

Michael Valley, Mississippi River Fisherman and Catfish Fillets with Lime

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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 is a food-fish outreach coordinator.

Marie: and Marie is a science communicator.

Sharon: I'm excited to talk about today's topic.

Marie: Why's that?

Sharon: Because, honestly, until this past summer I didn't really know much about Wisconsin's Mississippi River commercial fisheries. I'm happy we can talk about my Mississippi River adventure in this episode. I'm also looking forward to the Fish-o-licious part of our show, we're cooking an easy Eat Wisconsin Fish recipe using catfish --- it's called fish fillets with lime.

Marie: I'm looking forward to that, too. But first, why did you drive to the far southwest corner of Wisconsin?

Sharon: Since pandemic travel restrictions were lifted, I've been working my way around the state meeting with commercial fishers of Lake Superior and Lake Michigan as well as food-fish farmers to get a feel for how Sea Grant can work with them to solve challenges. Several times, people, mainly from the Wisconsin Department of Natural Resources, asked if I had talked to the Mississippi River fishers. I was able to arrange a trip to learn more about the river fishery and the people behind it in 2023. I met with several fishers, including Michael Valley, a fourth-generation commercial fisherman who owns Valley Fish and Cheese, a store in Prairie du Chien, Wisconsin.

Marie: Michael's business is a bit different from others that we've featured before. Tell us about that, Sharon.

Sharon: Well, it was interesting being there. It was so different than the Great Lakes fisheries where our fishers catch lake whitefish, cisco, and lake trout, down there in the Mississippi River, the commercial fisheries concentrate on what are known as rough fish and Mike -- we've interviewed Mike and he'll tell you more about that soon -- but rough fish are generally the non-sports target fish. So, instead of walleye, he would be going after things like carp, buffalo and sheepshead.

Marie: Uh huh.

Sharon: And the equipment is really different, too. People like Mike and the other fishers down there use things like hoop nets, a few set nets, but that's very different from the big boats and the trap nets and the gill nets that are used in the Great Lakes. Then, also the way they process is different. The fish are so huge down there that they're able to steak them up in chunks as opposed to fillets. So that was kind of interesting to see. To look into the smoke room and see these big chunks of fish.

And then the regulations are different, too. So, because they're rough fish, there's no quota on how many fish they can catch. They can catch as many carp and sheepshead and buffalo they want to and can process.

Marie: Oh wow!

Sharon: Yes, I thought that was very interesting. It's like the wild west as opposed to the more regulated fisheries of the Great Lakes.

Marie: Michael sells smoked fish, meat jerky, bologna, summer sausage, and good ol' Wisconsin cheese. He's also diversified into selling handmade duck decoys and wooden painted signs.

Let's hear from Mike about how he got into the business.

Michael Valley: I got into it through my father and my grandfather who were in the same business. They were 99% wholesale. I am 99% retail. Switched in about 1988, 89. That's when we went pretty much full-time into the store and dropped most of the wholesale markets. So, in the smoked fish end of it, we do carp buffalo, bullheads catfish, sturgeon, perch, probably forgetting a couple. And out of all of those, the carp is the number one seller.

Second probably is catfish. Third would be the perch. And then the other products that, you know, we make catfish, jerky and perch jerky, snapping turtle jerky, alligator jerky. All different kinds of jerkies, but catfish and perch as far as the fish end of it, those are our jerky sellers. Make catfish bologna, three different varieties of catfish bologna. Sell a lot of that.

We handle lots of snapping turtles. I make snapping turtle jerky, snapping turtle beer sticks, snapping turtle summer sausage. You can make anything out of it. But usually, I'm out of it because it's such a pain in the butt to make, but we usually always, as a rule, we'll always have fresh frozen turtle meat, you know, so we usually always have that on hand.

You know, people want something unique. I'd say 95% of people, they're like, "Oh my God, is this good!" You know, "Man, this is really good," you know?

