

ALASKA

Tidelines

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September, 1979

TO CATCH A SALMON

Few tools have changed as little with time as those used to catch fish. Since the earliest days, almost all the finfish of the world have been caught in one of two ways: with nets or with hooks.

No one knows how nets and hooks developed as fishing gear. But we can guess that the first nets were no more than woven fences of willow branches stretched across salmon migration streams.

Chances are that the combination of hook and line began as a barbed bone point, attached to a line and fixed at the end of a stick, which came loose when the fish was speared. But think of the imagination it must have taken to figure out that first real fishhook — along with the lure that would fool the fish into swallowing it!

There's a big difference, of course, between the huge nylon nets of a Chignik purse seiner that can gather in thousands of salmon with one haul and the hand-woven seal-skin net pictured here. The same goes for the steel hooks and lines of the Southeast Alaska power-troller and the bone and wooden fishhook shown below. But the basic idea is the same. And if you're going salmon fishing in Alaska today, you'll need...



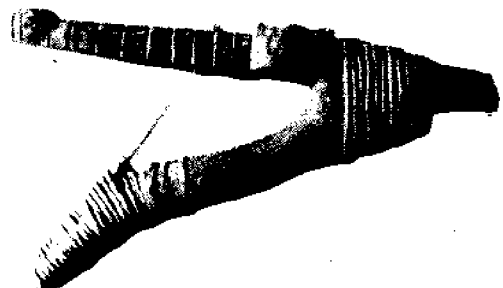
University of Alaska Archives, Van Valin Collection

Welcome to Tidelines

What lives in Alaska's waters? What lies beneath our seas and coasts? Why have these marine resources always been important to us? How can we best use and protect them?

To seek answers to such questions, the University of Alaska Sea Grant Program begins the second year of publication of *Alaska Tidelines*, written for Alaska students about Alaska's marine world. It is published once a month through the school year, and is distributed free in classroom sets or individual copies to all requesting it (see page 8).

October Issue, Octopus: Terror or Treat?



Courtesy Anchorage Historical & Fine Arts Museum

NETS or . . .

Salmon are creatures of habit. Led by mysterious natural time clocks and compasses, mature fish return at about the same time each year to spawn and die in the streams of their birth (see *Alaska Tidelines* September, 1978).

The timing varies, but usually the great kings show up first, from late April to early June. Then come the reds (or sockeye) in late June and July, followed closely by the pinks, the chums, and the silvers (or coho) which keep straying through well into the fall.

Fishermen know these habits and migration patterns. And they are waiting along the way in their boats or on the beaches and riverbanks with the gear best suited to the area and the species. But because nets can catch many fish at one time, they take more than 90 percent of Alaska's salmon harvest.

1 PURSE SEINES

The seine (rhymes with rain) is a trapping net. It works best on the open sea or in calm water where large groups of salmon (usually pinks) are schooled up near the surface. With floats strung along the top and lead weights at the bottom, the net is drawn around the fish by the seine boat and a small skiff, working together (Fig. 1). When the circle is complete, the bottom of the seine is pulled closed like a large old-fashioned purse with a line threaded through the loops (Fig. 2). Then the net is hauled in by a power block on the fishing boat (right). You can spot a seiner by the rigging at the top of the mast, and the net and power skiff on the stern.



Alaska Division of Tourism.

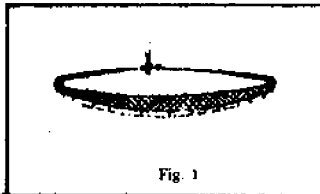


Fig. 1

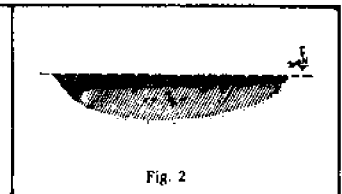


Fig. 2



Photo by George Sabo, courtesy ALASKA (R) magazine

2 GILLNETS

The gillnet is designed to entangle the salmon or snare it by the gills (Fig. 3). It is lighter than the seine, and the size of its mesh depends upon the species fished (usually reds, pinks or chums). Well-gilled salmon die almost immediately by drowning.

Gillnets are fished in a straight line at any depth. They can be either set out from a beach or riverbank (left) to a float and anchor offshore, or drifted from a boat. Any boat can fish a gillnet. But commercial gillnetters, like this Bristol Bay boat (right), can be identified by the large power drums which haul in the nets.

