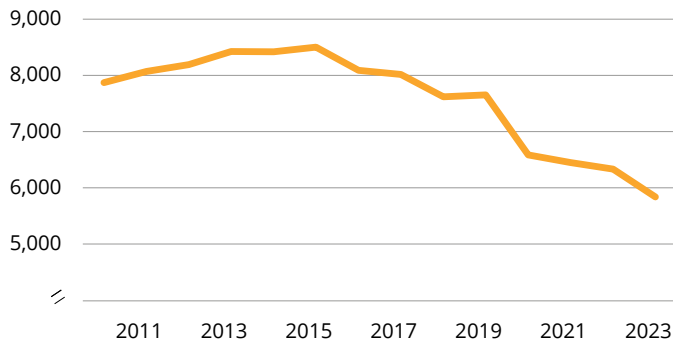


Fishing jobs down 8% in 2023

Seafood harvester count hits lowest level since at least 2001

Harvesting jobs trend downward



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

By JOSHUA WARREN

The number of fishing jobs in Alaska declined 8 percent in 2023, bringing the industry's total job count below 5,900 — its lowest level since at least 2001, when this data set began.

July, when jobs peak with Alaska's massive salmon harvest, also dropped by over 10 percent. July 2023 had about 2,000 fewer jobs than the previous July. (See the box below for how we create these estimates.)

The seafood harvesting industry struggled through a confluence of challenges last year. Some fisheries remained closed, including the large Bering Sea snow crab fishery. Salmon runs materialized around the state, with some exceptions such as the Yukon Delta, but prices were flat or falling. Even as demand for seafood products

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 are 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 catch 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.

declined with inflation, Russia continued to flood the global market with fish.

With lower dock prices and some processors no longer accepting the catch, many harvesters didn't fish at all.

In 2023, 12 percent fewer people bought a crew license. The number of crew licenses had rebounded by about 400 since the 2020 plunge, but by last year, that gain was erased and then some.

Among permit holders, almost 8 percent fewer fished their permit than the year before, a drop that compounded previous years' decreases. The initial decline in active permits when COVID first hit was steeper, but not by much.

A decade of mostly losses

Over the last 10 years, fish harvesting employment fell more than 30 percent. The only Alaska industry that fared worse over that time was oil and gas.

Fish harvesting employment increased in just two of the past 10 years. The industry hoped for a strong rebound after 2020's 14 percent plunge — most industries have since regained some or all of their losses — but seafood harvesting has continued to lose jobs every year since. July once had more than 25,000 fishing jobs, but by 2023, it was down to 18,000.

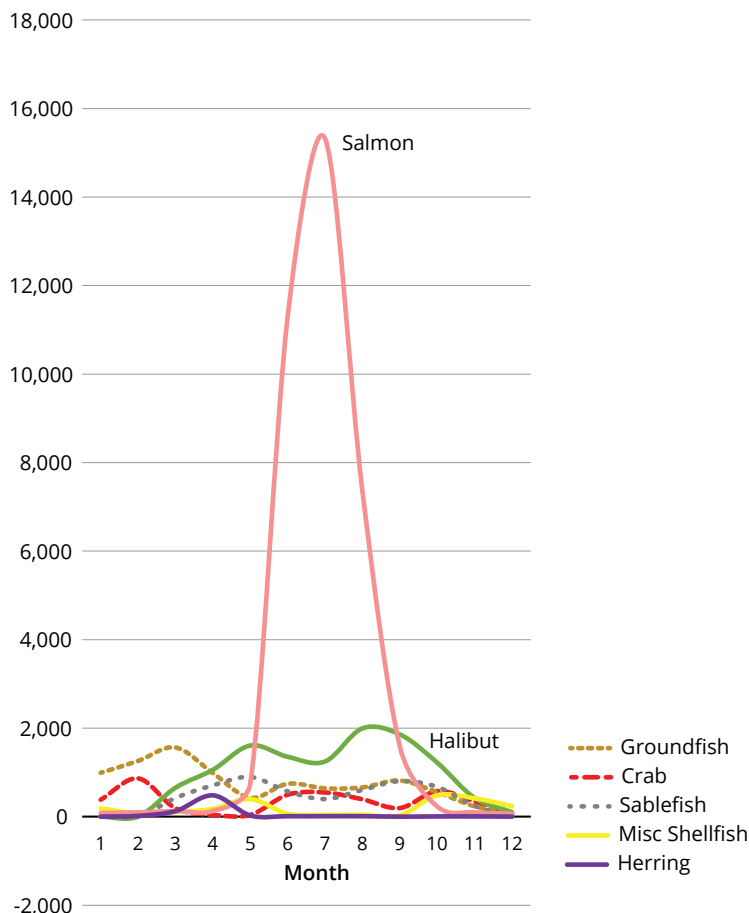
The economics of harvesting continue to put a drag on the industry, but biologically, many fisheries still have strong numbers and a healthy outlook. Prices haven't dramatically increased in 2024, however, so overall employment isn't likely to bounce back this year. If prices do recover, for most species, there will be fish to catch.

