

## UWisconsin Sea Grant | People-and-their-pets.mp3

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**BONNIE** Did you all have goldfish as a kid?

**WILLISON:**

**BEN** I did. I did have a goldfish. It didn't live very long though. I didn't do a very good job of

**MARTIN:** taking care of it.

**ROB** How long did you lives?

**MOONEY:**

**BEN** Oh I don't even remember. I just remember-- I think I was six or seven. Whenever I had

**MARTIN:** goldfish.

**ROB** OK. Yeah, I definitely got one from a fair and I think it lasted like a week. I don't know if I

**MOONEY:** was just bad at taking care of fish. But--

**BEN** I think I got from the fair to, in one of the plastic bags.

**MARTIN:**

**ROB** Yeah, yeah, yeah.

**MOONEY:**

**BONNIE** Here you are, finishing up a PhD where you're studying fish.

**WILLISON:**

**BEN** Yep.

**MARTIN:**

**ROB** We do have live fish in the lab right now. They're surviving better than my first goldfish.

**MOONEY:**

**SYDNEY** I'm Sydney Widell.

**WIDELL:**

**BONNIE** And I'm Bonnie Willison.

**WILLISON:**

**SYDNEY** And you're listening to *Introduced*.

**WIDELL:**

**BONNIE** Hi Sydney.

**WILLISON:**

**SYDNEY** Hi Bonnie.

**WIDELL:**

**BONNIE** So what we just heard was Ben Martin and Rob Mooney. They're PhD students at UW

**WILLISON:** Madison. Despite not being able to take care of goldfish really well, they're studying fish now, as students.

Ben is studying the things that disrupt the food web in rivers and lakes. And Rob is studying how our use of the land affects streams and rivers by Lake Michigan. So they co-taught the Ecology of Fishes lab at UW Madison last spring.

So in the class, they're teaching people-- they're teaching their students how to identify fish. So at the end, the students know how to identify 70 of Wisconsin's native fish.

**SYDNEY** That's so many fish.

**WIDELL:**

**BONNIE** Right? So they teach students how to identify the fish, but they also-- You can use the

**WILLISON:** structures of a fish to tell how it lives. So you can look at it and by knowing what its tail and what its fin looks like, you can kind of tell where it lives. If it lives in the bottom or the middle of the lake, and what it eats.

So that's all things that they're teaching their students. And they do all that in the classroom, but then at the end of the class, they go on a field trip. And they said that's really great, because it allows students to actually get out there and see something that's different than a textbook fish.

So they go and they usually go to a Creek called, Badger Mill Creek.

**SYDNEY** Where's that?

**WIDELL:**

**BONNIE** It's outside of Madison. And the students put on these backpack electro-fishers which--

**WILLISON:**

**SYDNEY** Yeah, Bonnie. I've seen those happen. It's crazy. I was mad jealous.

**WIDELL:**

I had some friends in that class last semester and they were showing me what that was like. And I was insanely jealous. It looked really crazy.

**BONNIE** Yeah. I've never worn a backpack that like is capable of shocking things before. But it  
**WILLISON:** seems kind of powerful, I guess.

**SYDNEY** Yeah. But also scary, because you're in the water. But you're also shooting this current  
**WIDELL:** into the water.

**BONNIE** Yeah. Like

**WILLISON:**

**SYDNEY** I would be so afraid of getting electrocuted.

**WIDELL:**

**BONNIE** Yeah, yeah. I was confused as to how it's not shocking humans. But apparently you wear  
**WILLISON:** waders, like rubber stuff. And so it doesn't shock you.

So you go around and you're shocking the stream and it temporarily stuns the fish. And so then the students are bringing them up and measuring them, seeing what they're eating, seeing if they can identify them. I asked Ben and Rob if they ever get fish that they wouldn't expect to be there.

And they said, they do all the time. And Ben said that he feels like doing a fish survey is like opening up baseball cards. Like you never know you're going to find, but that also makes it interesting. That makes it fun.

**SYDNEY** Oh, I love that.

**WIDELL:**

**BONNIE** Yeah.

**WILLISON:**

**SYDNEY** I feel like Ben was into baseball cards when he was little. I got that vibe from him. In the  
**WIDELL:** best way possible.

**BONNIE** So I actually had Ben and Rob in, because I wanted to hear about a certain field trip that **WILLISON:** they went on in the spring of 2019. And where their class found a mystery fish. Again, they went to Badger Mill Creek near Madison and Rob starts us off.

**ROB** Yeah. So we went out there with all the students. Everybody got separated into the groups **MOONEY:** and we were going through shocking the stream, getting lots of brown trout, lots of white suckers, some sculpin, some smaller minnows. And

Then all of a sudden we heard some people not being sure what the fish was. And we went over and we looked at it and it was the biggest goldfish that I had ever seen. Because, everybody's used to seeing goldfish that are two to three inches in length. But this fish in particular, I think it was 12 to 13 inches, and it was really round and it was a pretty ugly looking fish.

And so it took us a little bit of looking at it. And then once we figured out what it was, then we had students try to identify it. And so then they were able to go through the key and identify it as a massive goldfish, which was a pretty interesting find in Badger Mill Creek, after getting trout and suckers. It's just something odd to find.