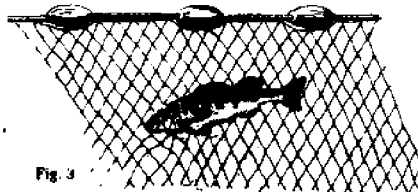
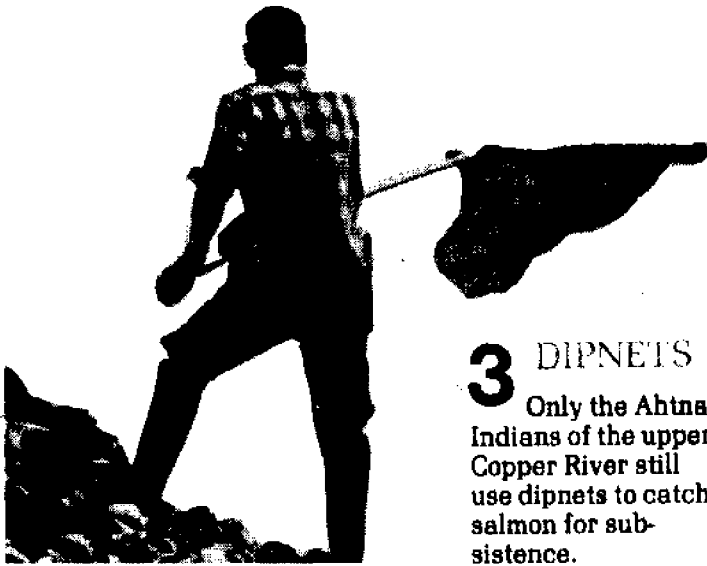


Fig. 3

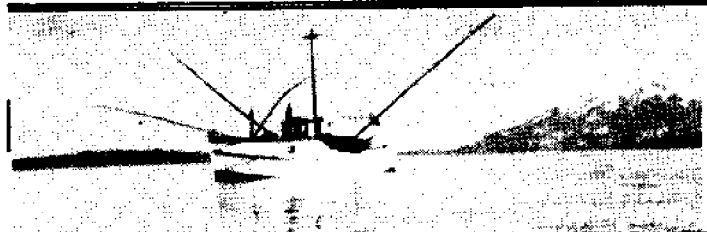


Photo by Fran Durner



3 DIPNETS
Only the Ahtna Indians of the upper Copper River still use dipnets to catch salmon for subsistence.

National Park Service photo



ALASKA (R) magazine

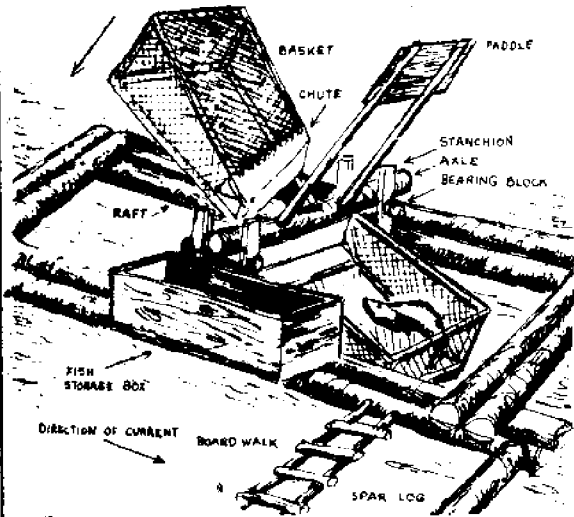
5 TROLLERS

Trolling is done by trailing lines, lures and hooks through the water from a slowly moving boat. It is designed to catch fish that will strike at a lure, mainly kings and silvers.

Commercial trollers are restricted to the inside and outside waters of Southeast Alaska. Boats usually are equipped with one or two pairs of long poles which are lowered over the water when fishing (above) and are carried upright the rest of the time. Each pole is rigged with a number of weighted steel lines that fish at different depths. The fisherman, working from a "pit" at the stern of the boat, reels in the individual lines as the fish strike.

Alaska's commercial fishing laws separate trollers into two different classes: power-trollers and hand-trollers. The difference lies simply in how the lines are reeled in. Power-trollers use power reels to bring in the fish; hand-trollers rely on good old muscle power. Only the power-trollers are subject to Alaska's Limited Entry laws (see page 5).

ALASKAN FISHWHEEL



4 FISHWHEELS

Fishwheels work best in silty swift stretches of large rivers. Paddles are turned by the current, and wire baskets scoop up the migrating salmon and slide them down through a chute into the holding box. Although they may be used for subsistence fishing anywhere in Alaska, commercial fishwheels are limited to certain areas of the Yukon and Tanana rivers.

Sketch by Kathleen Lynch, from her book, "Fishwheels and How to Build Them," Adult Literacy Laboratory, Anchorage Community College, 1979.

