

Happy Burbotine's Day!

Music from Zenith City by Woodblind

Marie: You're listening to The Fish Dish, brought to you by Eat Wisconsin Fish, a campaign of the Wisconsin Sea Grant Program. Are you fish-curious? Or are you a fish expert who wants to learn even more about Wisconsin's fisheries and cooking fish? We'll give you the latest "dish" on fish.

Your hosts are . . .

Sharon: Sharon Moen

Marie: and Marie Zhuikov

Together: Two friends who have been working for Sea Grant seemingly forever and who know a thing or two about fish.

Marie: But that's "forever" in a good way.

Sharon: Sharon runs the Eat Wisconsin Fish campaign

Marie: and Marie is a science communicator.

In this episode we interview Titus Seilheimer, one of our Sea Grant coworkers. Then we travel to Cornucopia, Wisconsin, on the south shore of Lake Superior to speak with staff from Halvorson Fisheries. What's our topic? Burbot!

Now, if you're not familiar with what a burbot fish is, you will be by the time this podcast is over. We'll let our speakers describe it for you. Plus, there's a very special day coming up soon. Most people call it Valentine's Day, but we call it something else due to an important event in the burbot life cycle.

For the Fish-o-Licious part of our show, Sharon and I cook Poor Man's Shrimp and assess whether burbot can really pass a shrimp in this tasty appetizer.

Let's hear from Titus, who is Sea Grant's fisheries outreach specialist. He's stationed at our office at the University of Wisconsin Green Bay's Manitowoc Campus. Sharon asked him to describe what a burbot looks like.

Titus: They're sort of these like giant, almost giant fish sausages. They are totally tubular in shape. And I think the interesting biology here is that they're actually a member of the cod family. So, you know, people are familiar with the Atlantic cod, with your cod fish fries. This is the only species in the cod family that lives in fresh water. If you had a picture of a cod and a picture of a burbot together, you would see kind of the placement of the fins would look similar. They have a single barbel on their chin, and that's that little dangling thing off the chin that lots of fish used to feel the bottom which is useful in finding food. That is this distinctive characteristic. They also have pectoral fins. I like to think of those as the arms of the fish. Those are the ones up front. They kind of use 'em to navigate around. Then you have the pelvic fins, and so pelvic: pelvis. I kind of imagine those as the legs on a fish and those pelvic fins on the burbot and on the cod is actually really far up on their bodies. So, it's almost like pectoral fins and pelvic fins all in this one little bunch where lots of our other freshwater fish we would look at, you'd have the pectoral fins up front. You'd have kind of the pelvic fins in the middle or farther towards the back of the fish. So, just this really interesting body shape unlike other fish that we would see.

Sharon: There are a lot of common names for burbot. What do people know burbot as if they don't call them burbot?

Titus: Yeah, so lawyer is the most common Great Lakes name. When we're out on the commercial fishing boat they're talking about lawyers and that is, they're slimy. They're kind of twisty.

Sharon: I was gonna say, no offense to any lawyers out there, just ...

Titus: Right. I'm not saying it, I'm just saying what they are, and you know, I'm not making any judgements here.

(Marie laughs.)

Titus: So, if you're over in Minnesota, they're actually known as eelpout. There used to be a big fishing tournament.

Marie: Yeah. Sharon and I once had plans to go to the Eelpout Festival on Leech Lake but it didn't work out. And now they're not holding it anymore, so we missed our chance, I guess.

Sharon: Yeah. Is there a commercial fishing season for eel pout, lawyers or burbot, depending what you call 'em in Wisconsin?

Titus: Mizay would be the Ojibwe name. Dogfish, spineless catfish, mother eels, gugeons, mud blowers, yeah, lots of names. So, is there, is there a commercial season? They are allowed to be commercially harvested in Wisconsin. In the Great Lakes in general, they're classified as a rough fish. So, they're, they're not a sport fish, they're not a commercial, not necessarily targeted. Generally, people will catch them as sort of bycatch, as an incidental catch. So, they're trying to catch something else, a different species like whitefish. They might bring up some burbot in their nets and then, sometimes they might throw 'em back, but they might also keep them because there is kind of these local markets up in Superior, Lake Superior fisheries.