**BEN** I thought it was a carp at first. Obviously, that's the first thing you would think it is. But **MARTIN:** when you look closer, you notice it doesn't have barbels, which is the key thing. And so once we noticed that, it was a funny looking carp at first to us and we knew something was up.

**ROB** Yep. Yeah and it's kind of funny. The year before Ben and I went out and found the **MOONEY:** goldfish, I was out teaching the year before with the other TA. And we shocked up what we think is the same goldfish. And so we shocked it up the year prior and we were looking at it and we thought it was a goldfish.

And then we ended up releasing it, because we didn't have any of the necessary equipment to properly euthanize the fish. And so we just put it back into the stream and didn't think anything of it. And then the next year Ben and I found what we think is the same goldfish.

**BONNIE** Why do you think it was the same one? Did it have like--  
**WILLISON:**

**ROB** Yeah. So the caudal fin, the tail fin, it's missing the top lobe. And so it's missing half of the  
**MOONEY:** caudal fin. And I'm pretty sure the goldfish that we found the year prior had the exact same tail. And so we think it was the exact same fish that's been in the same stretch of Badger Mill Creek for at least a couple of years. In captivity, they're bred to have these different colors and be nice and gold, but once they get released into the wild, they start to take on their more natural form, which is this kind of dingy, brown, goldfish color, but not that vibrant orange that I think people are used to seeing goldfish have.

**BONNIE** So how do you think it got there?

**WILLISON:**

**ROB** Like most goldfish that you find in the streams and lakes, it was probably a pet at one  
**MOONEY:** time and it probably got released into some body of water. Whether it's a pond by Badger Mill Creek that flooded and drained into the creek or somebody just released it straight into the creek. So that's usually how most goldfish invasions start.

**BONNIE** So yeah, the mystery fish was a goldfish.

**WILLISON:**

**SYDNEY** It's crazy.

**WIDELL:**

**BONNIE** Right out in Badger Mill Creek.

**WILLISON:**

**SYDNEY** Plot twist.

**WIDELL:**

**BONNIE** So Rob was talking about that like euthanizing the goldfish. And that's because goldfish  
**WILLISON:** are actually carp and carp are invasive.

**SYDNEY** What happens when goldfish get out?

**WIDELL:**

**BONNIE** In the wild they eat algae, small invertebrates, fish eggs and they disturb sediment and  
**WILLISON:** nutrients that trigger algae to grow.

**SYDNEY** Oh, whoa. They are a force of destruction.

**WIDELL:**

**BONNIE** They are. They're a force of destruction. And then they also can carry diseases that--

**WILLISON:**

**SYDNEY** Whoa.

**WIDELL:**

**BONNIE** --that you wouldn't think. And also, did you know that they can interbreed with some

**WILLISON:** species of wild carp? So there it can be like goldfish carp hybrids out there-- hybrids.

Goldfish outproduce most freshwater fish. So the females like lay up to 40,000 eggs per year, which--

**SYDNEY** I can't even fathom.

**WIDELL:**

**BONNIE** --is a ton of eggs. I started doing a deep dive on goldfish as I was researching this. Do you

**WILLISON:** want to hear some goldfish facts?

**SYDNEY** I would love to hear some goldfish facts.

**WIDELL:**

**BONNIE** OK. So goldfish were bred from carp that is native to China.

**WILLISON:**

**SYDNEY** OK.

**WIDELL:**

**BONNIE** Goldfish were initially a fad of the wealthy, more elite people in China. Those were the

**WILLISON:** people who had money and time to make ponds and gardens, and start collecting and breeding these colorful fish. They are thought to be the first foreign fish introduced into North America, which I thought was really interesting. Like the first fish that we brought over was like a pet that we wanted to display.

And when they got here, they actually spread, because there was a new US commission on fisheries in the late 1800s. And they gave out goldfish as a publicity stunt. So in the late 1800s, they gave out like 20,000 goldfish a year to people that live in DC, to advertise for their new commission. That's how they became quite widespread here.

**SYDNEY** Oh, that's crazy. Like it was someone's job to go around and hand out goldfish. Someone's  
**WIDELL:** job to sit around and breed goldfish to be passed out.

**BONNIE** Yeah.

**WILLISON:**

**SYDNEY** Crazy.

**WIDELL:**

**BONNIE** Yeah. And I wonder if that has anything to do with how they're given out at fairs still. You

**WILLISON:** know?

**SYDNEY** Whoa.

**WIDELL:**

**BONNIE** So we keep goldfish in bowls, but it's kind of funny that we do, because they're actually

**WILLISON:** really smart, surprisingly smart. I want to show you this video of a goldfish doing a trick.

- Move over

David

Beckham,

Common it

is lethal in

front of the

goal.