... HOOKS

6 SPORTFISHING

All sport fishing for salmon in Alaska is done with a rod, reel, line and hook. Nice catch!



Photo by Richard Wood.

courtesy ALASKA (R) magazine

WHICH WILL YOU USE?

The gear you fish with depends on the size and habits of the salmon you're after and the area in which you're fishing. Decide which kind of gear would be best in each of the following cases and put the number in the box:

1. The reds are running through Bristol Bay on their spawning migration.

2. You are commercial fishing for kings and chums far up the Yukon River.

3. The pinks are schooling up off Evans Island in Prince William Sound.

4. The silvers are moving into Icy Strait in Southeast Alaska.

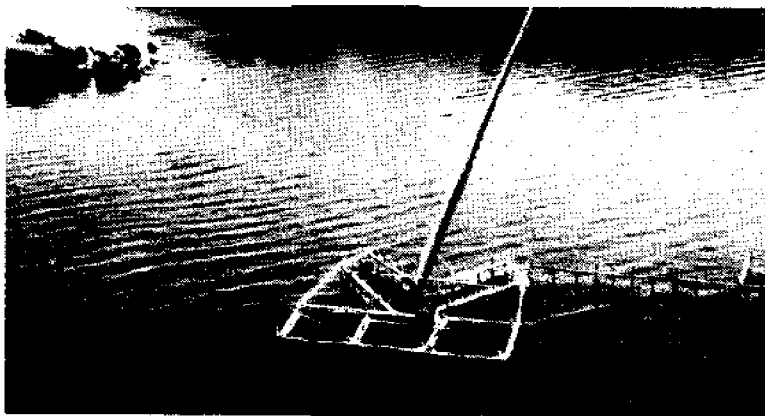
5. You are subsistence fishing on the upper Copper River.

6. You are fishing for fun (and the family pot) anywhere in Alaska.

(Answers on page 8)

READ ON: "Fisheries of the North Pacific," by Robert J. Browning. Alaska Northwest Publishing Co., 1974.

THE GEAR THAT WAS "TOO GOOD"



University of Alaska Archives

Kelly Rock trap at Squaw Harbor in the Shumagin Islands was built of log pilings and wire netting across a route the salmon followed year after year.

If ever there was a unit of gear Alaska's oldtime resident fishermen hated, it was the salmon trap.

Not that it wasn't a great tool for catching salmon. Once set up it was the cheapest gear in the world to operate. The fish simply caught themselves (see maze). And there they waited in fine, prime form until the fish packers or processors were ready for them.

What's more, traps might well have proved to be the perfect management tool. At times of low escapement (number of salmon reaching the spawning grounds), more live salmon could be released from the trap. That couldn't be done with dead fish from the hold of a seiner.

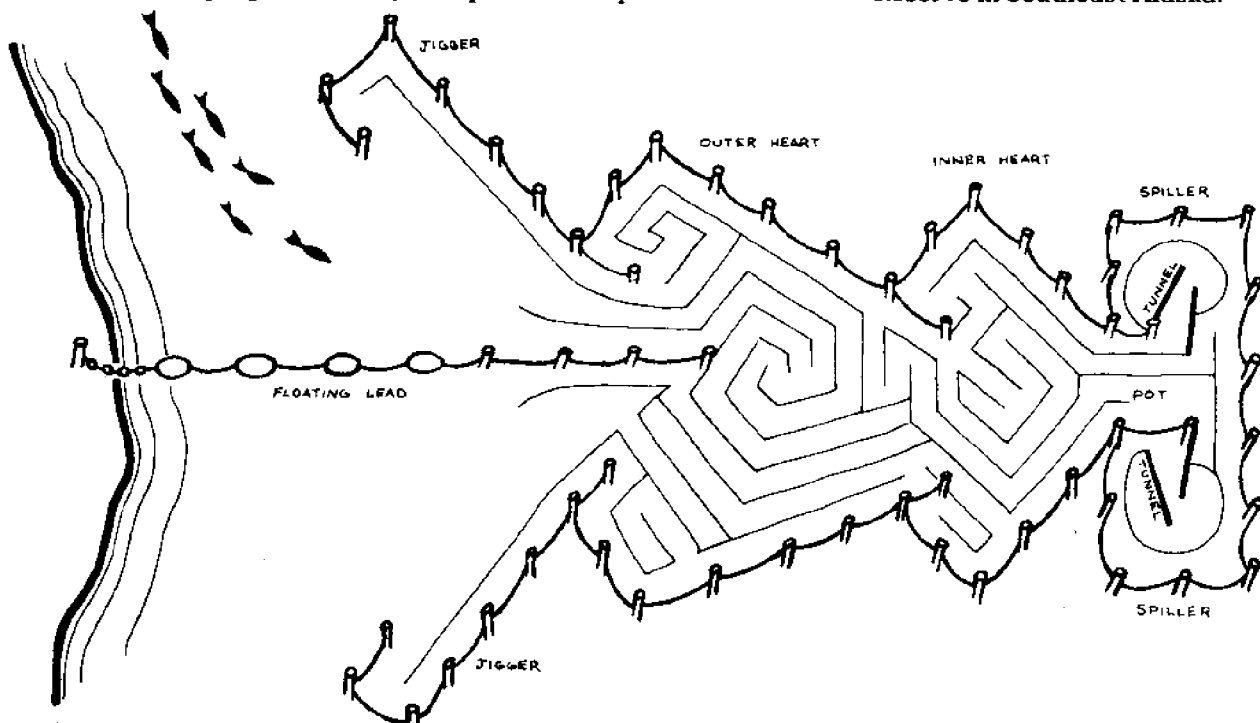
But the value of a tool depends upon who is using it how well and for what purpose. During