With our Lake Michigan fisheries, you can go to the market and say, "I'd really like some lawyers for my fish fry on Friday." And if they catch some, they can hold 'em for you. Then if you go to the end of Door County, catch the ferry to Washington Island, you can actually go to a restaurant there that advertises the fresh lawyers that Ken Koyen, a commercial fishermen on Washington Island will catch. Hey, they're freshwater cod. If you like light and flaky fish, try a burbot out.

Sharon: Right. So, we're into February and it seems like that's the season with Valentine's Day and love. And tell us about what burbot fit into a February love theme.

Titus: Yes. Well, I have dubbed it, Burbotine's Day. So, forget Valentine's Day this year. Get your loved ones a nice card with a big burbot on the front and celebrate Burbotine's Day. This is the season of love for the burbot. This is a winter-spawning fish. So, generally lots of the fish you think about, they're spawning maybe in the spring. Maybe they're spawning through the summer. Some will spawn in the fall like trout, but burbot, they're just kind of hanging out, waiting for the dead of winter, and then they are spawning under the ice. And I think that is just a really great kind of niche way to survive in the world. You're kind of avoiding other fish, you're avoiding predators because it's cold and not a lot of other fish are out there. So, it's really kind of a unique life strategy.

Sharon: And so, my impression is they kind of spawn *en masse*, and like in a burbot orgy, right?

(Marie laughs.)

Titus: Basically, yes. A writhing mass of these burbot, just kind of all together. Lots of fish spawn in big groups like that. But, you know, it's the imagery of this writhing, rolling ball of burbot on the bottom of the lake is, it's an interesting mind picture, I guess.

Marie: Yeah. I love the, the rolling ball of burbot image. So, do the males and females not really pair off then when they mate, they just like do it all together?

Titus: Yep. It's, it's just a, a broadcast fertilization. You know you've got lots of males in there. Everyone's kind of putting their reproductive material out into this shared space. Everybody wants to fertilize a few eggs or get a few eggs fertilized. If you pop open a burbot, they actually have quite a few eggs in there. So, they're not pairing off or defending anything. Those eggs kind of just sit on the bottom and then in the spring those eggs will hatch out and then they can start growing these little baby burbot, which are also quite adorable.

Marie: And so, the parents don't like hang around and protect the eggs or anything really. What do they do?

Titus: They get together in the winter, they spawn and then they're out of there. That's a fairly common reproductive strategy for a lot of fish. Sort of leave your eggs in the best condition you can in the best place, and then off with your life until the next year when the call of Burbotine's Day comes in the middle of winter and they, you know, move back to those, those areas they spawn in.

Marie: Mm-hmm . . . and why are baby burbot cute?

Titus: Oh, you gotta look at a picture of 'em. You already have this kind of goofy fish, and then if you miniaturize it, it's, it's just, it's, I don't know. I think they're, they're pretty cute. And one burbot in the wild that I spotted was actually right up at the, Frog Bay National Park or National Tribal Park in up in northern Wisconsin. There was this little burbot just kind of swimming along in the beach while we were there. So, it's a cool little fish.

Sharon: I think it's their big eyes. Any babies with big eyes, like that, I think.

Marie: *(Laughs)* And I saw something about burbot have a song or like a noise that they make. Does that help them find each other under the ice in the dark in February?

Titus: Yeah, it's a sound that the males make. It's really only recently that science has discovered that burbot make this sound. You know, in general, fish don't, don't make sounds. They're not songbirds, they don't really advertise themselves. They kind of vibrate the, the muscles along their swim bladder. So, the swim bladder is this kind of air-filled organ inside their body that allows many fish that have them to be neutrally buoyant so they can stay in whatever depth they want to be in. They don't have to fight against floating or sinking all the time. It's like having a drum inside you, I guess, and they're able to kind of vibrate or move those muscles and create these sounds.

Marie: It just so happens I have a clip of that sound. Behold, the mating noise of the male burbot! (You might need to turn up the volume to hear it, especially if you're listening to this while you're driving a car.)

Play clip – a series of soft clicks that accelerate until they meld together.

Maire: And now, we'll go back to Titus.

Sharon: What are some of the common questions that people ask you about burbot? Do people ask you questions about burbot?