**SYDNEY** What?

**WIDELL:**

**BONNIE** I'm actually going to mute this video before I show it to you.

**WILLISON:**

**SYDNEY** Oh my God. That's crazy. He just scored a goal? I don't understand, how is--

**WIDELL:**

**BONNIE** They apparently can train goldfish to nose a soccer ball into a tiny underwater net, which I

**WILLISON:** don't know why you wouldn't want a fish to do that. But that's apparently something that people do. They're actually used in a lot of experiments, because--

So, for one, they're particularly susceptible to alcohol. So they can be used in like physiology experiments.

**SYDNEY** Like more or less susceptible than people? Probably more, right? Because it's--

**WIDELL:**

**BONNIE** I don't know. Maybe equally. Because I don't know how normal fish respond to alcohol.

**WILLISON:**

**SYDNEY** OK.

**WIDELL:**

**BONNIE** But, yeah. I have no business saying that, actually. I don't know. They have this special

**WILLISON:** thing where they can regenerate their optic nerve, which is something that like not many things can do. And so they're used in studying vision.

They have pretty good memory. So they're used in psychology studies. They're sensitive to light, like their skin, and so we can use them to research skin cancer.

**SYDNEY** Wild.

**WIDELL:**

**BONNIE** And so I was reading through scientific journals, and a few studies of goldfish, and the

**WILLISON:** history goldfish and everything. And I kept coming across them saying these are monstrosities.

**SYDNEY** That's kind of an intense word.

**WIDELL:**

**BONNIE** That's exactly what I thought. It sounds very monstrous, like threatening. Yeah. So I kept

**WILLISON:** seeing that they were called monstrosities and I wasn't sure what that meant in science.

**SYDNEY** Yeah, is that a scientific word that people used to describe fish?

**WIDELL:**

**BONNIE** So I asked John Lyons, who's the curator of fishes at the University of Wisconsin

**WILLISON:** Zoological Museum. I asked him about that.

**JOHN** Well, that's because goldfish have been bred for thousands of years. And they've been



**LYONS:** bred to have these really bizarre, bulging eyes and huge tumors on the head, and really elongated fins. And so in the sense, they have these physical characteristics that make it difficult for them to survive, even in a tank, much less in the wild.

**SYDNEY** That's crazy.

**WIDELL:**

**BONNIE** Yeah. So people have bred them so selectively and basically contorted them into like all **WILLISON:** these shapes and things that a fish would normally not have.

**SYDNEY** Do you have any pictures of normal goldfish?

**WIDELL:**

**BONNIE** Yeah. So this is the common one.

**WILLISON:**

**SYDNEY** OK.

**WIDELL:**

**BONNIE** That you make swim in a fish tank.

**WILLISON:**

**SYDNEY** And that's what I'm expecting. Just pretty gold, small. It looks really innocent, I think.

**WIDELL:**

**BONNIE** And then as you like get into more niche goldfish, there are ones with really billowing

**WILLISON:** tails, ones that are like spotted in certain ways.

**SYDNEY** That's interesting. This goldfish has a body but then like a huge-- is that his head? What is

**WIDELL:** that?

**BONNIE** Yeah.

**WILLISON:**

**SYDNEY** It's like this huge bump.

**WIDELL:**

**BONNIE** He's got like a humpback thing.

**WILLISON:**

**SYDNEY** Yeah, whoa.

**WIDELL:**

**BONNIE** And then they start to get eye stuff going on.

**WILLISON:**

**SYDNEY** That's so extreme. That goldfish's eyes are on the top of its head. I feel like that goldfish

**WIDELL:** is uncomfortable. Like it you can't see. That's crazy. Like a human did that.

**BONNIE** Yeah it's funny that people--

**WILLISON:**

**SYDNEY** Weird stuff up there.

**WIDELL:**

**BONNIE** It's funny what people like to have in a pet. You know?

**WILLISON:**

**SYDNEY** Yeah. That seems-- I think that would be frightening to me actually, if that was in my

**WIDELL:** home.

**BONNIE** Anyway, OK. So tens of thousands of goldfish are released in Wisconsin every year.

**WILLISON:**

**SYDNEY** What do you mean, released?

**WIDELL:**

**BONNIE** They're just let out into a nearby pond, or lake or something. And that number was crazy

**WILLISON:** to me. Tens of thousands of people have goldfish that they then, I guess, don't want anymore. And so they release it instead of flushing it or something.

And so I was curious if there's any goldfish infestations around here. If there is an infestation, they're usually concentrated in urban areas. Because that's where the most people that have them as pets. So when I was talking to John Lyons, he said that in Milwaukee, in like retainer pond sometimes they have goldfish infestations.

Or in Madison, he's been riding his bike on trails and seeing-- He just looks down into a storm water detention pond. He sees a goldfish in there. So I got to be more observant.

**SYDNEY** Yeah. Also though, he just seems like someone who would notice.

**WIDELL:**

**BONNIE** Yeah.

**WILLISON:**

**SYDNEY** I think most people are not noticing.

**WIDELL:**

**BONNIE** So there's a lot of newspaper clips that I've been seeing of different areas where-- it

**WILLISON:** sounds like this is more of a problem. Do you want to read through some of these headlines?

**SYDNEY** Oh my gosh. Giant goldfish are breeding in Lake Tahoe. This is from 2013, but I'd

**WIDELL:** imagine-- Oh my gosh. It's so big.

Thousands of fat goldfish take over a lake. That's a really crazy picture. That's just like swimming with goldfish.