the first half of this century when the salmon canning industry was booming, most of the hundreds of traps scattered around Alaska were owned by large Outside corporations. Many were interested only in taking as many fish as possible as quickly as possible, and heading home with their profits at the end of the season. Little thought was given to preserving the runs — which made the traps doubly dangerous because they were such good fishers.

At the height of the trap era in the mid-1920's, some 800 traps were taking more than half of Alaska's total salmon catch. And they were doing it only with a guard or two stationed on each trap to fend off possible fish

pirates (many of them frustrated Alaska fishermen).

It was the kind of "limited entry" independent Alaskan fishermen didn't appreciate. And one of the first laws passed by the Alaska legislature after statehood was one banning salmon traps. Today the only fish traps remaining in Alaska — and in the whole United States — are four operated by the Metlakatla Indians on their Annette Island Fishery Reserve in Southeast Alaska.



Traps took advantage of the salmon's refusal to turn back once they have begun their run to their spawning streams. They followed

the wire netting deeper and deeper into the trap until they reached the pot from which there was no escape. The spiller boxes

had wire floors that could be raised to dump the fish into pick-up boats from the canneries.

Maze design by C. Kelley Weaverling

Limited Entry: WHO GETS TO CATCH THEM?

Fishing has always been a way of life for Alaskans. The prized salmon were there for the taking. And in the old days if you didn't have anything else to do, you could throw out a line or a net and raise a little cash by selling your catch.

No more.

What happened was that over the years fishing pressures built up to the point where too many people were using too much gear to catch too many salmon. Fewer fishermen were making enough money to really get by. The hit-or-miss harvest was hurting the industry. And what's worse, with so many people fishing, the risks were greater for management mistakes that could wipe out once-rich salmon runs.

Everybody agreed something had to be done.

So in 1973 Alaska passed a law allowing the state to issue permits that would limit the number of people and the amount of gear that could fish commercially in certain areas. The law raised problems then, because obviously if too many people were fishing some of them would have to stop. And it's raising problems today because, while permits can be bought and sold, a limited number of anything tends to drive prices up.

With salmon runs building back to record highs, permits which qualified fishermen got for an application fee of as little as \$10 now are selling for as much as \$80,000. And a few lucky permit holders are making up to \$500,000 gross in a season. All this has raised fears that Limited Entry might be turning Alaska's commercial salmon fishing into a "rich men's club," with little chance for young people to get a start.

Is that happening? Is the law doing what it is supposed to do?

Those were some of the questions Alaska Tidelines asked Allan Adasiak, former chairman of the Alaska Commercial Fisheries Entry Commission, who helped draw up the law in the first place and has followed it through from the very beginning:

Q. What is Limited Entry anyway?

A. Just about what it sounds like. It's a program that limits the number of people who can enter — or take part in — a certain fishery.

Q. Does it apply to sports fishing or subsistence fishing?

A. No, just commercial fishing — or catching fish to sell.

Q. Do we really need it?

A. Well, as you know, a certain number of salmon must be allowed to spawn (give birth) each year or salmon runs will die out. And if you have to limit fishing to, say, 24 hours a week to save those fish, nobody is going to make very much money.

So the law is designed to do two things: first, protect our salmon resource, and second, limit the number of fishermen so that each will have a chance to make a decent living. And that, in turn, will help build a stable and healthy industry.

Q. Does it just cover salmon?

A. That was the original idea, since our salmon runs were in such bad shape. But then we decided that the law should be written so that it could also be used for other fisheries that might become endangered or overcrowded.