Titus: Yeah. I go to people and I tell them about burbot. There's sort of increasingly more interest in burbot out there, as a sort of seasonal winter sport fishery through the ice, people will catch them and actually start targeting them. Burbot have been in the Great Lakes. They're a native species. They're a benthic species. They're down on the bottom. They're a top predator. So if you think historically, if we went back 500 years and jumped into Lake Michigan, your sort of top predators would've been the lake trout in most of the lake, but then also the burbot at the same time is this top predator, but hanging out on the bottom. Yeah, a neat species that I think is getting a little more attention.

Sharon: So, I like that it's the top predator on the bottom. *(Laughs)*

Titus: That's the niche that it inhabits. They're fish eaters but a bit of a generalist too. Like they'll eat other things as well, but, really looking for fish to eat.

Marie: Yeah. Didn't I see like a graph that you showed in one of your presentations, that 70% of the burbot's stomach was filled with like rocks and just stuff that they ate by accident?

Titus: Yeah. So just kind of a messy eater. They're kinda lunging at things and maybe picking up whatever's on the bottom. So, they get a mouth full of food. But, some mud and, and other junk too.

Sharon: Because of the way they eat and what they eat, the Wisconsin DNR has a consumption advice saying that you should eat only up to like one meal a week for burbot that are coming out of Lake Michigan and Lake Superior. So, I always think it's good when we're talking about a specific fish to talk about how often you should be eating this fish.

Marie: Oh sure.

Titus: Definitely always keep that in mind. Your whole kind of ecosystem of seafood eating. Cuz it's not just that you can eat one meal per week of burbot. And also if there's a guideline for something else that's also one week, you know you can't eat both of those. It's just sort of a total thing. So important to keep in mind.

Sharon: But then I'll also add the benefits of eating fish far outweigh the negative effects of eating fish. So, it's important to keep seafood in your diet, especially fresh fish from Wisconsin.

Titus: Absolutely.

Sharon: So, speaking of food, do you have a favorite burbot recipe, Titus?

Titus: Yeah. This is from my local captain I've ridden with a lot, John Culpa, his recommendation was just to boil 'em, and then dip 'em in butter. It's easy. I'm always looking for easy seafood, and anything you get to dip and butter is, is pretty amazing. It's quick, it's easy. I've also deep fried them before with just a general beer batter and also really good.

Sharon: I have a couple things to add to that is that if you freeze your burbot, it becomes denser and it holds its firmness and form better. So, if you're thinking about doing something that you need medallions or something a little denser like chowders for, get the frozen burbot, which, up here in the

shores of Lake Superior, we can find it in our commercial fish markets, normally in the freezer section, you can get it fresh too. The first recipe that Titus you talked about is a recipe that we have on the Eat Wisconsin Fish website called Poor Man's Lobster. But what do you call it?

Titus: I say that lobster is poor man's burbot. Out on the coast, they just don't have enough burbot, so they, they're stuck eating these crustaceans.

Sharon: Oh, that's a funny point. Yeah. Thanks.

Marie: Yeah. We feel so, so sorry for them!

Sharon: How about you, Marie? Do you have a favorite way to eat burbot?

Marie: I have never eaten burbot. I've tried. We actually went to Washington Island, our Sea Grant communications team, for a field trip once, and, we visited the restaurant there that Titus mentioned. What, what was the name of it again?

Titus: KK Fisk.

Marie: Yeah, KK Fisk. We visited their restaurant but they didn't have any burbot available that day, so we were really bumming. So, yeah, I've never tried it. I'm a Burbot Virgin.

Sharon: Oh, can we'll take care of, that here soon.

Thanks so much for being with us. I'm so excited to celebrate Burbotine's Day on February 14th, so it's gonna be our new Sea Grant holiday.

Titus: Absolutely. Thanks for having me. This is a lot of fun.

Marie: Full of love and good will toward the lowly burbot, Sharon and I traveled to Halvorson Fisheries in Cornucopia. We spoke with Jessica Resac and Mark Halvorson. They explained they catch burbot incidentally in their search for whitefish using nets set on the bottom of Lake Superior. Sharon asked Mark how the burbot population is doing from his perspective as a sixth-generation fisherman.

