

Hey to all you fish enthusiasts out there. Whether you're an avid angler or just curious about fish, we'd like to welcome you to Fish of the Week! It's Monday, May 17 2021. And we're excited to talk about all the fish. I'm Katrina Liebich with the US Fish and Wildlife Service in Alaska,

and I'm Guy Euro, a wannabe walking fish encyclopedia.

Our fish of the week is the Chinook Salmon and very specifically Kenai River kings.

36 years ago today Les Anderson of Soldotna Alaska landed the all tackle world record Chinook. It weighed 97 pounds four ounces. We have two guests with us today, both from Alaska's Kenai Peninsula. We've got Andy Loranger, who's the Refuge Manager at Kenai National Wildlife Refuge. We've got Jim Boersma, who's a fisheries biologist with our Kenai Fish and Wildlife Conservation office. Andy, can you take us to the Kenai River? What are people coming to the Kenai River for?

You know, it's a world renowned fishery. Some of that early fame was about the Chinook salmon and fishing opportunities for Chinook being the largest of the Pacific salmon. But there are tremendous opportunities for resident fisheries, particularly rainbow trout, managed as a trophy fishery for rainbows. There are also a couple of runs of Sockeye Salmon and the Coho Salmon run in August and September is pretty spectacular fishing as well.

Would you mind giving us just you know, a visual description of a Chinook salmon?

Well coming out of the ocean, of course, they're silver, you know, silver colored fish and they have black spotted markings on the back all the way down the back and to include both of the lobes of the tail. They also have a black marking inside the gum line, which is you know, kind of important for distinguishing, especially in the younger age fish and they're kind of deep bodied, typically the females, especially.

Jim, now, there's some variation among king salmon. Can you tell us a little bit about the tributary versus mainstem Chinooks like timing of their return? Where are they going? Are they interacting at all?

So for regulatory purposes historically, they were called the early and the late run and that's based on their the timing that those populations enter the rivers and the tributary spawners typically enter the river starting right about now around the 10th of May and peter out around the first of July and then that late run is July through the end of August typically. And the two pick nature of the run timing is really due to the differences in spawning water temperatures in the big lakes in the system, moderate annual temperatures through the year and provide adequate spawning temperatures longer into the year.

We mentioned earlier that this is the anniversary of the world record all tackle king salmon being cut out of the Kenai River. But in fact I think something like eight out of the top 10 biggest king salmon ever caught have come from the Kenai and I'm curious what about it makes what about the Kenai population makes them get so big? And also if one of these runs that we're talking about has bigger genes in it than the other so to speak.

Yeah, so the thought is that their spawning conditions require them to have a larger body size so these main stem spawning fish that spawn in the deeper fast flowing waters need a larger body size to maintain position dig into the larger gravels and be successful spawners. So right now the earlier ones will average around 5000 fish in and obviously those fish are protracted over time as they enter, spawn and move out. And so typically inside the Benjamin Creek, they'll stage in the Killey River. Benjamin Creek is a tributary of the Killey and then Killey is a tributary of the Kenai and they'll stage in the mouth of the Killey, hold there until the ripe, will go into the creek and do their business. and come and then that'll be it. And they'll, you know, at any given time, there will be you know, 100 to 200 fish in that stretch, and then that persist for about a month while they're doing all that.

And has that size been changing over time? Like can people still expect to catch large fish like that or is there some variation?

Yeah, so, you know, across the North Pacific in the last few decades, we've lost between eight and 10% of the body size of Chinooks. And the Kenai is no exception. Both the late run and the early run components are losing their body mass. So those fish are getting smaller. And those that reduction in size has implications for how many eggs those fish can produce it and how much production we can expect from the total population.

And just to ground folks again, and kind of the life history of salmon, I mean, so these fish they're born in the Kenai River, going out to sea. How long are they spending at sea? And how does that influence kind of what size they're returning it?