So far, 29 fisheries in Alaska have been placed under Limited Entry rules. That includes all com-

mercial salmon fisheries, except for hand-trolling, plus a few of the herring fisheries.

Q. Now wait a minute. How can you have 29 "fisheries" with only two kinds of fish?

A. You have to understand what fisheries are. The definition of a fishery is "the commercial taking of a certain fishery resource in a certain area with a certain kind of gear." So you see, three things are involved when you're talking about a fishery: the kind of fish, the area, and the gear. For example, there are two salmon fisheries in Bristol Bay — the set net fishery and the drift gillnet fishery.

Q. How many permits are issued?

A. About 15,000 people applied for salmon fishing entry permits and about 10,000 got them.

Q. All Alaska residents, we hope.

A. No, but statewide nearly three-fourths of them were. Under the U.S. Constitution, we cannot exclude non-residents.

Q. How did you decide who would get them?

A. That was the hardest part. But we held public hearings and talked to a lot of fishermen and finally came up with a point system. Fishermen would get points based on how active they'd been in a certain fishery, the amount of their investment in boat and gear, how much they depended on fishing to make a living, whether other jobs were available in their area — things like that. Then the fishermen were ranked on a scale, and permits were given out up to a certain maximum number.

Q. What's a "unit of gear"?

A. In most cases, a net — gill or seine. For a power-troller, a unit of gear is whatever number of lines and lures the Board of Fisheries allows.

Q. Can you still apply for a permit?

A. Not in most cases. Almost all application periods have closed down because that was the only way the commission could decide



Limited Entry (Continued from page 5)

who had enough points to get a permit. But this year the law was changed to allow people who had fished the same gear in two different areas to pool their points. So watch for announcements of new application periods. Or if you have questions, write the commission.* Your chances probably aren't too good, but it's better to be turned down than not to apply when you're eligible.

Q. But that's only for people who have already fished commercially. How are young people ever going to get a permit?

A. First, let me explain how this permit system works. A permit is like a personal possession. It belongs to the individual. And like any other personal possession, permits can be sold, traded, given away, passed along to a son or daughter. The only requirement is that it must go to another individual.

Q. Could you leave it to several children?

A. No, just one. But then you couldn't carve up a house and pass that on to more than one child, either.

Q. Well, if you're not an only child in a fishing family, maybe you could go hand-trolling for starters. You said that's not under Limited Entry.

A. Yes, but not for long, I'm afraid. You see, many of the people who didn't qualify for the power-trolling permits have moved over to hand-trolling, and that fishery is becoming overcrowded too. Last year some 2,600 hand-trollers caught nearly four million pounds of salmon, mostly kings and silvers, or 28 percent of the whole troll catch.

It's too bad, because hand-trolling has always been a good source of cash income for retired people and for young people who want to get started in fishing. But the king and silver stocks are suffering and there is a real danger of a runaway harvest, because a large fleet of little boats is harder to manage than a small fleet of big ones.

Q. Then how can you get in?

* Alaska Commercial Fisheries Entry Commission, Pouch KB, Juneau, AK 99811.

A. Well, you can go into a fishery that isn't under Limited Entry, like bottomfish or shellfish. Or you can get a job as crewman aboard a salmon fishing boat. Either way, you would gain experience and knowledge of the area, which is very important. And you could save your money to buy a Limited Entry permit.

Q. For \$80,000????!! That would take forever. If they're so interested in limiting things, why don't they put a limit on the price of permits?

A. Last spring the legislature named a special committee to study Limited Entry, including ways of bringing those prices under control. But personally, I think placing a lid on the price of permits would create more problems than it would solve.

If people want those permits badly enough, they would just pay extra money under the table. I'd rather keep it all out front so we know what is going on. The high price of permits right now shows that the fishery overall is healthy, and more people want to get in on it.

Q. If some fishermen are making \$200,000 in a couple of weeks, who wouldn't want to get in on it? It doesn't seem fair to have a few people making that much money in a fishery, and everybody else having to stay out.

A. Well, not all fishermen are making that kind of money. And you forget those bad years when many fishermen barely scraped by or went bankrupt.

If those profits are being plowed back into better boats, better gear, and more safety

equipment, then I think it's reasonable. Remember, one of the goals of the program is to develop a good professional fishing fleet like those of some of the foreign nations fishing off our coasts.

So again, I think we should wait awhile and see what happens. If these high profits continue, the State might apply an excess profits tax — which would also tend to drive down the price of permits.

Q. Or maybe we should throw out the whole program and start over.

A. YIKES! Don't say that! If we took the lid off now, we'd really be asking for trouble. We'd have a flood of new fishermen and new gear — gear that is becoming more efficient all the time. There would be far greater chance for serious management errors, especially when the salmon hit the downward part of their cycle. All the problems we were trying to cure in the first place would be back — only worse.