**BONNIE** And that one's from Boulder, Colorado.

**WILLISON:**

**SYDNEY** Never seen so many goldfish. Loss Lake closed for fishing due to goldfish invasion.

**WIDELL:** Where's Loss Lake?

**BONNIE** That one is from Canada.

**WILLISON:**

**SYDNEY** OK. Wow, they got North. They're kind of far North. That's super wild.

**WIDELL:**

**BONNIE** Although, yeah. They can become a real problem. When I was talking to Rob and Ben,

**WILLISON:** they didn't seem that concerned about it. And so I asked, does a fish like the one that they found in the creek have a negative impact?

**ROB** Yeah so the definition of invasive is whether or not it has a negative impact on its

**MOONEY:** environment.

**BONNIE** So say there is a fish in Lake Mendota, that's the lake that borders UW Madison. And the

**WILLISON:** fish isn't reproducing, it's not competing with other fish. It's just sort of hanging out in the lake. And yeah, it's not native, but it's not having a noticeable negative impact. So we'd call it non-native.

**ROB** And that happens a fair bit more often than most people think. Non-native species get  
**MOONEY:** into a lake like Lake Mendota constantly. But it's only every few that actually come to be invasive and actually are successful.

Some of them, they can't withstand the Wisconsin cold weather. So if a species gets in there in June, it might survive until October, but then that fish dies. And then it would be a non-native for that three or four month period.

**BONNIE** What should you do with a goldfish if you find one, then, out in the wild?

**WILLISON:**

**ROB** Probably remove it from the system. With many invasive species, or non-native at least, if  
**MOONEY:** you're able to catch a goldfish while it's the only one in there, if you're able to remove that, you could prevent a invasion. But yeah, I would definitely say remove it from the system.

**SYDNEY** Remove it from the system. That sounds like a euphemism.

**WIDELL:**

**BONNIE** Yeah.

**WILLISON:**

**SYDNEY** Yeah. Awe, poor goldfish.

**WIDELL:**

**BONNIE** So there are a lot of things going against a goldfish that would be let go. It's color, for  
**WILLISON:** one. They are always a very bright color, so they're easy to see by other fish or even a kid with a net. If you have one goldfish released, you have to have another one to mate with it in order for it to become a really big population.

And so the odds of that in some of these rivers and streams isn't that great. The weather around here gets really cold in the winter and they're not always able to survive that. They would definitely do better in a warmer climate.

And then predators. There's a lot of predators in lakes around here in Wisconsin, like bigger sport fish. But there are a lot of things going for goldfish and that's how they're able to become invasive sometimes.

So they're extremely hearty. They can survive a really wide range of temperatures compared to usual fish. they can survive high turbidity, so a lot of murkiness. Apparently they're the only fish that survives in shallow lakes that don't have any oxygen during some parts of the years or season.

**SYDNEY** What?

**WIDELL:**

**BONNIE** So they're just out there chilling and living their life in these puddles that don't have any

**WILLISON:** oxygen.

**SYDNEY** Just like, I'm not going to breathe for another four months.

**WIDELL:**

**BONNIE** They are more tolerant than any other fish to heavy metals and certain insecticides. So

**WILLISON:** we're dumping chemicals in and they're like, that's fine. And then they're one of the most resistant fish to changes in the environment and pollution.

So as the environment changes, even in polluted lakes, they're doing fine. And I thought that was kind of crazy, because in creating the perfect pet, we've basically created the perfect fish to survive climate change. Because we've been breeding this fish for thousands of years. And now, it's the only fish that can survive in all these really bad conditions that other fish can't survive in.

**SYDNEY** The fish for the future.

**WIDELL:**

**BONNIE** So a lot of people have good intentions for releasing fish. It feels bad to flush a fish or

**WILLISON:** some other way of-- If you can't take care of it, killing it, basically. But a lot of people-- and I think even when I was a kid we would do this. Oh, I'd like to give him a new life, swimming out in the lake. So a lot of people--

**SYDNEY** You're free now, little friend.

**WIDELL:**

**BONNIE** Did you ever feel like that?

**WILLISON:**

**SYDNEY** No, but we never had goldfish. We did-- all the alewives would wash up on Lake Michigan

**WIDELL:** and my sister and I would go down and think we were saving their lives, when in reality, they were just dying. They were washing up because they were dying.

