

Yukon River Fall Chum Salmon feat. Andy Bassich

Hey to all you fish enthusiasts out there. Whether you're an avid angler just curious about fish, we'd like to welcome you to Fish of the Week! It's Monday, August 16 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 Eroh, a travelling fish finder.

Today, we have Andy Bassich with us to talk about Yukon River fall chum salmon. Andy's a subsistence user. And has spent a long time getting to know this river and its fish. And Andy, we wanted to thank you for joining us today.

Yeah, it's great to be aboard.

Can you help us set the stage just a little bit here by giving a highlight or two about your connection to the Yukon and the salmon in this river?

I've been living along the Yukon River now for over 30 years...came up here as a young man from the east coast, and I'm living my dream, living out with the resources on the Yukon River and fall chum is probably the most important resource to me and my subsistence lifestyle here along the Yukon River. The salmon...are you guys hearing the dogs in the background?

Yeah, I like it.

I like it, too.

Oh, you like it? Okay, there's 19 dogs just outside my home right here. And they are my best friends, my workforce and my great companions. They're wishing that they had some fall chum to nibble on right now. But unfortunately, we're not they're not going to get any this year.

So my understanding is the chum salmon entering the mouth of the Yukon River happens around July 16. So they're considered to be fall after that point in time. And they can reach the Canadian border in about a little over a month, which is crazy migration feat in itself. When do you typically start seeing them in Eagle and what are some of the communities they pass through along their journey upstream?

Fall Chum are actually an incredible salmon species. They enter the Yukon River in mid-July. They reach Eagle, which is about 1200 miles upriver from the mouth, in mid August. So right around now they're starting to show up. And then they continue to build and they reach their peak here and Eagle around the middle of September, on their way up into Canada. Their spawning migration is unbelievable. They swim almost 1800 miles without a meal, to go and spawn. And four years later, they'll [their offspring] do it again. They don't spawn and then return to the river, they spawn and die and the carcasses from the parents are actually the food for the young fry as they emerge. One of the beautiful things about fall chum is that they have a lot of fat, a lot of oil content. And because they have

a long migration, 1800 miles, they've got to swim without eating. So they're living off their body fats and the oils in their body to make that migration. So it's a pretty spectacular migration and put that into perspective. That would be like a person getting in the river in Washington, DC, swimming all the way to Salt Lake City and never having a meal. So they're in a pretty amazing species.

You mentioned that these are four year fish. And I was doing a little bit reading. I saw that four years ago in 2017, that you guys had a pretty good return of these chum salmon. So that you would expect maybe to have a strong return this year. But it seems like that's not the case.

Yeah, we're having a very poor year. In fact, we may not be allowed to fish at all. This year, the Chinook salmon, there has been no fishing forum and the run of fall Chum has been very, very poor this year. So they're restricting or not allowing any fish fishing effort on the fall Chum. There are a lot of different things happening that are affecting salmon around the world. And in particular, on the Yukon River. There's no one magic bullet that's going to fix any problems. But in my 30 years of living with fall Chum and depending on 'em the one thing I have noticed is they are cyclic fish, they do have these natural ups and downs. They're affected by what we as humans do to them, and the climate but they just have these natural cycles. 1999 and 2000, we had a similar crash where for no reason. We've had good apparent escapement years and the fish just didn't come back. So it's just something that the species does from time to time. I don't think anybody scientists or anybody really understands it, but we have to learn to live with it. And that's making it tough on us as dog mushers living up in a really remote environment dependent on that resource. It's it's really making it tough to maintain a dog team out here.

So use the salmon as food for the dogs. Not just for you, is that correct?

Yeah. So living out here, I like to live pretty much as simply as possible with the land. And dogs are an incredible tool for us. They are our security. They don't allow any kind of bears or anything to enter the property without us knowing about it. There are transportation, the rivers freeze up in the wintertime and our roads and highways in the winter. And they're our workforce. They're like having a tractor, they haul wood, they haul water, we go trapping with them. And when we want to travel, we use our dogs. And the way dog mushing has been going on along the Yukon River for centuries, is people maintain a kennel of dogs, and they fish for fall jump. And that fall Chum becomes the food for the dogs for the winter. And we feed about a half on most years, we feed about a half of a fall chum per dog per day throughout the entire winter. So it's an incredibly important resource if you're going to maintain a dog team on the Yukon River.

And the other name for chum salmon is dog salmon. Is that due to this factor? You got those big teeth to do you know you think about the history of the name of these fish.

Yeah, yeah, well, primarily chum salmon or dog fish. As they get farther up river, they become less quality for human consumption. So they became a traditional dog food because of the large numbers of them coming up river. And the fact that they were fairly abundant and easy to catch, and they make tremendous dog food for the dog teams. So, you know, 100 years ago when the Gold Rush happened and all the people started coming up into this territory, they didn't have commercial dog food, you fed your dogs, whatever the land provided, and chum salmon was abundant. And a great source of protein

and fat, fall chum are pretty specialized to the long migration that they make. And that means that they have a high oil content which makes them tremendous food for the dogs.