Marie: Mike also sells fresh fish fillets. He described the other species that he catches.

Michael: Buffalo fish, carp suckers, sturgeon, hackleback or sand sturgeon, cannot take rock sturgeon. Bullheads, Flathead catfish, channel catfish, quillback. Sheepshead. Oh, sheepshead the most important one, which is freshwater drum.

Sharon: Mike ... a Jack of all trades ... and a jovial man of diverse skills ... gave us sheepshead samples from his smokehouse and we also got to watch him baste trays and trays of these fish in the smoker. I encourage listeners to go to the Fish Dish episode extras page to see what deliciousness looks like. I'm sorry you won't be able to smell the rich and tangy aroma of fish in the smoker through the internet. Now, his smokehouse was attached to his processing building, which was interesting, and it's right next

door to the store where he sells the product. And, he's 100% on-site sales. He gets a lot of tourist traffic there and then a lot of locals come to buy his product, too, and it was so tasty.

Marie: Does the smell of the smokehouse kinda waft into the store?

Sharon: It does. I don't know if you've ever been near a smokehouse, but wow! It's just so aromatic and delicious smelling.

Marie: Yeah, I worked in a building that had a smokehouse in the basement. You'd just walk in there and ah, I loved coming to work every day because it smelled so good!

Michael: My smokehouse it's all wood, 100% wood-fired. I use no sodium nitrates. It's all natural, high-quality spices. And most people, let's say you're smoking a carp, so tonight when you're eating that carp, I just guarantee you're gonna go, "Oh my God." Because it's not just salt and water. There's probably seven or eight different seasonings in there, lots of brown sugar, and the salt I'm using is high-grade. It is just one step a little bit above. And I cut all the wood myself. I have two other guys that help. I'm picky on wood. If there's any mold on it, it goes out. I use pignut hickory and shag bark hickory. I will mix a little bit of fruit wood in: apple, pear, plum.

Marie: Mike has a Facebook page for his business, Valley Fish and Cheese. If you look at it, it won't take you long to see Mike holding up some big fish that he caught. Mike agrees that they're big, but they're not as big as they used to be.

Michael: When I was 16 years old, raising nets with my father, we had two catfish in one net and they each weighed 96 pounds apiece. And I haven't topped that since. You know, we get a lot of catfish in the sixties, seventies, 50, 60, 70. It's nothing to get 25 a day over 25 pounds. But the big big ones, you know, they're not as prevalent as they were 75, a hundred years ago, obviously. You know I've had some huge, humongous sturgeon out here, probably 300 pounds. We can't take those. And obviously you can't get it in the boat, so you've gotta release it in the water. And that's a real pain because they're dangerous. *(Laughs)* They're extremely strong. But we've had some fish that we never did see that were unbelievably huge.

Sharon: So, I can kind of attest to the unbelievably huge types of fish that he still catches. Not only were there big chunks of carp and sheepshead in the smoker, but in the bottom of a boat I visited down there in Prairie du Chien, there were these things that looked like zebra mussel shells or shells of clams. So, I asked the guy in the boat, "Are you pulling up mussels, too?" He was like, "No. Those are the scales of the fish."

I'm like, "Wow!" They kind of look like big toenails. It was kinda gross.

Marie: Like big toe toenails?

Sharon: Yes! Yes.

Marie: Ewww!

Sharon: Because up here in the Great Lakes, I'm used to fish with smaller, more delicate like glit... some of the fishermen up here call it fish glitter.

Marie: Fish glitter, yeah.

Sharon: But down there it's like no, big ugly toenails.

(Laughter)

Sharon: Huge fish! And I also want to mention that just because there's no quota doesn't mean that there's not a sustainable fishery there. So, people like Mike have to be accountable to the DNR every month and report their catch. And they are monitored. So, it's not, when I said wild west earlier, maybe that was an overstatement. There are some regulations that they have to follow and seasons that they have to follow.

