Hey to all you fish enthusiast out there! Whether you're an avid angler or just curious about fish, we'd like to welcome you to Fish of the Week! your audio almanac of all the fish. It's Monday, September 19 2022. And this year, we're excited to take you on a week-by-week tour of fish across the country with guests from all walks of life. I'm Katrina Liebich with the US Fish and Wildlife Service in Alaska,

and I'm Guy Eroh. The autumn equinox is right around the corner. So to honor that we're talking about a big chub: the fall fish. So I'm excited about this one.

I'm excited we've actually got three guests today, each with a different perspective, but who share enthusiasm around this really cool fish. We've got an avid fisherman and the Virginia state record holder for Fallfish. We've got Josh Dolin. We've also got fisheries biologist Mike Pinder from the Virginia Department of Wildlife Resources. And we've got Dr. Eugene Maurakis who's a research scientist and adjunct professor at the University of Richmond. Mike, would you be able to kick us off with a colorful physical description?

Well, sure. Fallfish are a North American minnow in the family Leuciscidae. And these include the shiners, the chubs, the daces and the minnows. This family is the largest freshwater fish family in North America with over 300 species. Now the fallfish, it's a large, soft rayed fish, torpedo-shaped with a fork tail, and a rounded snout. In terms of coloration, most of the year, they're silvery. And they have these dark outline scales, the margins of their dorsal fin and the caudal fin or tail fin is in black. What makes these fish really interesting is during the breeding season, the male will get this brassy sheen on his head, and on the top of his body and down to his sides. His cheeks in his particular will get a bright red, and the sides and fence will get this rosy pink colored view. Yeah, they're beautiful. And one other thing is that at the same time, the breeding males will actually get weaponized. And with these horny projections, we call tubercles. That form around the eye and the snout.

That's awesome. I never heard weaponized before. But yeah, that's a common kind of trait with a lot of these fishes. That's super cool. And you guys are all in Virginia. But what's the larger range of this species? I know I've seen them up in Maine, caught quite a few.

Their native range is from the James River, north along the eastern seaboard, up into Canada, just south of James Bay.

So from James to James.

And this is the largest minnow right on the East Coast

East coast, yes.

Yeah, that's cool.

Yeah. And in the southern part of the range that you find, find them primarily in streams and rivers, rocky bottom to sandy rivers, down to the coastal plain. But then you go up north, they do find them in lakes. And so there'll be prevalent in lakes.

Fallfish feat. Josh Dolin, Mike Pinder, and Eugene Maurakis

Where does the name fallfish actually come from? It's somehow related to the seasonality of the fish? Where do we get that name?

I have the information here.

Oh, good.

Fallfish derives from occurrence and splash basins beneath falls.

I wonder, why do you think that anglers get disappointed when they catch a big fallfish? If it's enough fight to kind of convince them that they think they have a big trout on why would they be disappointed after having that good fight?

That is the million-dollar question. It's the same reason a largemouth [bass] angler gets upset when he catches a bowfin. I think it's just kind of a dated mindset more or less is what people are kind of clinging on to you know, being disappointed that you're not catching what you're targeting instead of just enjoying what you have in hand.

So yeah, maybe it's a bit of a bragging rights thing and you know, you don't get to show it off to your friends as much as "guys look at this big 20 plus inch trout I caught" but I'm curious with your record fish now what kind of reception have you got when you show people that?

It's very strange. It's great that it happened and it's awesome. And I'm forever grateful for the situation but it's kind of a curse in the aspect that now I have to describe to people that have generally no idea about fishing, what a fallfish is. "Oh, what is that?" "It's like, well, it's like a big minnow." And, you know, it's kind of a anticlimactic thing. Everyone's like, "oh, okay, what the heck." but yeah, I tell everybody I have a world record chub and my girlfriend's kind of getting annoyed at that, but no, no, it's been great.

Um, we should probably hear this story of yours. Like what happened, the whole kind of seeing how you caught it.

I want to hear the story from all three perspectives of the people we got on here, of course, like, you know, the firsthand account. But then when these two other fallfish experts first heard about this particular fish, I want to hear what their thoughts were too.