Mark: Well, five years ago, maybe eight years ago, we didn't even keep 'em. I mean, it wasn't even that big of a deal. And then we were getting so many of 'em in the trap nets, I started doing things with 'em. I do fish fries, you know, for weddings and bear camps and deer camps and everything. We had so many of 'em. I started cooking them and people just loved them. And then all of a sudden, in the past, what, five years? You put 'em in that little freezer there, as fast as you can put 'em in there, they're gone.

Sharon: Why do you think that is? Why the change?

Mark: They're the ugliest fish there is in the lake but, I don't think people knew what they were. My mom made fish chowder for me a couple days ago, three days ago, and she put burbot in in the fish chowder. Best fish chowder you'll ever eat. When we make it at our restaurant up here, we use burbot as long as we have enough. That's what we use.

Sharon: Wow. That's interesting.

Mark: It's fabulous.

Mark: Because normally people come to Cornucopia and these, these fisheries to eat the whitefish. Right?

Mark: Right. But it, it's not fishy. It's really, what do you say? I don't know.

Jessica: Mild.

Mark: Mild. It's not, it's not a fishy fish.

Sharon: What's the texture like?

Jessica: I think it's more chewy than whitefish. It's not as flaky. That's why it's good in chowder, because it holds up.

Mark: It holds up. It doesn't turn to mush. It will stay in an actual little piece.

Jessica: People like 'em a lot and for sale in the store, because they don't have any skin on 'em, they don't have any bones at all, and they are, they're just like kind of little skinny filets.

Mark: Solid white meat.

Jessica: Yeah. Solid white meat. So, they're super easy to prepare. You just take 'em out of a package and cook 'em. No dealing with skin or bone or anything like that, so ...

Sharon: Is there anything you think people should know about burbot? Or like what are some of the questions people ask you guys about burbot?

Jessica: People in the store here ask what it tastes like. Your mom used to say it tastes like freshwater cod.

Mark: Yeah.

Jessica: Remember she said freshwater cod when we first started selling it in the store? I guess that's pretty true.

Sharon: Well, it is.

Mark: I will tell you that anybody that buys it, you'll definitely get a repeat customer that comes back here to buy burbot.

Sharon: I know when I was here last time talking to Jessica, there was a list and you're like, well, we may or may not have burbot.

Mark: That's all how it's gone.

Sharon: You have to be on the list, right?

Jessica: Yeah.

Mark: My mom will say, oh, we got, we got so much of it.

Jessica: And then it's gone.

Mark: And then all of a sudden, it's, it's just gone.

Sharon: Yeah.

Mark: We vacuum seal 'em in little bags like, like you've seen there that Jesse brought. People just love that. We don't let any of 'em go anymore. Everyone that we get, we skin 'em out. My brother does it different than we do it, but we cut around their head a knife, and then we have a pair of pliers in the boat and we just pull the skin off of 'em. Cut the head off. Take the guts out. And then when we come in here, one of the guys that's been working for us for years and years, his name is John. He loves filleting them things. He fillets them things out nice and pretty and he's got 'em all nice and uniform and we wash 'em up, mom vacuum seals them, and put 'em in the freezer.

Sharon: So now you know to call ahead if you want burbot. The Halvorsons are done fishing for the season but will start up again in spring. You can also check out the Red Cliff Fish Company, Bodin's, Hoops, and many places in Door County like the Hendrickson Fisheries and the Baily's Harbor Fisheries might also have burbot. But again, make sure to call ahead!

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Marie: Now it's time for the Fish-o-Licious part of our podcast, where we discuss fish recipes which, by the way, you can find on the Eat Wisconsin Fish website (which is eatwisconsinfish.org). Today we're doing Poor Man's Shrimp.

Sharon, tell us what's going on here?

Sharon: So, we have burbot with us today and four fillets that we've cut into thirds. But I also got some shrimp so we could do a taste comparison between the burbot and the shrimp and see if shrimp is poor man's ...

Marie: Burbot.

Sharon: ...or if burbot is poor man's shrimp.

Marie: Yes.

Sharon: So, that will be our challenge today.

Marie: How interesting. So, yes, we have water boiling . . .

Sharon: In the water there's a little salt and some spices. We have celery salt in there and some ground savory and a little of the Penzeys Spices Arizona Dreaming in there too, just to give it a little extra flavor. And then we have siracha here, and another type of chili sauce and all the fixings for the red sauce recipe that's on the Eat Wisconsin Fish website.