Job trends by species harvested

Only 'other' shellfish harvests added jobs

Narrowing the view to individual fisheries shows only one type of harvest generated any job growth in 2023. The miscellaneous shellfish category, which excludes crab and is mostly shrimp and sea cucumber, was a bright spot with 21.5 percent more jobs than in 2022. However, this category is small.

Salmon's summer job peak is extreme



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

While most months were higher, the real driver was fourfold employment in May as the shrimp fishery moved to a new month to allow the shrimp to lay eggs before being harvested. This didn't spur a corresponding job loss in the original month, either, as other types of shellfish harvesting continued. The lowest harvest months of the year did have fewer jobs, but the spikes drove up the year's average.

Decrease for sablefish erased prior recovery

Jobs catching sablefish, or black cod, decreased by 7.7 percent over the year after a limited pandemic recovery the year before, erasing that progress.

While employment rose in the late spring, the season ended early for some sablefish harvesters. November's count dropped by half and December's nearly hit zero.

This wasn't because of a lack of fish, as fishermen harvested just 60 percent of the total allowable sablefish catch. Most sablefish is sold to the

Japanese market, and changes in the yen exchange rate made sablefish more expensive, denting demand and pushing catch prices down.

Halibut season shortened

Halibut harvesting stood out in recent years for almost fully recovering from COVID-related losses, but in 2023 the job count fell by 5.1 percent.

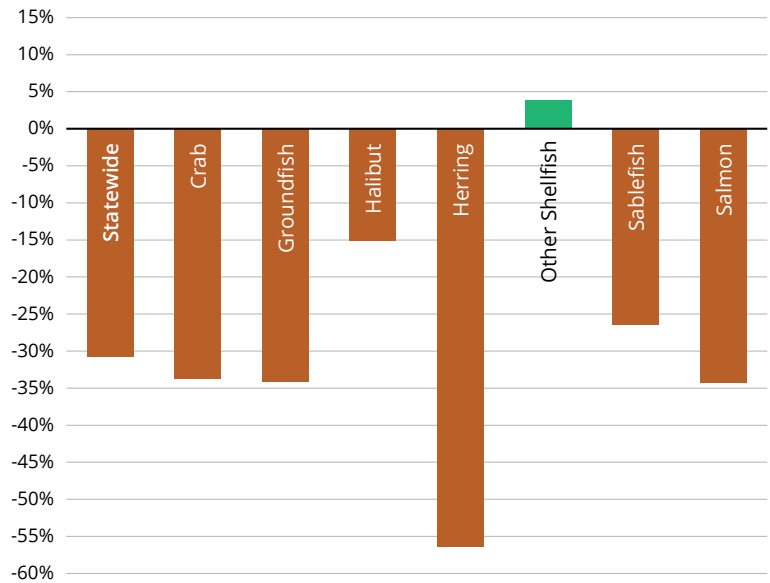
Similar to sablefish harvesting, the halibut season petered out earlier. The largest losses came in November and December. Some fishermen likely reached their halibut quota early, as their catch limit was reduced in 2023.

