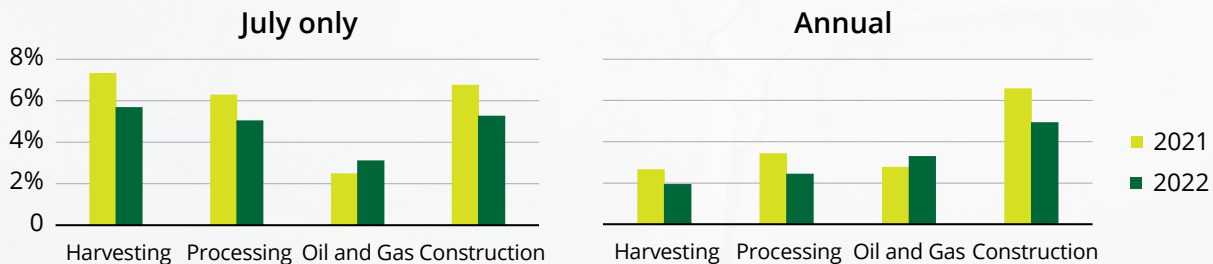
Salmon most seasonal by far



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

Since that 2020 drop, both the yearly average and the monthly peaks have decreased every year. The ongoing collapse of the Yukon Delta salmon fishery has been a large part of that downward trend, which the next section will cover in more detail, although other regions have also lost salmon fishing jobs. Only Bristol Bay and the Northern Region added salmon harvesters last year. (See the last page for more on other factors affecting salmon fisheries and what to watch this year.)

Fishing's share of Alaska's total jobs, yearly and at the July peak



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

Alaska's total seafood harvesters by month, 2001 to 2022

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Month avg
2001	2,972	4,286	4,505	4,681	7,053	18,884	21,571	13,921	8,095	6,194	2,617	726	7,959
2002	3,590	4,047	4,334	4,913	6,715	16,292	18,224	11,975	6,983	5,794	2,632	524	7,168
2003	3,284	3,609	4,378	5,797	6,233	17,610	19,670	11,922	7,191	5,969	2,660	526	7,404
2004	3,594	3,492	4,110	5,050	6,476	17,139	19,634	12,308	7,371	6,023	2,259	509	7,330
2005	3,561	3,150	4,227	5,115	6,283	18,169	20,566	12,889	7,192	4,958	2,768	953	7,486
2006	2,700	3,038	4,573	4,293	5,709	17,748	20,066	13,700	7,719	5,003	2,507	720	7,314
2007	2,584	2,966	3,930	4,348	5,949	17,528	20,137	13,567	7,500	4,738	3,080	791	7,260
2008	2,738	3,138	4,511	4,445	5,572	17,022	20,446	13,633	8,225	4,202	2,708	602	7,270
2009	2,527	3,817	3,126	4,874	5,693	17,609	20,076	13,687	7,148	4,593	2,388	507	7,087
2010	2,668	3,060	4,005	5,255	5,685	18,878	23,128	15,287	7,759	4,992	2,887	850	7,871
2011	2,898	3,214	4,010	4,729	5,642	20,112	23,824	15,586	7,918	5,721	2,303	849	8,067
2012	2,923	3,409	4,609	5,402	6,163	19,237	24,761	16,191	6,988	5,453	2,274	853	8,189
2013	2,736	2,930	4,091	5,516	6,270	22,012	25,351	15,419	7,559	5,496	2,780	930	8,424
2014	2,242	2,776	4,879	5,407	6,489	21,167	24,594	16,593	8,018	5,190	2,596	1,097	8,421
2015	2,520	3,247	4,961	5,029	6,749	21,164	24,649	16,283	8,232	5,252	2,661	1,264	8,501
2016	2,678	3,374	5,222	5,363	6,329	18,840	23,695	16,055	7,909	4,953	1,886	765	8,089
2017	2,205	3,076	4,444	5,026	5,646	19,881	23,541	15,407	8,562	5,334	2,292	754	8,014
2018	2,126	2,538	3,379	4,310	5,166	18,942	22,790	14,763	9,211	4,849	2,681	689	7,620
2019	2,347	2,548	3,637	4,372	4,721	18,154	23,440	15,632	8,664	5,201	2,443	679	7,653
2020	1,975	2,296	2,983	3,113	4,020	16,286	20,917	12,325	7,310	5,104	2,193	473	6,583
2021	1,573	2,339	3,305	4,017	3,997	15,732	20,627	11,616	6,995	4,017	2,268	902	6,449
2022	1,853	2,312	3,085	3,908	4,244	16,210	20,241	11,172	6,203	3,534	2,269	945	6,331