But we would put them in buckets and then take them home and keep them. And then they would all die within 24 hours. And we always thought we'd killed them, but I think they were just like--

**BONNIE** Not healthy.

**WILLISON:**

**SYDNEY** --their time was coming anyway.

**WIDELL:**

**BONNIE** So you didn't let of a fish go, you took them?

**WILLISON:**

**SYDNEY** We took the fish in. We didn't let the fish go.

**WIDELL:**

**BONNIE** So when thousands of people are doing this though, it can become-- that's when we get

**WILLISON:** feral goldfish invasions.

**SYDNEY** Feral goldfish.

**WIDELL:**

**BONNIE** And I did see a headline that said, feral goldfish invasion. And it just reminded me of feral

**WILLISON:** pigs or feral hogs.

**SYDNEY** Oh, yeah. I can't take it seriously. Which is probably about.

**WIDELL:**

**BONNIE** Yeah. Goldfish aren't the only pet that people release, though. After the break, I'll tell you

**WILLISON:** about all of the other strange pets that are introduced into the outdoors.

**BONNIE** So one thing that I came across was something called, pet amnesty days or pet surrender events. It really means days where you can go to an event and you can take an animal, like a pet that you have that you can't care for anymore and that you don't want, and you can give it to that organization. And it's a responsible way to get rid of your pet.

So at these events it's like, no questions asked. You just bring up your turtle and you say goodbye. Which is kind of wholesome, but kind of sad too.

**SYDNEY** Yeah. Bitter sweet.

**WIDELL:**

**BONNIE** There are these events all over the country. There's a national organization called **WILLISON:** Habitattitude and they tried to do education and stuff around responsible pet ownership. And then there's little pet rescues and aquarium societies that will host these things too.

And I think a lot of people ask, well, if you wanted to get rid of your snake, why don't you just give it to a zoo? And the people I talked to said, zoos-- they just don't have the capacity to just be taking in everyone's pets. I think they're very specific about the animals that they have at the zoo.

And the same is true for humane societies. They don't always have the capacity to take in these other animals. And then pet stores, you might think, oh, I could just bring my fish or something back to the pet store, but their shelves are full of things that they're trying to sell. So they usually aren't able to take back a lot of stuff.

So I talked to Jamie Kozloski. She's the founder of Kingdom Animalia Exotic Animal Rescue. It's been her dream since she was a teenager to start this rescue where she takes in unwanted animals. And so it's a small nonprofit near Green Bay, Wisconsin. She's actually fundraising and trying to build a new, bigger facility now. She takes in exotic animals and that means anything non-native. She has 60 or 70 animals at any given time. They take in reptiles, amphibians, birds, small animal and vertebrates, things like snakes or turtles, that are kind of common as a pet. And then more unusual animals, like foxes.

**SYDNEY** What? Wait. Sorry, where is she running this? Is like a storefront or is this like a garage?

**WIDELL:**

**BONNIE** Yeah. It's just a building and she has it outfitted with the proper cages and all these **WILLISON:** animals.

**SYDNEY** Whoa.

**WIDELL:**

**BONNIE** She's located kind of far from Green Bay, and she's looking to get closer to the city so  
**WILLISON:** that she can do more events and stuff like that.

**SYDNEY** She's just out in the woods with her snakes.

**WIDELL:**

**BONNIE** Yeah. People might think they want a fox and then--

**WILLISON:**

**SYDNEY** Can you have a fox?

**WIDELL:**

**BONNIE** I know, right?

**WILLISON:**

**SYDNEY** Did someone surrender their fox to her?

**WIDELL:**

**BONNIE** No. She's one of the only-- the only rescues in Wisconsin that takes in domestic raised  
**WILLISON:** foxes. So it's actually more common than you would think. she has five of them that  
people have surrendered or that they have released.

**SYDNEY** Oh my gosh.

**WIDELL:**

**BONNIE** I know, right? And I was also like, I didn't know it was legal to have a fox. But--

**WILLISON:**

**SYDNEY** I would have never assumed.

**WIDELL:**

**BONNIE** --it is here. So things like foxes, parrots, boa constrictors.

**WILLISON:**

**SYDNEY** And all of those animals can just co-habitate together?



**WIDELL:**

**BONNIE** She's got very specific living areas for these. For the foxes, for all of them, you have to

**WILLISON:** have special enclosures and everything for the foxes. She's got this really big like outdoor fenced in area that they can run around and stuff like that. Yeah. And then she's got things that I had never heard of before like, a kinkajou. Have you heard of that?

**SYDNEY** Is that like--

**WIDELL:**

**BONNIE** You look like you're racking your brain.

**WILLISON:**

**SYDNEY** I mean. And all I'm getting is like Pikachu. And also, that sounds like one of the animals

**WIDELL:** that would have been inside your Tamagotchi or something. I don't know.

**BONNIE** It is a tropical animal, which makes sense that we, being Mid-westerners, have never seen

**WILLISON:** one before. But this is what they look like.

**SYDNEY** Oh, that's so cute.

**WIDELL:**

**BONNIE** Can you describe it?

**WILLISON:**

**SYDNEY** Yeah. It kind of looks like a lemur, but also like a cat, but also, it almost has human hands.

**WIDELL:** I don't know. And a super long tail, kind of squirrel like. There's a lot going on.

**BONNIE** It's safe to say these are not animals that you usually find in Wisconsin.

**WILLISON:**

**SYDNEY** Is that legal to have them in Wisconsin?

**WIDELL:**

**BONNIE** I don't know. There are breeders, apparently, that will breed tropical animals like this,

**WILLISON:** that some people might pay money to get. And so it's kind of like a trade that happens.

**SYDNEY** Interesting.

**WIDELL:**

**BONNIE** I don't think it's illegal to have them, but these animals are a lot of work to take care of  
**WILLISON:** and that's why a lot of people surrender them in the first place. Because they can't take care of them. And another big thing that she does is education. So she goes around to school groups, elderly homes and libraries and does programs, where she helps people learn about this kind of stuff, exotic animals.