Yeah. So typically, for Kenai, you know, they only spend a single year in freshwater, and then the remainder of their life is spent at sea. You know, I grew up in Wyoming did a lot of elk hunting, you know, in my teens and early 20s. And the way I like to think about Chinook spawning is a lot like an elk herd, right? Like, you have to you have a dominant male, you have a bunch of females, and then you have a bunch of smaller males that surround these females that occasionally are successful every producing. But in general, what they usually successful at is exhausting the larger male and moving the females around and causing the entire population, or the population of the larger oldest individuals to be a little less productive. And so when you saturate the spawning population with a ton of younger, less productive males that act in that way, you end up with lower productivity.

Is there like a slot limit or something?

There are active management actions that have been taken to try and address this stuff. And one of them is a slot limit. And so this early run component where we're seeing the most dramatic declines in size, there has been at a slight limit in order to preserve those largest fish.

So we're talking about a pretty complicated social and ecological system. There's a lot at play in the ocean, there's a lot at play in the fisheries, a lot of people value them. What are some of the ways that Fish and Wildlife Service and [Alaska Department of Fish and Game are getting there, like the data like

how do you measure what's going on in these different environments to inform management and conservation of these fish?

Generally, the in season management of the fishery is done by sonar counts in the lower river as fish are entering the river. And then they take creel censuses to figure out, you know, what the sport harvest is in river, and then adjust their management strategy accordingly. From that some of the, the, you know, after season or postseason management actions that get taken are a result of some of these longer term data sets that have happened in the past and are currently happening. So the trends that we talked about declining ages and sizes of fish, those became evident because we have been collecting escapement data from different weirs around the system. And from that sonar site for, you know, decades that allows us to discern those trends.

Yeah, and weirs they're pretty cool. They're those, you know, different structures that go across a river, basically, and fish are funneled into a spot where fisheries biologists can take a look at them, and then they continue upstream to their spawning grounds just for folks who aren't familiar with what a weir is. They're a pretty cool management technique.

Another kind of interesting aspect of fisheries management and fisheries research, you know, is the genetics component. You know, one of the things that as these techniques are advanced and become more sophisticated, there's been a lot of information generated on that have differentiated even between the different tributaries the genetic differences between you know, salmon, but also for Chinook salmon. There's been some work done on the Kenai.

Well, I'm just generally curious about what part of the river people tend to focus their targeting these fish on? Are they down closer to the ocean? Are they further up into the actual running bit of the river?

So a lot of the effort where the effort occurs is due to the regulatory actions that they've taken. They've tried to restrict people from fishing directly in the mouths of these tributaries where fish typically stage and hold to try and protect them as they get ready to move up into this spawning areas. And what people do is typically they'll drift or backtroll either a quick fish or a spinning glow with eggs and slowly back down and try and get ahold of them in that section or rivers can be pretty congested. You know, when, when the fishing is good, and there's a lot of people there, it's not uncommon to see four to 500 boats on the river in one section so it can be extremely busy.

How wide is the river at that point?

You know, it varies from stretch to stretch a little bit wider as you are, you know, your approach to mouth, you know, and of course, the fishing pretty much occurs from right around river mile eight upstream now. So that lower section of the river tends to be a little wider, but there are narrow sections we're talking, you know, less than 100 yards in most places. It's not wide.

And what kind of boats are folks using?

So the preferred boat for the guide fisherman is like a Willie Predator, it's an open about 22 foot boat. And yeah, and so on the Kenai we have a horse power restriction. So it has to be below 50 horsepower. So that obviously just restricts the size of the hole of the boat. And the actual width and depth of the river. limit the size and how many boats can actually fit in in the area too. So it's it can be a zoo.

Hey there everyone. One thing that we want you to always keep in mind regardless of what it is that you're fishing for is safety. Every week, we're going to give you a tip that you can use to stay safe while you're out on the water. Today's safety tip is one that I could take to heart a bit more myself and as to stay hydrated. I know that on days when the fishing is good, I can find drinking enough water to be a challenge because I want to just keep casting. I'm not a medical professional. So I won't try to tell you the ideal amount of water to drink. But I like to have a full liter bottle with me for a half day trip and nothing go out and add a sports drink full of electrolytes I plan to be out all day. I have friends who will drink twice this and that just goes to show that you need to figure out for yourself how much water you need to stave off headaches and dehydration. Be aware that if you traveled to go fishing in the swamp or in the desert, you may need to pack more to drink to keep up with your body's extra water loss.