Michael: Now I know what I need. I'm self-sustainable in what I need. I know I can only clean four to 800 pounds in a day, so that's what I catch. I could set nets and catch two or 3,000, no problem. But I'm only catching what I'm gonna need for that week or that day.

Every day when we commercial fish, we've gotta write down every fish we catch, even the ones we throw back. So, you've gotta keep number of pounds, whatever you caught, and then at the end of each month, you've gotta file a report to the DNR. For every kind of gear. It's a lot of bookwork on top of, yeah.

Marie: Like many of the commercial fishers we've featured on The Fish Dish, Mike has a challenge finding workers to help him.

Michael: There's no problem selling a good product. The problem is making it, finding enough time and the help. That's the number one problem. 'Cause it's, it is all very, very time-consuming.

Bonnie Willison: How often are you out on the boat?

Michael: Anymore? Not very often. Probably two days a week now. Used to fish five days a week when we had help. This spring and the fall, like this spring, I fished probably five days a week.

Sharon: So, when I was down visiting Mike and his wife, he talked about what he used to do in the river and that was clamming. He grew up as a clammer and just as a FYI, freshwater clams are the same as freshwater mussels. Scientists normally refer to them as mussels but the clammers refer to them as clams.

So, on the outside of the processing facility, Mike had, actually the garage, I think – Mike had some old clamming crowfoot boards and I got him to explain how they were used. But first, I want to say, one of the most colorful chapters in the history of Prairie du Chien was its association with the freshwater pearl industry. It was actually called the freshwater pearl capitol of the U.S. from about 1900 to 1920. During that time, clamming and button cutting was almost as important to the community and the economy as the fur trade had been in the earlier times.

Marie: Hmmm!

Sharon: So, the bread and butter product was the buttons, pearlesque buttons that became fashionable. But the high-value product was pearls, which were really rare. So, freshwater pearls come in many different colors and their colors reflect the color of the mother shells. So, like washboard clams usually have pink pearls, and wavybacks create pearls in shades of blue, green, and lavender. So, they were very valuable if you found a good one, rare though. And at one time, there were 27 pearl buyers in Prairie du Chien alone. I thought that was really interesting. And then in summer, tent cities and whole families

would be gathering shells there along the banks of the Mississippi River and grocery boats would be selling supplies up and down the river, too.

Marie: Hump, so it's not just oysters that have pearls, huh? I didn't know that freshwater mussels had pearls.

Sharon: Correct, correct. They can. So, they were using jon boats and these crowfoot boards that were fitted with small, short links, like grappling hooks were attached. And they would drag them across the mud bottom of the clam bed. And they caught on the open shells of the feeding clams and mussels and the clams reacted by closing their shells and then they pulled them up.

Around World War One, the industry shut down because the Japanese cultured pearl industry grew. So, they got all the buttons and pearls they needed from the...

Marie: Oysters.

Sharon: ...oysters over in Japan. *(Laughs)* But then, in 1960s or so, the clamming industry had a revival because they were using – and this is where Mike got involved when he was a lad in the 60s clamming – and those clams or mussels were used to seed the culture oysters in Japan.

Marie: Ah!

Sharon: Because then the pearls would be super clear because they were forming around the grit of another kind of pearlescent ...

Marie: Pearl.

Sharon: Pearl, a very pure pearl. And they'd go for tens of thousands of dollars.

Marie: Oh, wow!

Sharon: Yeah, these perfect pearls. It became a big industry. But then then industry declined again because of overfishing, and changes to the river, and changes to the way pearls are cultured. So, there's no clamming industry now, but it was a huge deal for 20 years and then another decade in the 60s.

Marie: Hump.

Sharon: So, anyway, it was really interesting to talk to Mike about his days of clamming.

Marie: Uh huh.