Herring faced dwindling market

The tiny herring fishery bounced back even stronger after the pandemic, with more jobs in 2022 than before COVID. However, in 2023, its peak month for jobs, April, dropped by over a quarter, decreasing its annual count by a similar amount. Alaska had 58 average herring harvesting jobs in 2023.

Some herring fisheries didn't open in 2023, as herring harvesters sometimes find no market for the catch. Japan is the main market for the most common herring products, such as roe. With decreasing demand and unfavorable exchange rates, the lack of buyers last year has extended into 2024.

Change in jobs by species over a decade



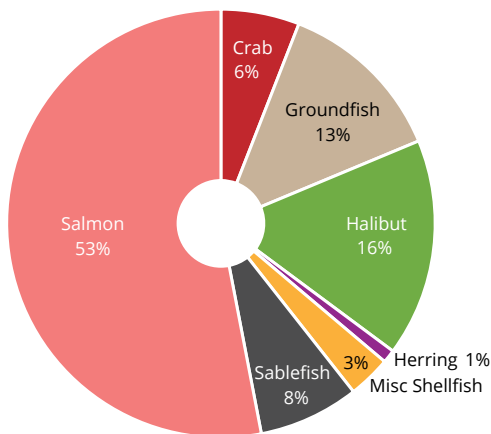
Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section

Groundfish jobs below historical average

Jobs harvesting other groundfish species, mainly pollock and cod, fell 6.1 percent from 2022, when these fisheries had recovered some of their gradual past losses. The year saw little pockets of decreases, likely through fewer people fishing amid lower prices.

The current decline put groundfish harvesting well below its historical employment average, and even the small amounts of growth in January and April couldn't offset the steep, often double-digit percent drops in the summer.

Fishing jobs by species, 2023



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

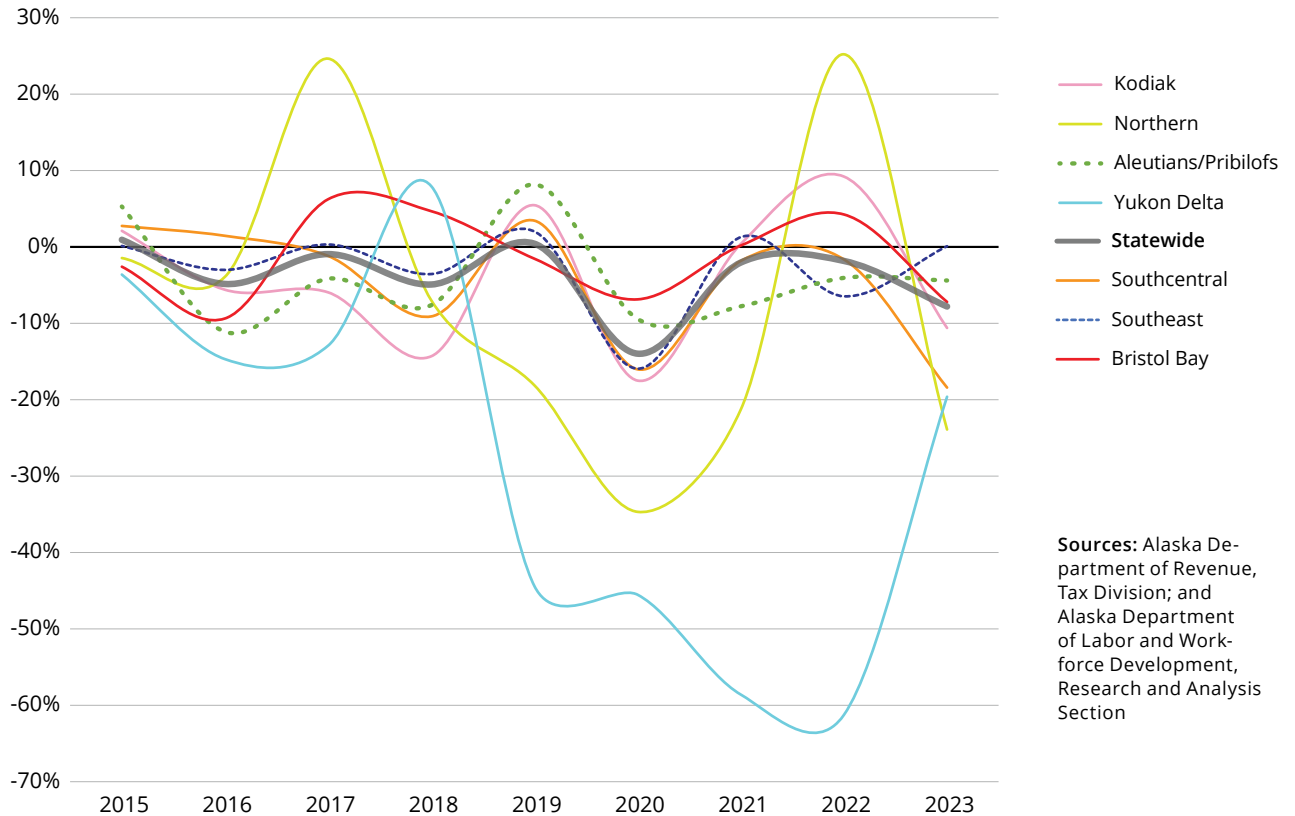
Jobs fishing salmon decreased 11 percent

