

Fish + Game Changers

Season One



Episode 1: Netting fish and getting the family outside

Katie joins fisheries biologist Liz Thorndike for a trap netting session and a conversation about Liz's important work as a fisheries biologist as well as a broader conversation about spending time outdoors as a family—what it meant to her growing up, and how she's keeping the tradition alive with her own kids.

Katie Yates:

Every day Maine's the Department of Inland Fisheries and Wildlife's biologist, educators, game wardens and other staff members report to some widespread and wild locations spanning means fields, forests, lakes and labs in trucks, boats, on snowmobiles, and ATVs. I'm Katie Yates and in season one of Fish + Game Changers, I'm heading out with MDFIW's female staff members who are changing the face of conservation. Learn what they do, why they love it, and what drives them to apply their time and talent to the Maine outdoors. In this episode, I jump in the truck with fisheries biologist Liz Thorndike to check trap nets at Rangeley Lake and Quimby Pond. Trap nets are one of the many ways fisheries biologists study the health of trout and salmon.

Liz Thorndike:

"Oh, are you Game Warden?" No. "So, what do you do?" I'm a fisheries biologist. And they say, "Oh, do you stock the fish?" No. So yeah, then they look at you like well what do you do?

Katie:

While Liz goes about her daily tasks in the summer and the fall, she often encounters members of the public curious about what she's doing. Sometimes they see the green uniform and think she's a game warden. But Liz is a fisheries biologist, and I feel lucky to join her on this crisp fall day in her rattling truck on our way to the first trap net location. She gets me up to speed on what exactly trap netting is and why fisheries biologists do it.

Liz:

So we're gonna go check trap nets at Rangeley Lake and Quimby Pond. So, in the fall when the salmon and trout are spawning, they usually congregate in certain locations. So at Rangeley Lake we target the outlet because the salmon we stock or outlet spawners, and it's conveniently located next to a boat launch.

Katie:

Standing on the edge of Rangeley Lake alongside a busy road, I watch as Liz and another fisheries biologist push off from the boat launch and head out in the water to where a trap net is suspended. The fall foliage is reflected in the lake. A loon dunks in and out of the shallows. The boat returns with a plastic tote full of fish.

Liz:

So we have these nets are called trap nets. So when the salmon and trout are trying to locate a place to spawn, they typically will work shorelines and so they'll hit this lead and they'll try to swim out and around it and they'll actually get funneled into the suspended mesh box. And then we'll go paddle out or boat out.

Katie:

Working in batches of about six, they add a mild sedative to the water so the fish relax. They weigh them and measure their length.

Liz:

We record the clip.

Katie:

Record the clip?

Liz:

Record the clip. Sometimes a hatchery fish will mark a fin and every year there's a different thing that gets clipped. If the fish came from a hatchery, the hatchery will mark a fish by clipping a fin. This is one of the mark fins I was talking about. Adipose. Adipose female, no hooking injuries. We've physically removed that fan and that tells us this fish is two years old or three years old.

Katie:

But if the fish is wild, biologists take a knife and gently scrape scale samples to gauge the fish's age.

Liz:

We actually kind of take a knife and just scrape the scales off.

Katie:

Then they release them back into the water where they wake up within minutes and swim safely away. For pictures of this process and the tools the biologists use, visit mefishwildlife.com/changers. But I ask Liz, why collect all of this information?

Liz:

This is how we get our data to determine if our stocking is off. And also we get a good look at the health of the fish. You know, if you get a length and a weight, we can get what we call a condition factor. And so there's kind of a range we like to see the condition factor in for both our salmon and trout. Every water we managed differently depending on access or the resource there. But these waters we do trap net. And it's an easy way to handle a lot of fish. It's a non-lethal method which is also really good, too.

Katie:

I know Liz pretty well. I've gone trap netting with her before and we've spent some time together at events. If you can tell by our accents, we're both from the same part of upstate New York. But I'm enjoying this opportunity, the long rambling drive to explore why and how she ended up at the department. What is your job title?