Furthermore, this Limited Entry program was established by law. And fishermen have gone in to it in good faith. You would have to pay them back somehow for the money they've invested. And who could ever figure that out?

Q. Has it been worth it?

A. Well, look at it this way. In 1978 Alaska fishermen caught 80,200,000 salmon, nearly four times the number caught in 1974 — the year the new law was being put into effect. It was the biggest harvest since 1943.

I'm not saying this was just because of Limited Entry. But I do believe it helped.

The Other Side

Here are some of the arguments against Limited Entry. In each case, decide whether you agree or disagree, and say why:

- There should be free competition in fishing, just as in any other business. If it gets too over-crowded, the good fishermen will survive and the bad ones will drop out.

- The salmon resource can be protected with better management. If it takes more fishery enforcement people in

the field to prevent over-fishing, we should hire them.

- We outlawed salmon traps 20 years ago because they were "too efficient" (see page 4). Why should we now have a law designed to make a limited number of our fishermen "more efficient"? If we're going to worry about someone's economic well-being, why not worry about the Alaska consumer who's paying \$5.49 a pound for fresh salmon steaks?

(Send your questions or opinions about Limited Entry to the Spout column, page 8.)

How the Salmon Started Up The Rivers

English adaptation by Henry A. Davis, Kake,
from the Tlingit version "The Salmon Box"
as told by Robert Zuboff, Angoon

To the Tlingit Indians of Southeast Alaska, salmon was more than just a major food item. It also played an important part in their beliefs, customs, artwork, and legends. Tlingit clans and house groups felt they had special ownership rights to the fish that came to their particular stream. And while they had no way of knowing that the salmon came back to the exact place where they were spawned, they marveled at this regular return. Here is one of their legends about how the salmon runs began:

After the earth's creation, Raven stole water from his best friend on the Hazy Islands. As he flew away with a mouthful of water, his friend gave chase. Whenever Raven dropped a big drop of water, it became a big river or a large lake. The smaller drops became smaller lakes, creeks and streams. But alas, there were no salmon in the inlets, rivers, or creeks.

The salmon and other fishes were kept in a house in the middle of the Pacific Ocean. These salmon were able to spawn right in the ocean, so they never came into the bays and inlets. Only the rich chiefs were able to go out to the ocean in their big canoes to get some of the salmon for food. The poorer people were not able to go out, so they just watched the rich eating the fine salmon.

Raven soon heard of this and he gave a lot of thought to just how he could get the salmon and other fish to the bays and inlets. Then he heard of another being, Xanaxgatwaayaa, who possessed an octopus-tentacle staff with supernatural powers. Raven thought, "With such powers in a staff, I could latch it to the salmon's house and pull it shoreward."

By means of trickery, Raven got Xanaxgatwaayaa to trade his staff for Raven's bow and arrow. With the staff, Raven and his nephew, Crow, made their way towards the Alsek River near Yakutat. At the entrance of the river, he latched his staff to the salmon house. Raven struggled with all his might, pulling and tugging, without success.

Then Crow urged Raven to sing a song about Xanaxgatwaayaa, and when he started to sing he easily pulled all of the salmon into the bays and inlets so they could go up the rivers to spawn. To this day, the tracks of the Raven are at the entrance of Alsek River where he struggled to pull in all the salmon.

{Look at a map of the northern portion of Southeast Alaska and find where the Alsek River empties into Dry Bay. Can you make out Raven's tracks?}



This is a century-old totem pole of Fog Woman, Raven's first wife. Every time Fog Woman washed her hands in her basket, the story goes, a salmon would appear. The totem came from Village Island south of Ketchikan, and can now be seen at the Totem Heritage Center in Ketchikan.

Photo courtesy of the Totem Heritage Center

KODIAK'S FLOATING CLASSROOM

Most of the kids in Kodiak have been around fishing boats and gear since they were big enough to walk. After all, their town is one of the busiest fishing ports in the nation, and ranks second only to Dutch Harbor in the value of its commercial fish landings. If their dads aren't out after crab or shrimp or salmon or halibut, very likely they have an uncle or cousin or older brother or friend who is.

So you would think that by the time they reach high school they would have learned just about all they need to know about fishing. But they haven't. Who says so? They do.

"The trouble is that when you're fishing with your dad or someone else, you're usually stuck with the work out on deck. You don't have a chance to run the boat or handle the electronic equipment, because when you're catching fish everybody's too busy to show you how."

It was Charlie Hartman speaking. But like many other students at Kodiak High School, he's found some answers to his



Chris and Charlie hand up the gillnet.



