

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, Monday, April 5 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, an aspiring trout bum.

And today we're going to be talking about rockfish. Our guest today is Brittany Blain, who's a fishery biologist with the Alaska Department of Fish and Game. Welcome, Brittany.

Hi, thanks for having me.

Basics first. Why is this class of fish called rockfish and about how many species are we talking here in Alaska waters Brittany?

So rock fish are in the *Sebastes* family and there's about 30 of them in different species or over 30 in Alaska. They tend to like rocks. So that's part of the reason they're called rockfish. So your black rockfish, or your *Sebastes melanops* and your yelloweye rockfishes, your *Sebastes ruberrimus*. I may not have pronounced them perfectly, but that's how I say

Oh, good enough for me.

And the reason we pick these two is because there are two really distinct groups of rockfish here in Alaska. You've got your pelagics and your non pelagics with black rockfish being a pelagic species and yelloweye being non pelagic.

So Brittany, we're hoping you could give us just a little bit of a quick understanding, you know, what are the differences between those two types of rockfish biology wise?

Pelagic typically means relating to like the open sea versus non-pelagics more of a bottom-dwelling type. Pelagic are typically a mid waters schooling species group. They're found throughout the water column typically close to rocky structures, hence the rockfish name again. But they can also be found up at the surface, they tend to congregate more than a non pelagic, you know, versus a non pelagic, they're typically the bottom dwelling species. And this is your yelloweye. And quite a few more, they're found near the ocean floor again, rocky habitat or balderstone habitat, they tend to be in smaller schools, sometimes they keep to themselves, they hide more than a pelagic species. Some of them are really deep dwelling some of the species are there's a short raker and rough I tend to be even deeper in the water column. And also pelagics aren't usually as big and they don't live as long. They still have a long lifespan of seven to 30 years on average versus a yelloweye. Yeah, non pelagic. You know, we typically say 15 to 75. But the oldest documented yelloweye was I think, close to 120 years old.

My goodness, some really old souls. So some of these fish are kind of keying into like maybe a certain area versus others are roving around in the open ocean looking for food?

When it comes to the life history, I mean, rockfish are an amazing species in general. So, reproduction wise, for instance, rockfish actually copulate, and they give live birth, while there's not the laying of eggs and fertilizing, they actually do give live birth and the copulation, it varies a little bit between the two. But January to March is when we typically assume that the copulation timeframe is going on and we see gravid fish, so fish that are either you know, full of eggs or starting to release larvae from anywhere from April to July. And they all give birth to a lot of fish. I mean, we're talking 1000s and millions of fish. And then that larvae after its release tends to be kind of swept away. The survivors settle on ocean floor hiding kelp, eelgrass or rocks. And then as the juveniles mature, they move into deeper habitat.

So for folks listening and wondering what these two species look like, how would you describe them for ID purposes? And do the juveniles look any different compared to the adults?

Sure, yeah. So when you look at the juveniles versus adults, they look very similar. So with Black Rockfish, they're basically a dark colored, grayish black fish. Typically, actually, in the whole pelagic assemblage, you mostly identify those as the black or darker colored fish. There's a few exceptions where some are kind of a yellowish or olive color, but typically it's more black or a dark gray in color in it, it does look similar to for those that are familiar with bass. It does look like one. Yelloweye, complete opposite. They are a bright yellow fish, a yellowish orange, I guess you could say. Historically, they've actually been called the red fish is kind of how a lot of the non pelagics are identified in general because they're a reddish, orangish, yellowish color, and typically yelloweye get bigger. The one exception when it comes to the juveniles is yelloweye when they're in the kind of the juvenile stage, you'll see they'll have a white stripe across them, sometimes two white stripes, and that's the way to identify them when they're younger. Typically, those aren't fish they're reproducing yet, but sometimes they are getting close and you do at times see gravid ones at that time.

What are your recommendations for folks in terms of how to get familiar with all the different species, you know, are there some resources that people can use to get better at identification, so when they're out fishing and trying to figure out if they've hit their limit on pelagics versus non pelagics, like just yeah, some advice for folks.

So here, the fishing game, what we've done is we've produced these handouts that are really great that we've given out to a lot of anglers. And our regulation booklet we have, you know, the most commonly caught species identified pretty well with some real loose identification features to help you identify the different species. But really, our focus is to have you, you know, know the difference between the pelagic and non pelagic, which again, the more colorful ones are typically the non pelagics.

So, you know, when we get into the fishing part of the show, I'm sure that swim bladders are going to come up.

If you're not super familiar with fish anatomy, a swim bladder is a special organ that most fishes have that allows them to stay neutrally buoyant in the water column.