I asked her how she learned to care for all of these animals, which is such a diverse set of needs. And she said that she started working in a pet store when she was 15. She studied animal biology at college. She interned at a zoo. She interned with an exotic animal vet, which I'm like, this is like all of the sphere of like animal stuff she's done. And then she interned at the Green Bay Police Department doing animal control. So she--

**SYDNEY** What is that?

**WIDELL:**

**BONNIE** So she would go along on drug busts and take the animal.

**WILLISON:**

**SYDNEY** Oh, OK.

**WIDELL:**

**BONNIE** Take the exotic animals away like from bad situations. So crazy. Jamie gets calls all the  
**WILLISON:** time when someone finds an unusual animal in the wild. So I asked, what kind of animals are people releasing just in her area, in the green Bay Area?

**JAMIE** I've literally gotten, in the general green Bay Area, African spurred tortoises, boa Python,  
**KOZLOSKI:**boa constrictors, parrots, iguanas, water dragons, Russian tortoises and so many aquatic turtles. Primarily red-eared sliders, because that's what the pet stores are selling, brought to me from outside. So I fail to see that all of these animals are accidentally escaping. In some cases, of course, I understand that, that happens, but we've also had foxes, domestic-- clearly, obviously domestic foxes, because of the color pattern, loose with no idea of where they came from.

These animals aren't being microchipped or dealt with like a dog or cat would be. So nobody knows where they're coming from and people are just escaping all accountability for these things. So I'm working with Sea Grant, and I have been since 2012, trying to get people to understand the realities of releasing an animal, what it can do to our

environment, and specifically to that animal, as well as just giving people--

OK so I'm telling people not to release, but what can they do about it? They can go and bring it to this facility or that facility. So we try to have somewhat of a network of people that we can at least refer people to for certain types of animal. Small animals, or exotics, or aquatic life, things like that.

**BONNIE** So animal control or a Humane Society will usually get a call if one of these animals is  
**WILLISON:** seen in the wild, like an iguana or something. And then they capture it and then they need a place for it, so they call Jamie.

**JAMIE** I just posted on my page the other day, there was a landlord who ended up finding two  
**KOZLOSKI:** abandoned turtles in a basement in a tank. She didn't know how long they were there, she said. And it's things like that.

And she has no idea who it was. I don't know if it's some kind of an apartment complex or whatever. And unfortunately, a lot of people do look at these exotics as disposable. And they get them and the novelty wears off, it becomes difficult when they get large, when they take up space, when they're destructive to their properties. And they cast them off.

**SYDNEY** That's crazy. Oh, man.

**WIDELL:**

**BONNIE** And she doesn't take in fish. There are other aquariums societies and stuff that will take  
**WILLISON:** in fish, but the aquatic animals that she takes in is mainly, it sounds like turtles.

**SYDNEY** Got it. Got it.

**WIDELL:**

**BONNIE** She mentioned red-eared slider's. They're the most popular turtles sold at pet stores, I  
**WILLISON:** think, nationwide. So they're the most common animal that's released in the wild around here. And there are only two rescues that she knows of that take in the turtles that have been released, that take in any amount over like one or two.

And she says, of the two rescues, hers is one, between them they have over 100 aquatic turtles. So for her, this is a really big problem, especially with the aquatic turtles. What is it like to have a pet red-eared slider?

**JAMIE** Well, red-eared slider's, the pet store says a minimum is a 40 breeder, which is 3' x 2' as **KOZLOSKI:**an aquarium. And that's even not enough for one. So it requires a very big space.

We recommend that people get plastic pens or stock tanks, and a lot of people aren't willing to take up half the living room to do that. They want to do the bare minimum. So when I tell them how much space they take up, they usually will opt out. They also need heavy, heavy filtration, because just like goldfish, and carp, and koi, they make a ton of mess.

And it's difficult to keep up on the water changes. Also, they live 20 to 25 years minimum. And so you're going to be having an animal that's really high maintenance to clean, who doesn't really feel like doing anything with you. It doesn't like being handled, for-- you're basically having a glorified goldfish for 25 years that needs a ton of space. And then people just generally get bored with them.

**BONNIE** So can red-eared sliders, can they live in Wisconsin year-round, outside, if they're **WILLISON:** released?

**JAMIE** Unfortunately, yes. They have as much chance of living as dying, put it that way. They're **KOZLOSKI:**very similar to the painted turtle, and if they can find a place where it doesn't freeze all the way through-- let's just say they do happen to get underneath the frost in the water or they find a place where they can kind of bed down.

Reptiles are really incredible in the sense that they can sort of disperse the ice crystal around their tissue, rather than in their tissue. So they kind of have their own antifreeze in their bodies with their proteins, and their aminos and stuff like that. And then because red-eared sliders are so much more gregarious and they take over, and they just push out the natives, because they're more defensive and protecting territory, mates and food and. They just totally outcompete the more mild mannered painted turtles.