Kodiak's small boat harbor drops astern as the K-Hi-C heads out for "class." Left to right: Darren, Luke, Teacher Bob Simpler, and Charlie.

problem in a highly unusual fishing course which combines classroom work with sea-going experience aboard the school's very own fishing boat.

The boat is a 42-foot Delta seiner, the K-Hi-C (the "C" stands for Community College which also uses the boat occasionally). It was purchased in 1973, largely with donations from Kodiak businesses and individual help from Dean Otteson and Norm Holm, who would have agreed that Charlie had a point.

Powered by a 240-horsepower diesel engine, it is loaded with all kinds of radio and electronic gear, including radar, depth-finder and automatic pilot. When school is out, the boat is rented to the State Department of Fish and Game for survey and enforcement activities, which helps pay its year-round maintenance and operating costs.

The course consists of two-hour classes held five days a week, half of them at school and half on the boat (fair weather or foul). Students learn how to handle a boat (docking, plotting a course, steering by radar); how to take care of gear (net mending, cable splicing) and, most important, how to catch fish (pull a crab pot, set a gillnet). It is taught by Bob Simpler, who fishes commercially for salmon during the summer out of Cordova.

"It's a pretty tough course," Mr. Simpler told *Alaska Tidelines*. "We started this year with 37 students, but now we're down to 24. Actually, that's a better number, since six is the most I want to take out on the boat at one time."

The red salmon run was just beginning in mid-May when *Tidelines* joined the class on the K-Hi-C for the last trip of the school year. After stopping by Charlie's dad's boat to borrow a gillnet, we moved out beyond the breakwater of Kodiak's small boat harbor and past "Cannery Row" to the choppy waters of Saint Paul Harbor.

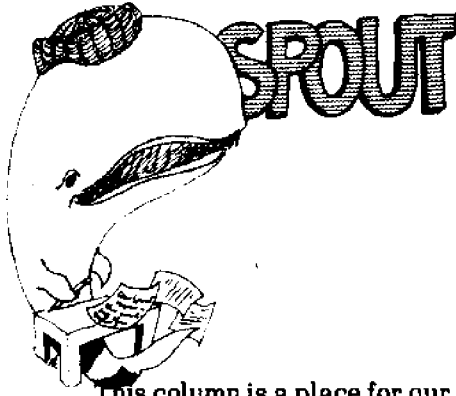
It was a squally day of mixed sunshine and sudden rain, but the K-Hi-C rocked briskly along with Darren Dylor at the controls. Darren's father, a junior high school principal, has a purse seiner and Darren works as his skiffman during the fishing season. ("Running a seine skiff is a very tricky job," Darren insists, and no skiffman, young or old, would argue with him.)

Near the mouth of the Buskin River the K-Hi-C throttled down and the gillnet was carefully set between two anchor-weighted floats. Then it was a matter of clean-up chores around the boat — and keeping a careful eye on the net.

"The reds move along near the top of the water so you can see them quite easily in the net," Luke Lechner, whose father is with Fish and Game, explained. It was early for reds and nobody had much hope. But suddenly, there they were.

Much excitement! Into the skiff to pick the net went Charlie and Chris Salazar, whose family is with the Coast Guard. And soon two prime salmon were on board — the first of the season.

"How would you rate this fishing course, on a scale of 1 to 10?" *Tidelines* asked on the way back in. "10," they agreed. "Tops."



This column is a place for our readers to SPOUT off. Send your questions about Alaska's water world — fish, walrus, ice, sea birds — and Spout will try to answer them. He also likes fish stories, fishy jokes, photographs, cartoons, recipes and opinions. But mostly he likes mail. Write to him: c/o Alaska Tidelines

Dear Spout,
What do salmon feed on?
Shelley Full
Wasilla

Dear Shelley,
Most fish feed on what is abundant. But what salmon eat also depends on where they are and the stage of their life cycle. In freshwater, salmon fry just emerging from the gravel feed on aquatic (water) insects, such as mosquitos and mayflies, and terrestrial (land) insects, like beetles or caterpillars that have fallen into the water.

In the estuaries where the freshwater of the rivers mixes with the saltwater of the ocean, the smolt (seaward migrating fish) feed on barnacle larvae and other microscopic animal life, which is called zooplankton.

In the open ocean, adult salmon feed on herring, sand-lance and other finfish, shrimp and squid. (A salmon's stomach can hold up to 20 percent of its body weight, so an 80-pound king salmon wouldn't have any trouble with a 10-pound squid.)