You know, when you catch a rockfish, a lot of times, you're actually going to end up seeing some of what's normally on the inside actually come out. It's quite gruesome, particularly if you catch a yelloweye. For folks listening, is that the swim bladder that comes out? Is it the organs, I'm just wondering if we can have a little bit of a discussion about swim bladders and how rockfishes' anatomy comes into play when they come up from a depth to the surface.

When people catch a rockfish, and it comes to the surface, and now it's positively buoyant. They float on the surface when they're released, because what happens is that swim bladders expanded within and can't escape the body cavity because it is a closed swim bladder. So the gases inside the swim bladder have expanded. Sometimes as ruptured gases are stuck in the body, their stomach pops out, their eyes pop out, sometimes you'll see actually little bubbling on their body cavity like gases trying to just come out wherever in their body, they can. If it's a gravid, female, you'll see that the eggs are coming out. So all of these injuries, it's called barotrauma, it looks awful. And so what happens when people are sport fishing, now, they caught this fish. And let's say they can't keep it. So say you're out there, you know, fishing, and you caught your bag limits, you can't keep it, you release it. And so you throw it on the surface. And it floats. What we've done for quite a few years now, it's actually about 12 years now we've done some studies on how to deep water release a rockfish, what we found is that if you release a rockfish back down deeper than 100 feet, it can survive. So you can take and it's positive buoyant, you can actually drop it back down. And now it's able to survive and swim away. It's mind blowing to me, because they just look awful when you catch them. But it is possible for them to survive if they are actually released back down to depth at their capture.

Or they're descending devices that people can use that are readily available? Are there other methods I've heard of people basically just taking like needles and stabbing fish that doesn't sound as good for catch and release. But what does the everyday person need to take out on the boat with them?

Yeah, so there are things you can just call it stab them with. They call it fishing or venting, we don't recommend that here in Alaska. I know for snappers and other areas, it's been recommended here and there. But deepwater release mechanisms are what we suggest. And actually, as of 2020, it's now required in all of the state of Alaska that anytime you catch a rockfish, if you are releasing it, you're required to use a deepwater release mechanism. So there's a couple options out there for you, when we did a lot of our studies, we actually took a jig which the jig hook took, it's a you know, you've got your bend in the hook. And coming off of it, you've got your weight at the bottom of called a 12 ounce weight on it as well. You know, typically you'd taken you'd fish with you put a little wiggle tail on the end and fish with that. But instead, you would take and in the bend of the hook, you would tie your line to the bend in the hook. And then you could actually attach the hook into the mouth of the fish and it's weighted, and then you can, you know, open the bail on your reel and drop the fish back down to the bottom. So that's one method of deepwater releasing. There's some other different options out there. There's a product out there that actually has a pressure sensor, and it's got a little clip you clip on the lip of the fish and it's weighted as well and when it gets down to a preset depth that will actually open up and the fish will be released and can swim away. Another option that I actually really have started to like using when I'm out is I take a milk crate of like a plastic milk crate that you know doesn't have the top on it, but I turn it the other way so it doesn't have a bottom, I tie line to the top. I hook some dive weights to the sides, zip time on and then if the fish is on the side of my boat, I can chuck this milk crate

over the top it's waited and it causes the fish to go back down and I have about you know, 100 feet of line on just a rope. And then I pull it back up after it goes down and the fish will swim away. And we know that they survived because we did some studies on yelloweye specifically and we actually tagged them, and over three years we recaptured them and we know that they could survive following this deep water release.

Cool.

Very cool.

Hey everyone. One thing that we want you to always keep in mind regardless of what it is or where it is that you're fishing is safety. Every week we're going to give you a tip or two that you can use to stay safe while you're out on the water. Most of our safety tips today have centered around angling activity taking place on the ice or from shore. However, as temperatures warm up, more opportunities will become available to fish from boats. So with that in mind today, safety tip is to always wear a life jacket when you're fishing out on the open water. If you ever find yourself going for an unintentional dip in the water, you're going to want to be wearing some kind of flotation device regardless of your abilities as a swimmer. A life vest will help you conserve energy if you need to swim to a boat or to shore and we'll even keep you buoyed up if, God forbid, you find yourself knocked out when you enter the water. Some of the jackets they're making now are really lightweight and comfortable and will inflate only when they impact the water. So there really isn't a good reason not to wear one. You can also attach other items to your life jacket that can aid in your rescue including whistles, reflectors and knives. Many marinas and boat launches have jackets that are free to rent. So if you don't own a vest, check and see if there are any available to use.