**BONNIE** So she mentioned painted turtles. Those are the ones that are more common in **WILLISON:** Wisconsin. They're native here. And the issue is that the red-eared sliders are more aggressive and everything, and they would outcompete the ones that we have native here.

**SYDNEY** That would be such a big problem.

**WIDELL:**

**BONNIE** Yeah. The red-eared sliders are actually banned in the EU. And the turtles are banned in a lot of different states, because they're so competitive. Also, do you want to get a pet red-eared slider now?

**SYDNEY** No. I mean, probably not even before having heard that. I mean, I can't take care of a cat.  
**WIDELL:**

**BONNIE** Yeah. And she said they live a long time. She was talking about a different-- the African spurred tortoise and she's like, you have to put them in your will when you get one of these turtles, because they live so long. They live like 50 years.

**SYDNEY** That's kind of profound.

**WIDELL:**

**BONNIE** I know, right? I never thought about putting pets in my will. Not that I've thought about getting a will yet. Put that on my to do list. Jamie has a pretty popular Facebook page with Kingdom Animalia Exotic Animal Rescue. When she posts stuff, there's a lot of passionate people that are liking and sharing and commenting on all her things.

And she puts a lot of videos out there of like her animals, or her playing around with a coatimundi, or just what her fox is they're doing that day. They're very entertaining to watch. I watched so many of them. I wanted to show you this video of a fox. She said, "This is too funny not to share. This is our arctic fox after he saw me call out to him. He was excited to see me."

**SYDNEY** Oh, he's so cute.

**WIDELL:**

**JAMIE** [INAUDIBLE], hi. Let me pet your head. Oh, hi there.

**KOZLOSKI:**

[INTERPOSING VOICES]

**SYDNEY** What am I hearing squawking in the background?

**WIDELL:**

**BONNIE** That's the fox.

**WILLISON:**

**JAMIE** I missed you, [INAUDIBLE]. Look up here. Oh.

**KOZLOSKI:**

**SYDNEY** I did not know foxes made noises like that. He's so beautiful.

**WIDELL:**

**BONNIE** Yeah. So it kind of like-- they're so cute, you know?

**WILLISON:**

**SYDNEY** Yeah. I could see wanting a fox after that. At first, when you told me that, I thought, why on

**WIDELL:** Earth would anyone take home a fox? I would be afraid. That seems like a wild animal.

**BONNIE** It's so cute and the fox is so happy to see her. But this post made me laugh, because--

**WILLISON:** She's like, "This is too funny not to share. This is our arctic fox. This is right after-- right before I was able to contain him a few days ago. Please don't ever get a pet fox. You'll eventually regret doing so. It's a huge, smelly, destructive commitment."

And I just found it funny how she's balancing posting cute videos of these animals. And that's kind of what's drawing people to the page or that's kind of why people are engaging with it. But she's also there to tell them, don't get this. You know?

**SYDNEY** Yeah. Very effective.

**WIDELL:**

**BONNIE** And how to balance that. I was going to ask, what do you tell to people who think that they

**WILLISON:** want a fix?

**JAMIE** Don't do it. You will destroy your whole life. They'll burn everything you love to the ground

**KOZLOSKI:** and take you with it. So they will literally burrow through drywall. They will rip down your window blinds.

They will pee and poop all over your house and your belongings, even if the a litter box trained, because they're a wild animal that wants to mark its territory. So they're very, very, very stinky. They smell like skunks. They will also escape pretty much any way that they can.

Whether it's through a window screen, they'll jump over a-- I've seen the fox that I had-- we were in the middle of moving to this location and my parents were helping me build

the-- basically, Fox Fort Knox. We have a six foot high wooden fence and we put an additional two feet of wiring on top of that, and my Fox was using the slat in the wooden fence to jump up and hang onto the wire over six feet up in the air.

And I had to then put 45 degree angle wire on top of that and we covered it with a poultry net. Then even though we put perimeter wire on the ground, they realized that if they dug far enough in, they could still dig out. So then I had to cover the entire bottom of the lawn area, which is about a 1,200 square foot outdoor pen, with wire so that they couldn't dig out.

And they still try. So it is very, very difficult to keep them contained. Again, they are wild animals. The other thing is, any small animals in the house, birds, guinea pigs, hamsters, fish--

**BONNIE** They're going to eat it?

**WILLISON:**

**JAMIE** They will eat it. They're going to-- That's a prey item for them. A lot of people aren't  
**KOZLOSKI:** feeding them properly. Everybody just wants to feed them dry dog or cat food and be done for the day. These guys are omnivores who need fresh meat daily.

They need fruits and vegetables. They're huge eaters. They can be very mouthy, and so, it's not a matter of if they're going to nip you. Even if it's in play, they will nip you. It's just a fact of it. They like to grab and go, because they want to take everything and run off with it.