Sharon: If I may digress into more about mussels, there's about 50 species of mussels in Wisconsin and a healthy mixed population still lives in the rivers of St. Croix, the Mississippi and a few other places. That's where you can find – and I love their names – like fatmuckets, pimplebacks, and monkey faces and heel splitters. So, there are a whole bunch of different mussels. And one place we visited on this trip was the Genoa Fish Hatchery, which I encourage our listeners to go to if they are in the area because they are doing some restoration on some endangered species of mussels there, which I think is really interesting. And they are seeding the Upper Mississippi River and the St. Croix River with some of these baby mussels that they are growing.

Marie: Hump!

Sharon: So, there's still mussels in this state. So, in addition to clamming back in the day, Mike and his dad and granddad also fished a lot, so he's been connected to the river his entire life. He could not imagine a job doing anything else than what he's doing now. And his favorite part is, of course, time out in the boat, going out, away from all his customers. *(Laughs)* Just being there on the boat. He rarely takes help anymore. So, again, the workforce is a little short. It's just him and his boat and the dawn, and he's in his slice of heaven.

Michael: Just being out on the water. It's like a relief, you know? *(Laughs)* It's nice just to get out there. And catching the fish is fun. I enjoy it. That's the enjoyable part of it.

It is in my blood. I was born and raised, and that's what I did as a, hunting, fishing, and trapping. That was my life. I didn't play sports. I was not good in school.

As a kid, my dad, thank God, taught me how to knit. We made all of our own nets. Everything was made. So even the respect outta that and today is making your own net. Setting that net, catching that fish, selling that, the complete circle, I call it. That's pretty important, versus just going, getting a net and setting it.

But yeah, the river is, I mean, as much as I've been involved in it and seen it, it would be hard just to walk away, you know?

Marie: As we get ready to segue into the Fish-o-Licious part of our podcast, let's hear from Michael about his favorite fish to catch and his favorite way to cook it.

Michael: Netting flathead catfish. We fish downriver out of Cassville. It's about 35 miles downriver and we'll trailer down there. And usually as a rule, we'll set Labor Day weekend. And the best month for flathead catfish is October. They feed up really crazy in October. They just eat, eat, eat, indulge themselves. And usually about the end of October, first week in November, they're done. They quit eating. And so, when that water temperature reaches about 38 degrees and it starts to crust over on ice, they're done. They quit.

A flathead only eats live things. It does not eat anything stinky or rotten, and it reflects in the meat. And it's as far as eating, I mean, that's one of the best fish there is to eat. Once you get the red off and get all the red meat off, that's huge. So, I do what's called a select, that's where all the red, all the fat, anything gone and cut up in bite-sized chunks. That's my number one seller. People request that 10 to one.

But I'll take a beer, a light beer so 75% beer, and I'll take a little bit of season salt. Some sweet basil, little rosemary, little garlic and stir that up good. Two hours in the beer, take it out of that and bread it and fry it.

There's two things for frying fish is number one, never ever pre-bread more than one minute ahead. That's huge. The hotter it is, the worse it is. Second, make sure when you drop your fish in the oil, they're sizzling. So many people will take a thermometer and it'll get up to 340, 350, and they'll, okay, it's ready, and then load it down with fish. Well, you've wrecked your fish. I'm religious on using peanut oil, and I'm frying at four and a quarter, so I'm frying hot. It's half the time in the oil, but, and if you don't wanna use beer, milk is just 2% milk is good, or buttermilk is good. But it does make a world of difference to marinate.

Sharon: All right, I know someday we're going to have to fry fish for this podcast, but it's not today.

(Laughter)

We thought about a recipe for fried fish, but it still is hard for me to take a beautiful piece of fish and deep fry it – beer batter it and deep fry it – as is Wisconsin tradition. So, today we’re going to be using a recipe from the Eat Wisconsin Fish website that works for, pretty much any fish. But we’re again using catfish today and, um, it will be a fillet of fish with lime.

Marie: And the fish, as we speak, at this moment, is sitting in a pan in the refrigerator in a bath of milk. So, why don’t we say a little bit about, yeah, why we’re doing the milk?