Liz:

I'm a fisheries biologist.

Katie:

That's it?

Liz:

Yeah. I think so. I started seasonally. And I did that throughout college. I got a degree in fisheries and wildlife sciences concentrated in fisheries.

Katie:

Why?

Liz:

Ah, kind of funny. So growing up my family's huge into hunting and fishing. Our world revolved around it. You know, camping, hunting, fishing, trapping, when we would go on family vacations. My mom would pick one fish species and that's what our family vacation would revolve around is fishing for this fish. So we'd go out west, and she'd want to catch cutthroat trout. And so our whole family vacation would revolve around catching cutthroat trout, or the next time it was grayling. You know, we go down to Key West and she'd want to, you know, target, like blacktip reef sharks or something. And I remember growing up, we're on Yellowstone like cutthroat fishing. And we can see that Yellowstone Lake is huge, and we could see this storm coming. And all of a sudden, it was like, wow, the storms coming really fast. And so we, but we were catching cutthroat, like 18 inch cutthroat, this was before the lake trout got into Yellowstone. And we're just catching one after another. And so we really didn't want to stop fishing and then all of a sudden, my dad's like, we gotta go. We have to travel all the way cross back across the lake. And I remember the boat was going as fast as we can. And I'm sitting in the stern looking backwards at the storm and there's it was like the storm was chasing us down. And growing up in that, like being an adult now and having kids, I'm just like, wow, that was

Katie:

your parents are dedicated

Liz:

When your vacation revolves around that, you know, your real love for it. And so it was pretty simple. I feel like I was one of the lucky people. I knew what I wanted to be.

Katie:

When people would say "What you want to be when you grow up?" You'd be like, "I want to be a fisheries biologist."?

Liz:

Well, originally, this is kind of funny. Growing up in New York, I was a big Yankees fan. I still have this memory of my grandfather introducing me to somebody and I was really I was fairly little six or seven and someone's like, "what do you want to be when you grow up?" And I was like, "I want to be Don Mattingly." I hadn't really fine-tuned it. I didn't know if I want to be fisheries or wildlife. And I so love hunting and just getting out in the woods. Whether you're successful or not, even when I take my kids out, it's just as long as I'm outside, I'm happy but in the end I chose fisheries I figured I just being on the water. I love it.

Katie:

Does it feel like you're on vacation?

Liz:

So it's funny people always say like, Oh, you're so lucky and I am My office is where people go to vacation. I mean, right now we're heading to Rangeley Lake. People travel from all over to vacation at Rangeley lake... This is my office for the day.

Katie:

Liz is an avid outdoors person. She took our Commissioner Judy Camuso out for her first successful turkey hunt after all, for some, like the commissioner hunting and fishing are experienced for the first time later in life. But for Liz, she was born into this and it's something she's passing on to her kids. You'll hear this a lot from our staff and upcoming episodes. The outdoors is their happy place. And they're passionate about sharing it and preserving it for the future.

Liz:

Generations that go back and my family that that fished and hunted and recreated outdoors--

Katie:

And it's something that you're passing on to your kids?

Liz:

So definitely. Both are into the fishing. Although this year I was teaching my son who's nine, how to fly fish and he's played with it a little bit, but he's really getting strong. He's really kind of getting the motions down and someone took a picture of him in the back of the canoe, and I'm in the middle of the canoe hunkered down behind him, like trying to avoid being snagged by the fly by it was just, it was one of those moments I look back and always remember him like learning how to fly fish and being right behind him. You know, helping him out. It was really fun. It's just so much fun. Watching my daughter. She could take or leave fishing, she's really more obsessed with just paddling the canoe, which but the second a fish gets in the boat, she's in heaven. So