Note: Because of a change in the way harvest jobs are calculated, data before 2010 are not comparable to data from 2010 forward.
Sources: Commercial Fisheries Entry Commission and Alaska Department of Labor and Workforce Development, Research and Analysis Section

Sablefish job count began to rebound but groundfish remains short of full recovery

Harvesters of sablefish, or black cod, increased 4.8 percent last year, and the number of "other groundfish" harvesters rose 1.4 percent.

The monthly peak for other groundfish climbed 100 jobs over the previous year, and the sablefish peak rose as well, by about half that.

Both of these fisheries had been on a steep decline before COVID, and while that pattern reversed in 2022, neither workforce approached previous employment highs.

Herring the only fishery with more harvesters than before the pandemic

The herring fishery's workforce grew in 2022 and surpassed its 2019 levels, although herring is the smallest fishery in Alaska with just 76 annual jobs.

Most herring is caught in April, when employment shoots up over 600. In 2022, the peak hit 664, the highest in the last decade.

Harvesting jobs by Alaska region

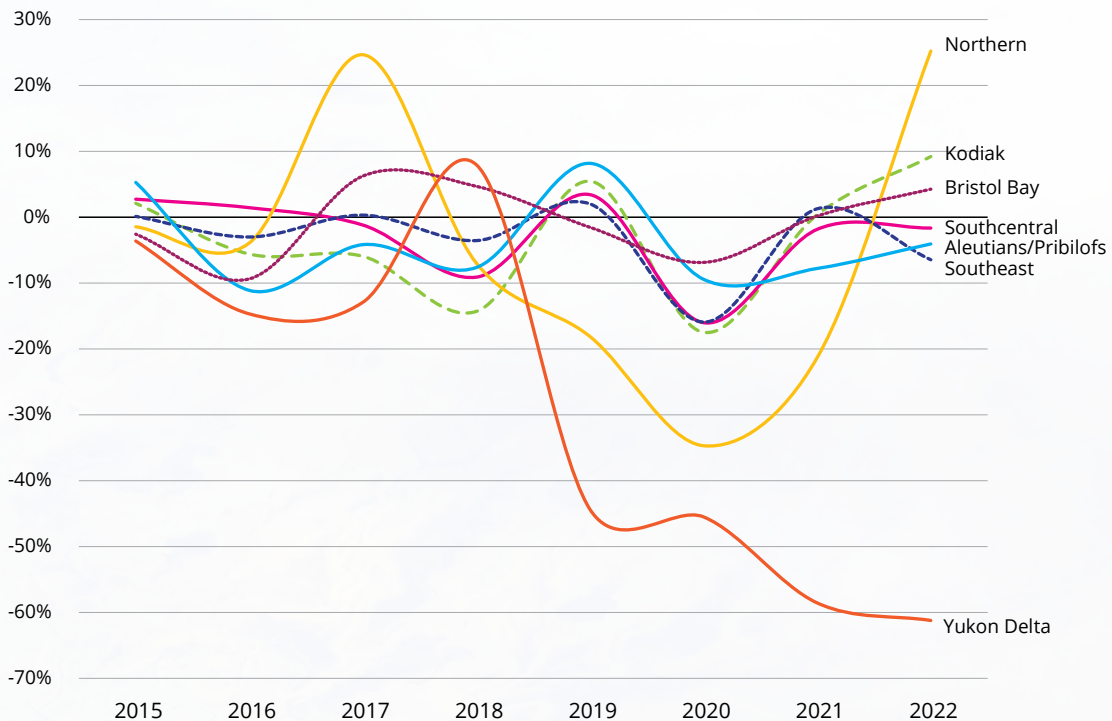
Most regions' harvesting employment held fairly steady last year, aside from the Yukon Delta's ongoing catastrophic loss and the Northern Region's robust growth. These two regions also have the smallest harvesting workforces, which makes them prone to dramatic swings. The Yukon Delta's salmon runs have dwindled, leading to the largest regional job loss last year (see the Yukon Delta section for more), and the Northern Region lost a lot of ground in 2021 but bounced back in 2022.