Salmon is the state's largest fishery by far, as its high-value harvests are so labor-intensive. It remains the largest despite consistent losses, year after year. Tanking value was the culprit, as the statewide salmon harvest was the seventh-highest on record for poundage since 1985.

Salmon fishing employment dropped 11 percent in 2023, a loss of 376 jobs. Combined with the preceding three years' losses, that pushed salmon fishing down to two-thirds of its peak employment year, 2015.

The summer peak has declined even more, with a 26 percent drop putting July 2023 about 6,000 jobs below July 2015.

Regional percent gains and losses in fishing employment, 2015-2023



Salmon prices have fallen enough to trigger fishermen at some harbors to protest, aimed at the processors.

Crabbing jobs were flat, but future uncertain

Crab harvesting job losses were significant over the last decade through multiple closures, some likely permanent. Closure-related losses seemed to stabilize in 2023, and employment held steady at 346 total jobs. Some of the summer months produced fewer jobs, but a strong harvest in February pushed the winter peak up by over a third.

The future is murky for crab fisheries, with an ongoing mix of closures and openings. As mentioned earlier, Bering Sea snow crab remained closed in 2023, and Southeast's commercial king crab fisheries have been closed for six years.

For the 2024-2025 season, however, the Bristol Bay red king fishery and the Bering Sea snow crab fishery will both open. The Bristol Bay king crab fishery had been closed for two years.

All closures have been abundance-related, with environmental changes topping the list of reasons for fewer crabs. Past overfishing is also factor.

Fish harvesting by Alaska region

The Aleutian and Pribilof Islands

Crab harvesting employment, a major driver in the Aleutian and Pribilof Islands, dropped 6.5 percent over the year, from 181 to 169. The early-year declines in statewide crab harvesters were mostly in the Aleutians. Historically, the area has had around 250 crabbing jobs.

The region's largest group of harvesters is for other groundfish, which also declined in 2023. Aleutians groundfish harvesting employment fell by just over 5 percent, a loss of 27 jobs.

Similar to the statewide numbers, Aleutians groundfish harvesting employment ticked up in 2022 but 2023 erased that amount and more. The region has about two-thirds of the groundfish harvesting jobs it had 10 years ago.

Sablefish harvesting has increased, however, and is progressing toward full pandemic job recovery.

The other two species harvested in this region are salmon and halibut. Salmon fishing jobs decreased

Statewide fishing jobs by year, all species, 2001 to 2023

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Monthly average
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	953	6,332
2023	1,643	2,313	3,184	3,583	4,152	14,540	18,204	11,055	5,286	3,742	1,757	562	5,835

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

by a tiny amount and stabilized at a new, historically low average after several years of little movement in the numbers of Aleutians harvesters. After the job loss during COVID, the numbers never popped back up.

The Aleutians halibut fishery, after briefly springing back in 2022, lost 10 percent of its jobs last year as harvesters quit earlier in the season than usual. The allowable catch was much lower in 2023, so many fishermen probably hit their limit early.