Can you speak a little bit to the relationship between the US and Canada because you have folks like this is really important fish, lower river, middle upper and then up into Canada. How is this managed where folks in Canada are still able to get fish as well and ensure that folks are getting what they need up there?

One of the one of the most fascinating things about the Yukon River is that it's an international river. It transects into Canada. And these fish know no borders. They don't know the Canadian border, they don't know Alaska, they just know the Yukon River and they enter the Yukon River. They swim 1800 miles and they end up in Canada. So the people in Canada have a big stake in salmon on the Yukon River as well. And we have an international treaty with Canada on Chinook salmon and fall Chum Salmon. We have what's called the Yukon River Panel and it is a body comprised of scientists and users on the river and biologists. We do spend a lot of money on research on the different species of salmon. And then we set the escapement goals for those spawning fish. The Canadians don't use fall Chum as heavily as Alaskan do because of the nature of the run. They're they're not in very good shape for humans to eat in Canada by the time they get there. The town of Dawson 100 miles up river for me, there's still some good eating fish. But once you get much above that, it's pretty much dog food. So the dog mushers up in Canada are dependent on it. And probably the most important thing for a lot of the Canadians is just the cultural aspect of it. People then First Nation people have been living in Canada for 1000s of generations. And it's a part of their culture, just like it is our culture right here along the Yukon River here in Alaska.

I think Chum Salmon are some of the most interesting looking of the salmon species can you describe what they look like for us real quick?

Chum salmon - fall chum females - average around six pounds. Males go anywhere from eight to I've, I've weighed them as much as 14 pounds before. So big, big difference in the size of them. When they enter the ocean, they're what they call silver bright. They're big, beautiful silver looking fish. But as they go up river and they start using up their body fats and oils they start changing in color and fall Chum in my region, they kind of look like a tiger, a green tiger with black and red stripes. So if you could visualize a fish and it kind of looks kind of a pale green color in the overall body. Then they have tiger stripes that go kind of from the belly to the back and they are blackened stripes, and they have a little bit of white in between. And then there's red stripes there. So it's almost looks like a zebra by the time they get to Eagle. And the other interesting thing is as they go up river and they start metabolizing their own body, they change, they get a really hooked nose, they get really big pronounced front, upper teeth and lower teeth, which makes it easier to catch 'em in a net because they those teeth in that hook nose gets tangled up in the net, like easier. They're not the they're not the sexiest looking salmon. But I'll tell you one thing they sure are an important one and there's also tasty.

Could you talk a little bit about how folks are fishing along the Yukon and up into Canada, like what are the different techniques kind of as you go up river?

So there's basically three methods of fishing for fall Chum, depending on where you live on the river and what volume you want. The lower river where the river is really big, they tend to drift net fish, so they get into a boat, they have a long net and they have a float on the end of it and they drift down the river. And the fish get entangled in the in the nets and then they pull them into their boat and and harvest the fish. As you move farther up river once you get into the Tanana river region, which is I think about 700 miles up river from the mouth. People start depending a lot more on the chum salmon for dog food. So they're going for volume. The fish are still good to eat there. But they're high volume fish. So they're fed to the big dog teams and Tanana, Fort Yukon, Eagle and up into Canada. So they use fish wheels. And a fish oil is a contraption. Basically it's an axle with a couple of baskets on it that turn with the current of the river. And as the fish swim up river, there's what's called a lead that goes from the shoreline out to the wheel and follows the contour the bottom of the river. And that acts like a fence. And as a fish hit those fences, it guides them out into where the fish wheel is turning then these big scoops scoop them up. The fish slide down into holding boxes and then the fishermen harvest the fish. I'm not gonna say it's a really efficient way of fishing but it's relentless. It runs 24 seven. And at my location, there are years when we catch six to 700 fish per day pretty easily. So it's a it's a great tool, and you don't have to get your hands wet, you basically just don't pull up to the fish wheel with your boat, load the fish into your boat, take them back and then process them by splitting and hanging them and drying them. There are a few people in the in the area that don't fish with fish wheels, and they use what's called a gill net. And they'll take that gill net and they'll set it in an eddy. It's connected to the shoreline and then I float an anchor go out into the current route along the eddy line. And then as the fish swim up river, they need to take a break. So they pull into eddies where they're not into a heavy current. And they take a little bit of a break there. And then when they go to leave, after their little rest break, they get entangled in the nets and then the fishermen will go out and harvest the fish out of that net.

How big are those fish wheels, it's got to be a pretty big diameter to be posting up salmon.

Yeah, they're they're pretty amazing contraptions. They were developed over in China. And they were brought over to North America during the Chinese migration when the railroads were being built across the country in the 18th century. And then the gold miners brought the technology up into Alaska, because many of the gold miners were from California. And they were seeing the fish wheels there. So they brought that technology up to the natives up here. And the natives very quickly adapted it because they were making nets out of out of natural materials, bark and other things. So it was a much more efficient means of fishing for them. Fish wheels down around Tanana are massive, they dipped down 16 feet.