Aleutians and Pribilofs hit by crab closures

Harvesting employment in the Aleutian and Pribilof Islands continued a multi-year slide, dipping to 1,044 in 2022 from 1,088 the previous year. Most of those losses were in crab harvesting, which is just starting to reflect the blow of fishery closures and will certainly shrink further in 2023.

All of the region's other fisheries except salmon added jobs in 2022, and the Aleutians' herring workforce tripled at its yearly peak. The

Percent change in seafood harvesting jobs regionally



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

longer-term loss of salmon harvesting employment dwarfs those gains, however. The region's salmon fishing workforce is still about 60 jobs below its pre-pandemic level.

Bristol Bay adds jobs again

Bristol Bay, where salmon represents 99.7 percent of harvesting jobs, added jobs again last year, putting the region only 34 jobs below its pre-pandemic level.

Bristol Bay has about 1,350 average monthly jobs in salmon harvesting, and its summer peak hit 8,134 last year (it was 7,948 the year before).

Kodiak jump mainly from crab reopening

Kodiak harvests a range of species, and its seafood harvesting employment is spread throughout the year. The region's harvesting workforce jumped 9.4 percent in 2022, mainly from its crab fishery rebounding with vigor after nearing zero in 2021.

Kodiak's tanner crab fishery is cyclical, and 2021 was one of the years without enough harvestable males to open the fishery. The harvest resumed in 2022, prompting an employment bounce, and the fishery remained open in 2023.

Kodiak's halibut and other groundfish fisheries also added jobs. Salmon is the dominant harvesting employer, and while its workforce shrunk slightly, the peak month activity was higher.

Northern workforce no longer the smallest

The Northern Region is now the second-smallest for harvesting because of the Yukon Delta's massive losses. Northern harvesting employment grew 26 percent in 2022, which equated to additional 19 jobs over the year.

Some of the gains came from salmon because it requires such large crews, but like Kodiak, the Northern Region's crab fishery rebounded last year after dwindling to almost nothing in 2020 and 2021. Northern crab harvesters are almost back to pre-pandemic levels, but salmon harvesting has some ground to make up.

Southcentral job count essentially flat

Southcentral Alaska's harvester count was the most stable, with a modest decrease of 1.6 percent over the year. Employment for halibut and herring grew dramatically, enough that counts met or beat their 2019 levels, but salmon fishing employment dropped 8.5 percent from the previous year.

How we use landings to estimate seafood harvesting jobs

Unlike the wage and salary job numbers we and our federal partner the Bureau of Labor Statistics publish each month, data on the employment fish harvesting generates is not readily available. Harvesters are self-employed, and permit holders aren't required to report the number of people they employ in the same way as employers subject to state unemployment insurance laws.

To estimate fisheries employment that's roughly comparable to wage and salary job numbers, we infer jobs in a given month from landings. A landing, or the initial sale of the catch, signals recent fishing activity.

Because fishing permits are associated with a specific type of gear, including boat size, we know roughly how many people a landing requires under various types of permits. The number of people associated with a certain permit is called the crew factor.

For example, a permit to fish for king crab in Bristol Bay with pot gear on a vessel more than 60 feet long requires about six people, according to a survey of

those permit holders. So when crab is landed under that permit, we assume it generated six jobs that month. We count each permit once per month regardless of the number of landings, which is similar to the way wage and salary employees work different numbers of hours.

Most permits designate where specific species can be harvested, so we assign jobs to the harvest location rather than the residence of the permit holder. This approach also best approximates wage and salary employment, which is categorized by place of work rather than residence. Jobs generated under permits that allow fishing anywhere in Alaska receive a special harvest area code and are estimated and allocated differently.

We produce the job counts by month because, as with location, that comes closest to wage and salary employment data. And because seafood harvesting employment is much higher in summer than winter, similar to tourism and construction, averaging employment across all 12 months allows for more meaningful comparisons among job counts in different industries.