Okay, well, I guess we'll start. I do the Virginia Master Angler Program, which is essentially a trophy in each of the 30 species that the state categorizes, so goes everything from largemouth bass to fallfish, carp, catfish, all those things. So I've participated in that and fallfish was on one of the few that I have left, I'm almost done with the program, but fallfish was on there. So it was kind of a bad weather day here in Virginia. I've been after the long nose gar state record a bunch. So I like the native species just in general, but I wasn't able to target long nose gar that day because of how bad the weather was. So I just kind of on a whim decided that I drive up to the Cow Pasture River, which is about two-ish hours from my house and I tried to just knock off the fallfish trophy. We call them citations in Virginia. I didn't leave Richmond till like 11. So I don't even think I started fishing till like, maybe three o'clock, something

like that was a very haphazard, lazy day. For instance, I hiked about a mile into the spot, and I didn't have anything tied up yet. I had a shad spoon on an ultralight rod. So just kind of shows you that they will hit anything. And I made two casts with that thing and got nailed, and the drag was peeling out going crazy. I thought I had my brown trout, which is one of the other species that have left on my list. And I was pretty stoked for that because it was fighting like a, you know, five or 10 pound brown [trout], it was going nuts. It was a shallow riffle leading into a pretty sizable deep hole. And I made one cast up into the riffles brought it into the deep hole made another one just kind of popping and letting the spoon flutter and it nailed it. I fought it all the way back to the net. And I'm like, Ah, that's a fallfish. That's pretty big fallfish. And I netted him and was like "that's a huge fallfish." And it just so happens that I have all the state record kind of sizes on my phone immediately knew it was close, put it on the scale. And it went over three and a half pounds. They went 3...3-9...3-10 So I knew I had a potential state record. I wasn't until my brother's friend as we're riding back he checks the world record for the species and realized that it was like right there. So I ended up getting it weighed in at Dances Sporting Goods about an hour from the house. And it was quite the show. My parents showed up my siblings all my friends I is pretty good deal. So it was quite the whole charade.

Yeah. I mean, yeah, you got to have a little adventure.

Mike what'd you think of this fish when you heard about it?

Oh, I was ecstatic. Because the fallfish making it a, you know, a trophy certification was kind of like coming to most the other species, many of the biologists in my agency were pushing for that. And when I finally got on, you can see that it's working: people are going out there, you know, specifically targeting the fallfish. And, and with that, you know, Josh gets his world record for fish that day. So the things that we're doing is making a difference. And hopefully, that will bring more appreciation for the species.

The trophy classification that they added for the Fallfish was the entire reason why I was fishing for them that day. So it clearly works. That was kind of the idea. You know, you get the accolade, but you also get to promote the species as a whole. And yeah, I get the blessing and a curse of explaining what a fallfish is for the rest of my life.

So we haven't had a ton of anglers on this show who really focus in on kind of hunting records, which sounds like that. So what you do, or at least hunting out these really big fish, what do you consider when you're trying to target locations to hit like to just kind of achieve these records are these marks?

Um, as far as like finding where to fish is?

Yeah, cuz you know, I go out and I do a lot of fishing and I'm focusing more on just catching the species and every once in a while I'll find a big fish. But I wouldn't know where to start just targeting big fish specifically.

Right. Well, I mean, a lot of it comes from on the water knowledge just kind of knowing what it takes to make big fish, food, depth, location, that sort of thing. But then it's more or less you're putting a puzzle

together so you take a piece here you know when is that fish going to be heaviest and one's going to be be there and be ready to eat. Little by little you put these puzzle pieces together until you have kind of a game plan of where I need to be when I need to be there what I need to be throwing.

You mentioned that there...this hole that you caught this fish in is pretty commonly frequented by trout anglers who aren't too fond of the fallfish. How many times do you think the fish that you caught, had previously been caught by anglers and toss back? Or do you think it happened at all?

No, I'd say it's probably been caught at some point in its lifespan, especially if these things live to be, you know, nine or 10. For sure, it's been caught before. I don't know if it's been caught. As you know, as big as it was. I'm almost certain there's a bigger one in there. I mean, I only made two casts. So there, it would not surprise me if there was a four pounder in that hole, which is something to think about?

Are you gonna go back and try and beat yourself? Or are you done with fallfish until someone else comes along and passes you?

Will I do it next spring? I don't know. It's just something that I'm sure somebody will beat it. I mean, like I said, the one thing that's good and bad, when it comes to being an angler that does this stuff is okay, you've now brought attention to the subject. Now there's a mark that people want to go be. So the chances of somebody beating that record within the next year are very good I'm sure. So we'll see.

We've talked about bluehead chubs on the show before, and they build these really pretty cool nests that other fishes like to come and use. Eugene, I was wondering if you can maybe talk to us about this fish, and does that have the same behavior or something similar.