Oh, whoa.

And they're often eight to 12 feet wide. So they're actually quite massive. And they're, they're really an engineering marvel, if you really look at how they build them and how they move them and, and set them. Up in our region. The river is in very deep. My fish wheel fishes eight feet deep. And that's due to the rivers not as deep here and fish are closer to the shore. So when fall Chum go up river, once they get up to a certain point in the river, they start orienting to one bank or the other depending on where their spawning stream comes in. And what they're doing is they're picking up the scent of the water

from the home stream that they were spawned in. And so they start keying into that. So the fire They get up river closer to their spawning stream. The more bank oriented they are, they're either on the right bank or the left bank, depending on the stream that they spawned out of. And so they tend to run fairly close to shore to get out of the current, and also to make sure they don't go by stream that they were spawned in.

So these fish wheels are really neat. We've never actually had chance to talk about them before on the show. Is this a community operation? Are they run by individuals? How do you determine who gets the fish out of these.

most of the fish wheels are operated by families, so the middle of river they're large operations, sometimes two families will come together and set them and fish 'em and harvest and take those fish. In my region. I have an individual fish wheel I live pretty remote, and there aren't any families nearby. So I own and operate my own fish wheel and take all the fish myself. And in Eagle, there are a number of people that have fish wheels, and oftentimes, it'll be one or two different households that will operate the wheel. Some years, we have tremendous runs of fall chum, and we're inundated with fish in our fish wheel. So we tend to share a lot of fish within the community. And anywhere from two to three out of 10 will oftentimes be very good for human consumption. So we not only feed them to the dogs, we, we love smoking them and drying them and saving them for ourselves as well for human consumption food.

Once you make your selection for human consumption, how do you prepare it?

Yeah, so there, there are a lot of clues that you can look at very subtle clues, when you take a fish out of fish wheel. Some of it is a coloration, the more they get those tiger stripes, the more spawned out they are and the whiter their meat is. Of course, we're cutting every single one of the fish to either split them in half and hang them on a pole. And that becomes our dried summer fish. Or the other thing we do is there's a line that runs down the middle of the fish called the lateral line. And that's right about where their backbone is. So it's a great clue as to where their backbone is. And we slice the fish from tail to the gill plate, creating a big slice in them, and then we hang them on the poles. But either way, we always cut the fish. And so when you cut the fish, you can look at the flesh, you can see the color of the flesh, it's nice and red or a nice bright pink color, then you know, it's pretty good. And then you can also look at the texture of the flesh. If the flesh is fairly firm, then it's going to be a good fish to eat. If it's soft and mushy, then that's dog food. One of the great things about having dogs is nothing that we harvest in this environment goes to waste, we put up the eggs from the females, we dry those and that becomes super high calorie food for the dogs. Sometimes we'll make a little bit of caviar out of that eggs. All the fish bones get eaten. Salmon have a very soft bone so the dogs can eat the fish bones, no problem. So nothing goes to waste. The only thing that's wasted is there some blood on the sand on the beach. That's it, everything else goes to either me or my dogs.

And what's your favorite way to eat it yourself like smoked, dried, cooked,

Like all fish, the best fish is a fresh fish. And so the best way to cook any fish is on an open fire or a grill. There's something about the smoke flavor going into the flesh of a fish. One of the things I love

doing it with fall Chum is I like putting them in a cold smoker. I smoke them for about two hours. And then I take them out of that. And that kind of dries the flesh a little bit. And then I put a little bit of brown sugar on the flesh, some garlic, some salt and pepper, and fresh dill out of our garden. And I'd have to say that's five star fish anywhere in the world.

Wow. Yeah. Sounds amazing. Sounds good? Andy did you have any final message you'd like to give to folks listening?

We're in a very dramatic change with climate change whether people believe it or not. We see it here in the north more than anywhere else. So the little things that humans do to affect wildlife make a big difference now. In the past, maybe not quite so much. But my interpretation after being an observer of wildlife for 30 years firsthand is that things are becoming much more fragile now. And so the impacts from humans are much greater now than they were, say 50 or 100 years ago. So it's really, really important for us to start looking at how we as human beings are affecting the spawning grounds the oceans, and the only way we're going to fix that is to talk to each other, learn to understand each other and I guess the most important word for anybody to remember is "respect." We have to respect not only the fish and the wildlife, but we have to respect the uses of other people and learn to work together.

Very nice. Thank you, Andy.

Yeah, thank you very much. It's been really enjoyable to talk about something that's so near and dear to me and my lifestyle here.

Yeah, we hope everybody gets out there and enjoys all the fish and gets involved locally with conservation. Thanks for listening to fish of the week. My name is Katrina Liebich. And my co host is Guy Eroh. Our production partner for this series is Citizen Racecar produced and story edited by Charlotte Moore, production management by Gabrielle Montague, post production by Alex Brower. 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 think and celebrate the whole community, individuals tribes, the state of Alaska, our sister agencies, fish enthusiasts, scientists and others who have elevated our understanding and love as people and professionals of all the fish