Southcentral's salmon fishery is still about 300 jobs below 2019.

Southeast loses 6.5 percent in 2022

Southeast has the largest number of seafood harvesting jobs in the state, averaging 1,739 in 2022 with a summer peak of 3,523. That was a 6.5 percent decline from the year before, mostly because of salmon and crab harvesting, and the region

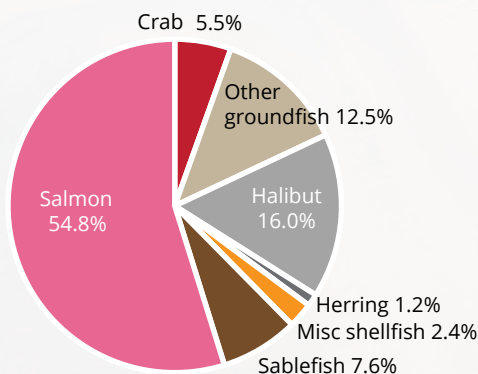
remains about 400 jobs below pre-pandemic levels.

Southeast's crab harvesting workforce dropped over 28 percent in a year. Dungeness crab season was short with no jobs in August, a month that would typically have about 300. Some Dungeness harvesters chose not to fish in the fall after a weak summer. Southeast red and blue king crab fisheries have been closed since 2017.

The second and third largest harvesting workforces in Southeast, halibut and sablefish, added jobs last year but they didn't offset the losses from crab.

Salmon harvesting was down throughout the summer, and Southeast salmon harvesters also fished a shorter season. Overall, the number of salmon harvesting jobs fell 8.4 percent over the year (-62 jobs).

Majority of fish harvesters catch salmon in Alaska



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

Yukon Delta remains at a crisis point

The Yukon Delta's harvesting job count has fallen over 40 percent each year since 2019, and 2022's drop was the largest yet at 60.5 percent. Salmon once provided over 94 percent of the Yukon Delta's fishing employment, but that number is now zero after jobs peaked at 1,044 in August 2018. A small number of groundfish harvesting jobs are all that remain.

While some biologists are optimistic that chum

salmon will return to the region, it would take a long time to regain those jobs, even under that best-case scenario.

Harvesting salmon in the Yukon area depends on the level of fish escapement in a given year. Treaties with Canada dictate that a certain number of fish must make it out of Alaska and into Canada's part of the river each year.

For detailed harvesting data, visit:
live.laborstats.alaska.gov/seafood

All species of salmon in the area have hit record lows in recent years, especially in 2021, making commercial fishing impossible in the area and dwindling enough to prohibit even subsistence harvesting, which is vital to the region, both for food and culturally.

Coho and chum escapement have improved slightly since 2021 but are still well below the levels necessary for a commercial harvest, especially because escapement didn't reach the levels necessary to reopen Yukon subsistence fisheries in 2022. Subsistence remained closed in 2023 except in one small Yukon tributary.

Low prices and Russia flooding the market are big factors in 2023

So far in 2023, few signs point to a reversal of the downward trend in fishing jobs. Snow crab closures will likely prompt big ongoing job losses this year, and while prices and job levels don't typically move together, prices for salmon and sablefish have

dropped significantly.

Last year's massive salmon harvests — especially sockeye, which by poundage was the largest sockeye harvest since the 1970s — and high prices have had downstream effects on the supply and demand for 2023 salmon harvests.

Some of the 2022 stock has carried over into this year, driving prices down and compounding the oversupply caused by Russia flooding the market at below-basement prices. Sablefish prices have also dropped this year because of a glut compounded by the Russian oversupply.

At the same time, economic trouble and wars around the world have depressed the demand for seafood products, and inflation has increased processors' costs.

While the United States has now banned the import of Russian seafood, the ban covers only unaltered seafood originating in Russia. Russian harvests sent to another country for processing can still enter the U.S. market, and this is especially prevalent in pollock and salmon fisheries, enabling Russia's low prices to continue depressing Alaska's fisheries.

Together, these drastic price reductions have prompted some harvesters to pull up their nets early or skip openings entirely in 2023.

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