So I made a post one time saying foxes shouldn't be pets and I had like 10 people jump down my throat. Well, how come you can have them but you're telling everyone else they can't? Do you think I want these animals? Do you think it's easy for me to go in to see the kinkajou at night when she is stuck in a cage and wants to be out in the rain forest, and she tries to rip my face off every time I go in there?

Do you think that's fun for me? So these animals, again, I want to make very clear that I'm not looking to have people's animal taken. If they're keeping them properly and they get the animal registered so that if it should be released or whatever, that they can track it back to the owner. But I want to do better for Wisconsin's future by educating on a larger scale about the reality.

And then if people want to get these animals and it's legal in their area, at least they're going to be prepared. Because it's the whole mindset of the community that needs to be changed. These animals are living things that need daily care. When you no longer want them, they do have to go to the appropriate space.

I mean, if I get a wild animal as a pet, I can't just continuously-- I mean, what if every single person in Wisconsin who has an exotic, right now, just released it outside? Imagine what that would look like. And if we don't change the mindset of people in the community about what's acceptable and what's not acceptable, we're going to have a very different outlook on our wild life going forward. Because there's going to be so much here that's potentially dangerous people and so badly affects the animals that we have here in ways that we don't even know yet.

**BONNIE** What about the people who adopt exotic pets? What motivates these people to get exotic  
**WILLISON:** pets?

**JAMIE** Sometimes, in the case of some of the issues that I've dealt with Animal Control,  
**KOZLOSKI:** sometimes it's an issue of status. They think it's cool. Maybe they are selling drugs and they think having a big Python is going to scare people and make them really edgy. Some people just legitimately have an interest in them.

Some people inherit them from maybe abuse situations and they think they're going to be able to help that animal and then find out this is totally something I didn't realize it was going to be. I think a lot of it is curious kids. Oh, mom, I always wanted a turtle. OK, Junior, it's \$20. Lets get it. But then they get complete wrong supplies, the kid gets bored with it. They end up calling the local Nature Center. The Nature Center says, call Jamie. Then I get tons of turtles with--

**BONNIE** And that's how you end up with them.  
**WILLISON:**

**JAMIE** Yeah, yeah. Did you catch that she called it Fox Fort Knox? What she has to keep her  
**KOZLOSKI:** foxes.

**SYDNEY** Fox Fort Knox. No, I was too hung up about the part of the foxes using litter boxes.  
**WIDELL:**



**BONNIE** That's the part?

**WILLISON:**

**SYDNEY** That's the part that got me. That is a lot. I can't imagine. I would have burned out so fast.

**WIDELL:**

**BONNIE** Yeah. So as I said, Jamie is working on funding and building a new facility. And I asked her

**WILLISON:** about that. That's really exciting that you're going to have the new building soon.

**JAMIE** Yes. It's something-- I actually came up with the idea, the rescue name and the building

**KOZLOSKI:** idea, when I was 15. And I just turned 34. So I've been working on this for a little over half my life. And I always wanted it to be very lifelike for the animal.

I'm going to have a huge educational room and I'm going to be having regular classes during the week. Fox 101, like, the realities. I'm going to have a wall of destruction up where I have photographs of everything that the foxes have destroyed of mine.

**BONNIE** Yeah. You're doing so many amazing things. It does sound like you have so much on your

**WILLISON:** plate, though. Was there any moments where you thought, maybe I won't be able to do this anymore? Or I won't be able to pull it off?

**JAMIE** Yeah. Yes. I do have my moments where I'm like, who am I? What makes me different

**KOZLOSKI:** than everyone else? How come I can-- What makes me think that I can pull this off to get this building that is going to be \$500,000 to build from scratch?

And I'm just a little girl with a dream from when I was 15 years old and I think I can somehow pull this off. Sometimes I feel like it's too big of a task for me, but then I have my friends going, don't be ridiculous. Let me slap you in the face, because look at all the stuff you've accomplished so far. If you're doing rescue, to any real extent, you really need to have a good support network and I do. Even this morning when I woke up, I did have a tinge of, oh my gosh.

I have so much to do. Am I ever going to be able to check the last item off my list and have five minutes at the end of the day to do something that I want to do? Take a walk or go do some photography in the woods. And obviously not now, because hunting started, and I don't want to die. But--

That's what's keeping me going right now, is picturing the building completed and

picturing myself being able to work there, and invite people, and just have it be a really amazing space for people to come to. It won't be too much longer and I'll have my actual building. And I'll be able to work a lot more with the community again and do a lot more education.

**BONNIE** I recorded this call with Jamie in November of 2019, which is why you hear her say that it's  
**WILLISON:** hunting season. Since November though, Jamie has made it to the next phase of approval for her new facility and she'll have the new land that's in the Green Bay Area in the summer of 2020.

**SYDNEY** That's so awesome. I'm glad she's out there.

**WIDELL:**

**BONNIE** You can find Jamie at Kingdom Animalia Exotic Animal Rescue on Facebook. They accept  
**WILLISON:** donations through cash, check, PayPal, or they accept donations of supplies. And keep a lookout for your local pets surrender events in your area or local nonprofits like Jamie's.

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**WILLISON:**

**SYDNEY** Thanks for tuning in. See you next time.

**WIDELL:**