So in terms of you know, strategy when folks are fishing I mean we talked a little bit about the biology. You know, they're using rocks for structure. Do you have any advice for folks that might you know, be interested in trying for rockfish but aren't super familiar?

Yeah, you know, rockfish for a long time have almost always been kind of a bycatch to people targeting halibut and lingcod really caught a lot because when you're fishing for lingcod you're typically on the rocky structure as well so you know are hoping for a lingcod but you're more likely to get into a lot more rockfish but in general you know digging so you know, typically the same way I try and target a lingcod I'd look for you know, some rocky areas rockfish. Specifically what we really found is you find some steep rock walls, you can get into a lot of different species. I like to you know, drop my line down to the bottom once I know I'm on the bottom try and keep it as close to the bottom as possible jig up and down. Adrift I don't typically get anchor up the amount of weight you need when you're fishing for I mean it's gonna depend on what the tides and the wind is doing. You know, you might be out there you know for six ounces away or you might need 24. Same goes for lingcod and how that as well but if it's if you just want to catch rockfish I typically light gear I mean something they need us for you know salmon fishing you know, you don't need you know, your heavy duty halibut rod because also, you know, sometimes, you know, they're just lighter, they're smaller, you can feel them easier when they hit and as far as I guess, you know, lures and bait and things. I mean, rockfish eat everything that live dead and you know a lot of people try and always focus on bait. I love using lures jigs, flies. My favorite is a

shrimp fly. It's nothing special. But it's, it's a great one. It typically is up off not on the very bottom. So I'd like to have a shrimp fly up on my line, maybe a foot and a half and then have a jig on the very bottom. So kind of got two different things going on.

You just use like super heavy sinking line for the shrimp fly? Are you actually using like a fly rod? Are you just putting a shrimp fly on?

I'm not using a fly rod but you can when the Black Rock fish are on the surface? You can use a fly rod try and catch him. But no, this is it's it really looks like I don't know if you guys have talked about sockeye fishing yet, but the coho fly they call it I mean it's nothing special. It's just a little hook with a little bit of material on it. And it's just coming off a loop off the side of your main line

You're gonna be fishing near structure, is there anything that you can do...well, one is gear entanglement around the structure any sort of a problem or not? And if it is, is there anything that you can do to make sure you're not contributing to any of those issues?

Sure. Yeah, that's...you're around the rocks you know, I like to just be careful you know, when I'm jogging, if I start to feel you know, I'm coming up on something you know, reel up a little bit stay off the bottom a lot so you don't you don't get your lures stuck, but you will break off. I like to use a heavy line, like a braided line. It tends to break less. I can check typically retrieve stuff. Sometimes you got to move the boat around a little bit to try and get your gear back but uh that's the one of the troubles of fishing around the rocky area. You will lose some gear typically

Yeah. Oh yeah. Keep that lure kind of active at the bottom so you're not just letting it sit really embed itself in a rock.

Yep, stay active. That's always key.

Pay attention and stay active.

So in terms of eating this fish, I mean, I think rockfish are some of the best tasting fish around and that's, you know why we primarily target them. When we go into Prince William Sound in April. I mean, we're usually shrimping and then trying to catch a few rockfish for lunch or dinner in between sets, and really, I guess my favorite way to eat them on the water is we'll make ramen noodles and throw a fresh fillet right into that. And, you know, you can kind of look down on ramen noodles maybe but it is amazing. It's just like hot and salty. And with the fresh fish filet in that it's like the best way to eat a rockfish, I think actually on the water, but I'm kind of curious if you have some favorite recipes or just you know, yeah, what, how would you describe eating rockfish and the type of meat they have and stuff like that?

I'm gonna have to try that one that sounds interesting. I'm a very partial to rockfish tacos. So that's one I also having kids I like to make little, little nuggets. I like to eat them fresh, you know, or as soon as possible they don't freeze nearly as well as your halibut and lingcod. Will I've also tried and this is one that you know folks kind of frown upon sometimes or don't enjoy but you know, cooking the fish hole.

Rockfish feat. Brittany Blain

So if you just get it and then do kind of an Asian style and do you know some limes and cilantro and you know some sesame oil and stuff and bake it in the oven. Then you're getting as much meat as you possibly can off the fish.

So Brittany, it's been great having you on. You got a wealth of knowledge about rockfish, super interesting information about their biology and swim bladders. And we'd really like to thank you for joining us today.

Appreciate it.

Yeah, thanks!

Get out there and enjoy all the fish. 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. Publication facilitated by Kelsey Kohrs. 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 enthusiasts, scientists and others who have elevate our understanding and love as people and professionals of all the fish