Marie: Sharon's putting the shrimp in the boiling water.

Sharon: There we go. The shrimp are in! Now, we're going to add all the burbot, too.

Marie: Will they cross-contaminate each other? *(Laughs)*

Sharon: They will cross-contaminate each a little bit. So, if you're allergic to seafood or shellfish, don't do it this way.

Marie: But I was just thinking taste-wise. You know, if we're doing a taste comparison and now we're mixing them together. Oh no!

Sharon: I don't think it's going to be a big deal because the burbot are far outweighing the modestly sized shrimp that we put in the pot. So, we're going to boil these up, then let them chill.

Marie: We dip the shrimp and the burbot in the sauce. It's kinda like a cocktail sauce, right?

Sharon: Right. It's a homemade cocktail sauce that we're calling red sauce for the sake of this show. And I like the idea that you can get saucy with Sea Grant. We have a lot of sauce recipes on the Eat Wisconsin Fish website. So, there's many dipping sauces you can use. If you prefer hot, there's siracha and chili sauces, and if you prefer mild, we have other types of sauces that you might want to try making up or purchasing from the store. So, whatever you would typically dip shrimp in for having a shrimp cocktail, that's what I would recommend for this recipe.

Marie: What is in our sauce today, Sharon?

Sharon: Ooooh, there's so many interesting things. The base is catsup, so like regular store-bought catsup. And then we've added Worcestershire sauce, and tobasco, and a little bit of horse radish, and a tablespoon and a half of lemon juice because we're making just half the recipe that's on the site. We also have some celery salt in there. So, it's pretty basic, pretty simple. So easy. And if you're rushing off to an event or you're supposed to bring an appetizer, I recommend this one.

Marie: Yeah, because you can make it ahead of time, right?

Sharon: Right, because we're chilling everything now and it's also great because if you have people in your group with shellfish allergies, this kinda compensates for that. There is, aside from what we just did when we boiled shrimp with it, burbot is not a shellfish. So, people with allergies won't react to this.

Marie: Yeah, so everything's in the refrigerator, and we're going to wait for a while and then do our taste test!

Sharon: Woo hoo! Okay.

And now we're going to cut them into shrimplike pieces.

Marie: The burbot.

Sharon: The burbot, yes.

Marie: So, cut each third into like about an inch long?

Sharon: Right, about the size of a cocktail shrimp. Some of them I'm doing lengthways, others I'm doing crosswise. So they're kinda in the shape – never exactly shrimplike, but close. That's probably enough for the sake of our experiment.

Marie: So, we've done our taste test. We skewered the burbot and the shrimp with toothpicks and dipped them into the cocktail sauce that we made and ... I'm no longer a Burbot Virgin!

(Laughter)

Sharon: Marie did it! She ate burbot! Uh huh.

Marie: Yes, yes, it was very good.

Sharon: Yes, it was good, but we also had the shrimp, so, how do you feel the burbot compared to the shrimp?

Marie: The shrimp in the cocktail sauce tasted just like something you'd get in a restaurant. Whatever . . .

Sharon: Right.

Marie: The burbot was a little bit less dense than the shrimp, but it tasted good. It tasted like a whitefish.

Sharon: Right. That's what I thought, too. It did not taste like shrimp, but it did taste like a dense fish. And it held its form for the cocktail sauce so that was great. And I like the cocktail sauce, too.

Marie: Yeah, yeah, it's really good!

Sharon: I also used siracha on one of my toothpicks and I'm like, whoa! I do like the spice. Much like a tortilla chip, I feel like burbot is a good vehicle for...

Marie: Sauce.

Sharon: Wonderful sauce.

(Laughter)

Marie: A sauce medium! *(Laughs)*

Sharon: That's right. It's good for dipping in stuff in this form. So, next cocktail party, if you don't have shrimp, you can use burbot. You can also use haddock and cod are also good substitutes. And I really hope everybody has a really fun Burbotine Day this February 14th.

Music from Zenith City by Woodblind

Marie: That's it for this episode of The Fish Dish. Thanks goes to Titus Seilheimer, Jessica Resac and Mark Halvorson for the interviews. And thank you for listening!