So the Nokomis species like the bluehead chub build a conical nest, and they spawn on the upstream slope of that nest. So the water current is facing them when they're spawning. In contrast, fallfish and the creek chubs, excavate a pit and deposit stones from that pit upstream to begin to form a ridge. And then that's where they spawn, they spawn at this pit ridge interface. There's a report from I think his name was Wilson back in 1903, that found the nest in a tributary of the in the Hudson River embayment. And that nest was about six and a half feet in diameter, and about two and a half feet three feet tall. And he estimated that there were two tons of stones in that nest.

That's crazy.

But the funny thing about that story is that he would ask the locals, you know, the Native Americans, like, what, what made this? And they said it was a fish? Of course, he wouldn't believe them. He was like "way a fish could do something like that." Until Until he got to see the evidence, see it for himself.

I mean, it is in the water. It can't be that surprising.

I did a study where I interviewed people to ask them, do you know about fishes that create nests by moving rocks with their jaws? And they say what? And so most people do not know about these marvelous species.

Yeah, once you can start to talk about, you know, these, these huge, you know, nests mounds out there. And that a fish did this, you know, character carrying these rocks one by one with its mouth, you got a good audience, they really start to appreciate it.

Once a fallfish or other gravel nest building species constructs this nest there's a host of other species, primarily minnows, that will congregate around the nest and on top of the nest. They are there to spawn and or eat eggs. But I'm engaged in a four-year research project funded by the National Science Foundation currently to examine the relationships between the necessary seats and the host species. And the host gains benefit. Because it's surrounded by all of these nest associates, there might be 200 individuals of 567 different species surrounding the child that built the nest. The fault is let's say, so that acts as a protective mechanism to reduce predation on the chub because other species surrounding it will be picked off first. The Nest associates in turn, get a place to spawn clean gravel. The part that we're examining now, it looks at are there any benefits to the embryos of the nest building pitch that is the fall pitch to the numbers of embryos laid by the necessary associates really dilute the predation on the hosts fishes. So that's what we're examining now.

That's cool. So it's clearly a really important fish. I mean, these are not something that should be just kind of carelessly discarded out of the water. We heard that up in Maine people are like, "Oh, just it's a fallfish, throw it on the bank." These are clearly really important to the ecosystem. So that's, that's really interesting.

My take on it is before you know, the stocking of the non-native predators, the brown trout, rainbow trout, and small mouth bass for fish were one of the top predators in these rivers and streams, those were the, you know, on the top of the food chain, they were never considered a trash fish back in those days. So I'm giving him more attention, during more publicity, we'll start putting it back on the top.

For each of you, what is something you'd like people listening to take home about the species in particular?

Just they are super fun to catch. And, you know, if you're just getting into fishing, you want to catch fish, and you want to have a good time not that difficult to catch most of the time, they'll pretty much hit anything, you can catch them on nightcrawlers, you can catch him on a shed spoon, you're in a typically in an area with beautiful scenery, I spent probably an hour before I caught that fish just walking around and checking it out, because I'm not typically in that part of the state in May. So there's a lot of lot of bloom going on lot of spring flowers, and all that good stuff. And there are fish that will willingly eat. So if you're new angler, it's definitely something to go take a swing at. And you know, most of the time, whether you catch a fish or not, it's going to be an enjoyable trip.

I went out with some fly anglers and they were calling on Shenandoah tarpon because it's a big silvery, you know, fish that jumps out of the water when you catch it and it fights all the way all the way to the

Fallfish feat. Josh Dolin, Mike Pinder, and Eugene Maurakis

net. And also James River Bonefish is another term I heard. Everybody talks about catching this on a hook and line, but these fish are amazingly fun to go out and snorkel with.

Good point.

If you snorkel with them, they're not shy. If you start digging up into substrate and kicking up some aquatic insects, they'll be shooting through there like lightning, grabbing those insects, and you look behind you and they're there. There's a whole school of them behind you feed on everything that you're kicking up, and you can take some great photographs of them underwater. And, and really, I get to see, you know, the behaviors, their natural behaviors in their environment.

They're architects, they're engineers. They're the construction worker. Okay, they're the defender of the nest. They're a lover on the nest, and probably more importantly, is that they are a convener of community. Yeah, they're magnificent. I think for me, the most important point is that they are a keystone species. And so realizing their importance, because once a keystone species dies off, or is extirpated from an area or becomes extinct, then it brings down a whole community with it. And so they're quite important, and I think we need to increase our education about non game freshwater fishes.

All right, well get out there and enjoy the fallfish and all those other native non-game and rough fish species like your suckers and your bowfin and your buffalo.

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. Produced and story edited by David Hoffman. Production Management by Gabriella Montequin. 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. We honor thank and celebrate the whole community, individual tribes, states, our sister agencies, fish enthusiast, scientists and others who have elevated our understanding and love as people and professionals of all the fish.