When adults return to the freshwater to spawn, they feed very little. But you probably already know that, if you've dropped a nice fly right on the nose of a returning king salmon and couldn't get him to bite it.
Spout

Thanks and a spurt of the Spout to Ruth Broderick of Harbour Log School (Kah Sheets Bay) in Southeast Alaska who asked about fishing boats (see pages 2-3).

Answers to questions on Page 3: 1-2: 2-4; 3-1; 4-5; 5-3; 6-6.

GOING FISHING

Starred (*) words are based on information in this issue.

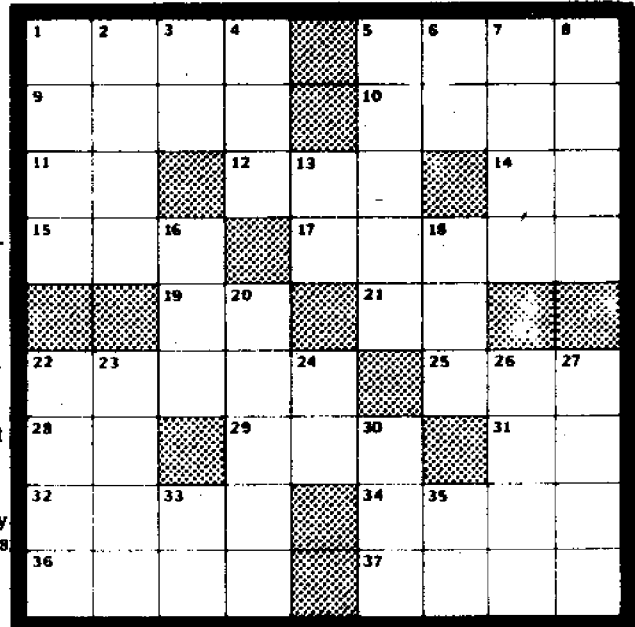
ACROSS

- *1. When you're fishing for salmon, you'll use either a net or a _____.
- *5. And that (1 across) will be attached to a _____.
- 9. The first four letters of Alaska's largest city.
- *10. With Limited Entry, the _____ is to protect our salmon runs and, at the same time, develop a healthy fishing industry.
- 11. No charge (abbr.).
- 12. Cameron's friends call him _____ for short.
- 14. Alaska Railroad (abbr.).
- 15. Radar tracking stations on the _____ Line (abbr.) in Northern Alaska are part of the nation's Distant Early Warning system.
- *17. Salmon entangled in a net are usually caught by their _____.
- 19. Preposition meaning belonging to, as in "kinds _____ gear."
- 21. Preposition meaning "toward."
- *22. To fish by trailing hooks and lines through the water
- *25. Under Limited Entry, the person holding the permit must be actively fishing whenever it is in _____.
- 28. (14 across) backwards.
- 29. You'll need two of these when you're rowing your boat.

- *31. Alaska Tidelines is published by the _____ (init.) Sea Grant Program.
- *32. A fishery is defined as "the commercial taking of a certain fishery resource in a certain _____ with a certain kind of gear."
- *34. In commercial fishing, the net is the most common _____ of gear.
- 36. Something that is annoying, like a mosquito.
- *37. More than 90 percent of Alaska's salmon are caught with _____.

DOWN

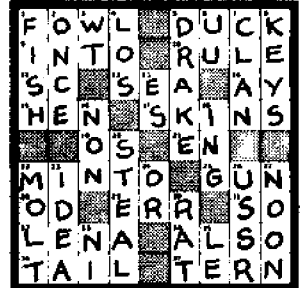
- *1. Power-trolling is covered by Alaska's Limited Entry laws but _____-trolling isn't.
- 2. One time.
- 3. Outer Continental (init.).
- *4. Name of Kodiak High School's fishing boat (init.).
- *5. In 1973, Alaska passed a law that would _____ the number of people who could enter the commercial salmon fishery.
- 6. Identification (abbr.), as in _____ card.
- 7. Movie star Ryan O' _____.
- 8. What you hear with.
- 13. Attorney General (init.).
- 16. To court, or make love to.
- 18. St. Louis Cardinal's great leftfielder and base-stealer, _____ Brock.
- *20. What is strung along the top of the net to hold it upright in



- the water.
- *22. After statehood, the fish _____ was banned in Alaska.
- 23. Unusual or scarce, such as a _____ species.
- 24. Sixth note of the musical scale.
- 26. Something you wear, like a _____ of clothes.
- *27. A subsistence fisherman is one who _____ what he catches, as opposed to selling it.
- *30. Migration of a group of salmon back to their home stream to spawn is called a salmon _____.

- 33. Add these letters to make a word plural, as in catch _____.
- 35. Northeast (abbr.).

Answers in October issue



Answers to May X-Word

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