So let's say you actually land a king salmon, what are some safe handling techniques for the fish itself if you plan to release it in for yourself, I mean, if you caught a big one like Les did?

Yeah typically for any catch and release fish, you know, you want to try and keep them in the water as much as possible and not stress them out as it are stressed them out as little as you can. And so these like I said these can be big fish that fight for a long time and you can obviously exhaust these critters and once you land the fish, you know moving as quickly as you can to reviving and releasing the fishes, obviously preferable to try and keep them alive and going at you know, on warmer days that stress can be higher. And so it's on those days you typically want to be more careful and try and get those those critters released as quickly as possible.

What weight line should people be using to ensure that they're getting these fish in in a timely manner and not just exhausting them?

So I have a 50 pound test on my rods and reels and you know that typically that so typically what happens when you hook a fish is you'll you know take the boat out of gear and start to you know, follow the fish as it tries to run. You're not catching this the fish the fish is catching itself. And so what you're trying to do is wear it out enough to be able to reel it in. And so what you're using the boat for is to follow that fish around wherever it wants to go...upstream, downstream, left, right or center and so you're maintaining the pressure of with the rod and the reel like you normally would with a fish but you're using that boat to not have to pull the entire weight of the fish with the rod and the reel and so you can get away with a little bit lighter tackle than you normally would have. Say if you were bank fishing or something like that you will do that you know, for 45 minutes to a couple hours until you can land that fish and so it's really exciting it's, it usually takes quite a while to actually land one and it's pretty fun.

As you can imagine, you know, in terms of the skill set involved is not only the person that has the fish at the end of the line but the boat operator as well been keeping avoiding hazards which a large number of the hazards are associated with, you know, other boats and other lines in the water and you know, avoiding all of that and putting the individual in the best position to land that fish is a skill set all of its own.

I'd like each of you to describe your favorite way to eat King Salmon if you have a favorite recipe.

Yeah, I you know, I mean, I love them on the grill. And there's a number of different, you know, preparations. But one thing about a King Salmon and you know, and of course, we try to use just about every, every part of the fish and not letting any need to go to waste. But that, you know, king salmon, you know, once you fillet them, there's a meal in the meat that is not removed in the fillet process and growing up, you know, we call it the carcass, but grilling up the carcass and just picking a clean is just an amazing treat.

So I guess my favorite way to eat it is as soon as possible. The fresher the better. And usually, you know, they're fairly rare to take catching keep, at least for us, and that that's usually a big deal. Put it on the barbecue and invite folks over and you eat it right away. That's, that's the way I like to do it.

How does king salmon compared to the other salmon species in terms of flavor?

It typically has a lot more oil content. So it's a little more flavorful and you know, not quite as dry as say a Sockeye Eriko. And that's, I guess that's the best way I would describe it.

We've tried...so whenever we catch salmon, we also eat the heads. And you can actually get a lot of meat out of the cheeks. And it's called the nape so like around the neck - baking that. Sushi. I think in terms of king salmon, like I've eaten so much salmon since being here in Alaska that I've kind of gotten over cooking it to some degree but with king salmon, that's the one where I will. Yeah, cooking it, baking it, grilling it. It is very delicious. And I think I'd save the sushi for some of the other species like Sockeye, probably. Well it's been great talking to you, too, today. Thank you so much, Jim and Andy.

Thank you guys.

Yes, we'd like everyone to get out there and enjoy all the fish and make sure you get a king stamp if you plan on fishing Chinooks this year.

Thanks for listening to fish of the week. My name is Katrina Liebich. And my co host is Guy Eroh. Our production partner for the series is Citizen Racecar. The show is produced by David Hoffman. Co-produced and story edited by Charlotte Moore. Post production by Garrett Tiedemann. Fish of the Week! is a production of the US Fish and Wildlife Service, Alaska Region Office of External Affairs. As the Service reflects on 150 years of fisheries conservation, we honor thank and celebrate the whole community, individuals tribes, the state of Alaska, our sister agencies, fish enthusiast scientists and others who have elevated our understanding and love as people and professionals of all the fish.