Sharon: The reason we’re soaking the fish in milk for about 20 minutes is because sometimes catfish comes to the market with a little bit of a mud taste or a fishy flavor that doesn’t set well with some consumers. And so that’s because there’s algae and other things growing in the water. It’s not unhygienic water, it’s just what fresh water has. And so, the taste is a compound called geosmin. They’re produced naturally by microorganisms in fresh water. But if you soak your fish overnight in milk or like for 20 minutes like we’re doing, you can get rid of a lot of that fishy flavor. So, that’s what I tell anybody who is thinking their fish is a little “off” flavored or too fishy, like, “Soak it in milk or vinegar,” you can do that, too, but then you pour the milk away down the sink and then you have some lighter, fresher, perkier tasting fish.

Marie: Okay. Well, let’s go cook our perky fish. *(Laughs)*

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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 cooking.....catfish fillets with lime.

(Sound of chopping)

Sharon: I am chopping the pistachios. And, they’re nice and fresh so they’re jumping.

(Laughter)

Sharon: They’re jumpers.

Marie: The pistachios are going to be a garnish for this recipe and what you need is four fillets. Well, we have three but they’re kinda big. Ah, a half-cup of flour. We’re using almond flour. Some balsamic vinegar, fresh lime juice, cold butter cut into one-inch pieces, some sliced scallions. Oh yeah, we’ll have to do that next. And then the pistachios and some oil.

Sharon: Yes, and I’ve never put nuts on fish before. So, this will be new for me. *(Laughs)* I’ve not made this recipe before.

Marie: So, we’re heating up some peanut oil on the stove top. And, I had to buy a new stove.

Sharon: It’s beautiful!

Marie: Yeah. My 14-year-old oven finally died, and it was going to cost too much to fix it, so I have a new range. But the stove top burners are hotter than what I’m used to, so, I’m still getting used to the different scale of it.

Sharon: It does make a difference. You want your oil to be sizzling so that – I think we said it on a different episode of the Fish Dish – you want it to sizzle if you drop a drop of water in it or if you put a wooden spoon in it. It should have bubbles coming around the wooden spoon to fry it.

Marie: And we got the fish out of the refrigerator and we drained off the milk. I'm about to dredge it in the almond flour and put it in the pan to sauté.

Sound of fish frying.

Sharon: So, while the fish is in the pan, Marie, have you ever eaten catfish before?

Marie: I have. I had a great uncle and aunt who lived on a lake and they pretty much taught me how to fish. My aunt liked eating catfish, my uncle not so much. But he taught me how to skin a catfish.

Sharon: Oooh, how do you do that?

Marie: He had a contraption that you just like hooked the skin to and then you pull, then you pulled it off.

Sharon: Oh, kind of like a burbot.

Marie: Yeah. And I remember I liked it when they cooked it. But, in later years, I tried to cook it myself and I wasn't that impressed with it. Though, maybe I didn't soak it in the milk or something. But, it did not work for me so I'm hoping this will change my mind.

Sharon: It's like the most-farmed fish in the United States and definitely popular in more southern areas. But I think because we live here in Wisconsin, walleye and bass and some of the other fish are considered more of a delicacy. But I like catfish all right. But I can see why people prefer walleye and perch.

Marie: And also while the fish is cooking, I wanted to talk about a study that was done by North Carolina Sea Grant. The name of the newsletter where I found it – it's in their Coastwatch newsletter – it's called "Who's Afraid of New Seafood: Packed with 16 grams of healthy protein per serving, seasoned catfish skin chips (*laughs*) make a tasty treat." Now, we're not doing it because we have fillets, we don't have catfish skin, but you can eat the skin off of catfish. What they did, they did a scientific study with two by two-inch squares of skin and they did a taste test with panels of brave people (*laughs*) and they battered the skin in eggs and flour and then air fried each piece for 12 minutes. Then they seasoned the chips with one of three flavors: lemon pepper, paprika, or barbecue. So, they had two panels of 115 consumers each evaluated the chips and provided feedback on whether they would purchase the product if it became commercially available. And the verdict was . . .