A combination of the largest fishery shrinking and crab closures persisting pushed the Aleutians and Pribilofs into the negative for the year, with a total fishing employment loss of over 4 percent.

Snow crab will reopen for the winter 2024 season, which will lead to future employment increases.

Bristol Bay

The Bristol Bay region has the state's largest salmon harvest, and while a couple of other species have been harvested there in the past, the final one disappeared in 2023 (herring).

Bristol Bay had an abundance of herring in the forecast but no interest from processors. With no market for the catch, that fishery was canceled,

and now the region exclusively harvests salmon commercially.

While 2022's run boosted employment, 2023 brought the job count back down. The yearly average and July peak were both the lowest on record.

The decline wasn't based on closures but on a gradual decline in the number of salmon fishermen. It can be a long trip to Bristol Bay for some, and lower salmon prices make the voyage less profitable.

Overall, Bristol Bay lost 7.2 percent of its harvesting jobs in 2023 (about -100). This area has the highest likelihood of rebounding, however, because its decline had nothing to do with biology. If prices recover, harvesters will return.

Northern

Salmon is also the biggest influence on the Northern Region, and a shorter season lowered the job count almost 24 percent in 2023, with the August peak down by 70 jobs. The surrounding months also declined.

The region has two microfisheries that in past years employed a dozen or more during the peak months, but those have dwindled. In 2023,

groundfish had just three harvesters at the peak and halibut had nine.

The region also has crab harvesting employment, which grew 4.9 percent in 2023, unlike the crab fisheries farther south. Employment reached the triple digits again at the region's summer crab peak.

Yukon Delta

Flanked by the Northern Region is the Yukon Delta, which a decade ago provided jobs for more than 1,700 summer workers. That employment has almost evaporated.

The region reported 45 harvesting jobs in May 2023, solely for other groundfish. In annual terms, the Yukon Delta had hundreds of jobs in past years, but in 2023, it had just 12.

Salmon runs have dwindled to the point that even subsistence has been reduced or closed seasonally. Warming waters, increased predation, and bycatch have all contributed to the area salmon fishery's collapse, and the recovery prospects look bleak, especially in the short term.

While the Yukon Delta still has some groundfish harvesting jobs, it will probably never again approach historical employment levels.

Kodiak

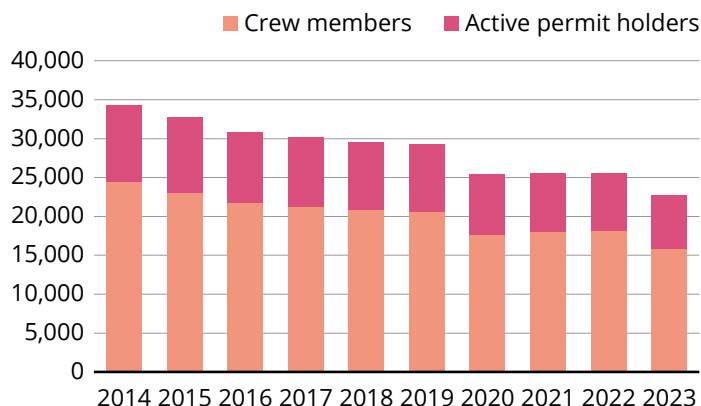
Kodiak's crab fisheries closed in 2021 but bounced back even stronger in 2022, hitting a new harvester high. In 2023, despite opening a month late, crab harvesting employment grew to just shy of 400 jobs in February. That peak month pushed the year's average for crab harvesters up by nearly 50 percent.

However, the largest job categories for Kodiak are groundfish, halibut, and salmon, and all three lost jobs in 2023, with some hitting new lows.

Groundfish has two yearly peaks in Kodiak, one in the spring and one in the fall, and the second underperformed last year. With the high months coming up short and jobs petering out earlier than normal, overall groundfish harvesting employment dropped 7.9 percent.

Halibut fishing was similar, with lower peaks and

Fishing permits and crew, 2014 to 2023



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

sharper drop-offs at the seasons' ends. One month was 97 jobs lower than in 2022.