as long as they're enjoying it, then I'm happy. It's a priority to me. It's something I love. Hopefully fingers crossed that them seeing my passion, you know will become their passion. They don't have to do it. But I think it's important that they see me being so passionate about something and making time for it. It is easy to just go home and sit on the couch and relax and I do feel like doing that some days and some days I do but you know, it never fails if I'm tired and I'm like oh, I really should go out there and check that game camera and it's like, "Come on kids. Let's go!" You know, the second you get in the woods, you start breathing the fresh air and the kids are running around. It feels right. Where I grew up in New York, turkey hunting was very popular. There's a lot of farm fields. So turkey hunting and deer hunting I think were what I grew up doing most. Turkey hunting is definitely addicting. Any hunt where you can go and the animals are responsive and interactive. That's pretty fun. My son is younger and he's starting to get into hunting. Taking my son out he has yet to actually shoot a bird. But I've taken him on so many hunts where we've had birds come in gobbling, and just watching him physically just shake with excitement and adrenaline is just the best thing.

Katie:

If you've never been turkey hunting, it usually involves waking up very early. And sitting very still, for a very long time. Hunters will use some call to mimic a hen or Tom Turkey in an attempt to lure a bird into range. I went turkey hunting for the first time last spring and it is fun. Having a full conversation with a bird is crazy and a different way to interact with nature. The trick is you have to stay extremely still because turkeys have awesome eyesight.

Liz:

So one time we had this bird... So he was sitting kind of in between my legs and I was kind of help helping keeping him sturdy if he had to shoot, you know? Just keeping them together. And we have this one of the biggest toms I probably ever called in just full strut all by himself. It's just like every turkey hunters dream and here he comes. It's like I was pulling them in on a string. I call, he'd gobble, strut, spin around. He was doing everything. So it's like this is perfect. All of a sudden my son starts like, moving his his butt around and he's just like kind of fidgeting and I'm like whispering, "Don't move, don't move!" He, so he just keeps doing it. Then finally he fidgeted so much the gun kind of fell off his knee and he picked it back up again. So any turkey hunter knows that's like, awful. That's like the last thing you want to happen because turkeys have such great eyesight. So immediately the bird drops strut and just took off. I said, I was like, "Oh, you know, you know that was okay. What happened?" He's like, "I don't know. I just got so excited."

So there is a lot of repetition but in some ways it's not. So you're usually going to different waters which is always nice, different change of scenery, different species you're working with, you know. It's spawning season, it's fall, and it's something you look forward to, and then by the end of that, you know, then by the time, you know, it's starting to feel repetitive or you know, you just want to move on to something else. It's winter, and then you're doing winter creel survey. Then you're starting to get over that, you're looking forward to spring, and smelt are running. And then it's, you know, summer, and you're in Maine, and it's awesome and you can hike into your remote ponds. So, it is seasonal. So that is a big perk. I don't really know how I could be any luckier I mean, sometimes Sure. It's, it's raining and blowing, you know? 15 plus miles an hour. But I'm still outside. I love it. I think the most gratifying thing is, you know, getting to a body of water and seeing that your stocking or your regulation change had the intended effect. But when you hear back from

a user, whether it's a kid or an adult that went and used the resource that you've been managing, and they had a really good experience... Hearing back from them, I think it's the most rewarding parts of the job.

Katie:

So like hearing from an angler who went out and was successful? Do you hear from them often?

Liz:

You do. A lot of times just kind of impromptu, you'll run into somebody. I mean, it's rare if somebody picks up the phone or writes a letter or anything. It's really, you run into somebody, and they'll just start talking about like, Oh, geez, they'll tell you their stories. I'm like "oh, well, I'm one of the fisheries biologists there. I manage that water," then you know, they start to praise you, and thank you for the work you do. That's really rewarding.

Katie:

For more information about this series, upcoming episodes, and fishing in Maine, visit mefishwildlife.com/changers. Next week, I'll sit down with a cartographer as she shares her journey from her family's 300 acre farm to her dream job in Maine.