Sharon: Da da da dun... drumroll!

Marie: (*Laughs*) they liked the barbecue and lemon pepper the most. Those were the most promising for consumers to buy this product. Paprika scored the lowest. Consumers responded even more favorably to the catfish skin chips when they knew the product was a source of healthy protein and played a role in reducing food waste and increasing seafood sustainability. It sounds like catfish skin is a thing!

Sharon: Yeah, and I really like the way the fisheries and people who care about the fisheries are developing new ideas for using 100% of the fish. There's actually a project going on called 100% Great

Lakes fish that is being modeled after what they are doing in Iceland to use all parts of the fish. And I think we talked about that on a different episode of the Fish Dish.

Marie: So yeah, farm-raised catfish accounted for 51% of all the aquaculture food fish sales in the United States in 2018. So, wow, it's ah...

Sharon: It's a big industry.

Marie: Yeah.

Sharon: Not here in Wisconsin so much but definitely in the southern states.

Marie: So, maybe we'll see catfish skin chips in the grocery store soon! *(Laughs)*

Sharon: Keep your eyes peeled. *(Laughs)*

Marie: We've taken the fish out of the pan and poured off the oil. And then we've added back to the pan the balsamic vinegar and the lime juice. So, now we're bringing it to a boil.

Sharon: Yep, and then we're going to reduce that a little bit and then add the butter one chunk at a time and whisk it in there.

Marie: You can whisk. And the nice thing about having the vinegar and lime juice in the pan is that it cleans the bottom of the pan for you, like stuff that's stuck onto the bottom. All that good, crispy fish gets cleaned off when you do this.

So, the sauce is brown and Sharon was just saying it kinda looks like a mushroom sauce. So, what do we do after the butter's all melted?

Sharon: We assemble our masterpiece.

Marie: Ah, okay.

Sharon: We will do an assembly. For pictures of this creation, please visit us at eatwisconsinfish.org or at the Wisconsin Sea Grant website under The Fish Dish podcast.

Marie: The episodes extras page.

Sharon: Yes. Bon appetit! I love the sauce.

Marie: Well, yeah, with all that butter . . .

Sharon: *(Laughs)* Lime and butter.

Marie: The lime kinda comes out first but then with the nuts . . .

Sharon: Yeah.

Marie: It's like salty sour but ...

Sharon: It's very tasty.

Marie: Yeah, it tastes almost like a red meat.

Sharon: Yeah, yeah.

Marie: It made the fish taste like a red meat not like a fish. *(Laughs)*

Sharon: So that fishy flavor was taken away by, not only the sauce but by the little bath it had. The milk bath.

Marie: Yeah, I'm putting some more pistachios on mine. But the nuts give it a nice texture. So, it's not all mouth mealy.

Sharon: Right. No, I agree with you there. Like the mouth feel is good for this, too. It has a little bit of a crunch to it. I'm going to have to try putting nuts on more of my meals.

Marie: *Laughs*

Sharon: I add nuts to salads sometimes. Do you?

Marie: Yeah.

Sharon: I think I'll have to try this again. Put it on my list of dinners to make.

Marie: Well, this experience sure changed my mind about eating catfish. Another thing I wanted to mention is that although the catfish skin taste study appeared in a North Carolina Sea Grant publication, the organizations that actually performed it were Louisiana State University and the U.S. Department of Agriculture's Southern Regional Research Center.

Music from Zenith City by Woodblind

Marie: That's it for this episode of The Fish Dish. Thanks goes to Mike Valley and to Bonnie Willison with Sea Grant for her behind-the-scenes work on this episode. That was her asking Mike how often he goes out in his boat. Thank you for listening!