Halibut prices were good at the beginning of the year, but rather than increasing as usual near the end of the season, they fell by nearly half, prompting fishermen to quit early. As with many of the seafood price issues in 2023, this mainly came from Russia flooding the market with cheap fish.

Kodiak's salmon fishery had added some jobs since the disastrous 2020 season but lost all of that and more in 2023 when employment fell 10 percent.

Kodiak's herring and shellfish fisheries added jobs in 2023, but they are both tiny, with combined peak employment of less than 50 jobs and a yearly combined average of five.

While crab and the microfisheries added jobs, Kodiak's overall harvesting employment fell from a yearly average of 595 in 2022 to 531 (-10.6 percent).

A good crab harvest in 2024 will buoy employment for the region — January had an opening — but to return to previous job levels, some of the larger fisheries would also need to rebound. Signs are optimistic, however, with almost double the vessels fishing in 2024 and 30 percent more landings reported so far.

Southcentral

As in most areas, crab didn't rebound in the Southcentral Region last year. The Prince William Sound tanner crab fishery closed when surveys found the

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

crab numbers didn't exceed the abundance threshold, bringing the previous March's 38 jobs to zero. The tanner fishery had been closed for decades before reopening in 2018.

The two smaller fisheries, herring and shellfish, also shed jobs. For the herring fishery, it was the first loss in four years.

Drops at the two highest summer months were dramatic for salmon harvesting, down at least 1,000 jobs each for June and July, as set net fishing in Cook Inlet was closed. Sockeye fishermen sometimes catch kings in their nets, so the state shut it down last year amid concerns about low king salmon runs. Those summer impacts led to a 24 percent annual employment decline in Southcentral salmon harvesters.

Groundfish was a bright spot, with the fishery continuing to add jobs as it did the year before. Gains were strong in almost every month, increasing the overall job count by over 23 percent, to a level not seen since 2018.

Southcentral groundfish is one of just three regional species groupings in Alaska that has surpassed its pre-pandemic job numbers. Those gains weren't big enough to offset Southcentral's widespread harvesting declines, however, and the region lost 18.4 percent overall in 2023. That was about 250 fewer jobs on an annual basis and almost 700 fewer than in 2016, the highest year so far.

Southeast

Southeast was the only region to add harvesting jobs overall in 2023, although the mix of gains and losses penciled out to just one additional job, to 1,740 total. Still, Southeast's stability last year was impressive relative to the double-digit percent declines in other regions.

While some of the region's largest fisheries' losses mirrored other regions, the smaller species harvests grew so much that they overcame the other declines.

The three largest fishing categories in Southeast are sablefish, halibut, and salmon, and they all recorded marginal gains in 2023 at the summer peaks. They also saw drops at the tail ends, with seasons ending earlier than usual.

Overall, that translated to a 0.2 percent decrease in yearly jobs for sablefish harvesting, -2.5 percent for salmon, and -1.4 percent for halibut.

Among the smaller Southeast fisheries, only herring lost harvesters. Most herring harvesting employment comes in March and April, and the April peak dropped from 584 in 2022 to 440. Fewer herring permit holders were active in 2023, likely finding the stock less economically viable. Herring harvesters only caught about a third of the available stock, and the annual job count declined roughly 21 percent.

Crab, groundfish, and shellfish harvesting employment in Southeast all increased last year, and in some cases dramatically.

The summer crab harvest extended into August, boosting its overall employment 1.7 percent.

Groundfish harvesting's pattern was similar, with high employment levels for a month longer than the previous year, boosting the average 10.4 percent.

The shellfish harvest's late spring employment flourished after a near-zero 2022. The May peak reached 321 jobs, more than double the job count of any May on record. The previous high was 143 jobs in May 2020.

The fall 2022 shrimp pot opening moved to May 2023 to ensure the shrimp could lay eggs before the harvest. However, the job count held steady throughout the winter as harvesters continued to bring in other shellfish, such as sea cucumber and geoducks. Overall, the number of shellfish harvesters in Southeast rose 25 percent in 2023.

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