Eric Moody:

Tents open in the morning at the Furnace Creek Campground in Death Valley National Park, California. We're here because it's the 50th Annual Meeting of the Desert Fishes Council. In this month's episode of the Making Waves Podcast, we'll talk to some of the people who are here at the meeting about why they care about desert fish conservation and what they see as the future of desert fishes.

Intro:

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Eric Moody:

This is Eric Moody and joining me this month is Susan Washko.

Susan Washko:

It's great to be here with you, Eric.

Eric Moody:

We'll talk to several people in this episode who are here at the Desert Fishes Council Meeting about why they care about desert fish and why they think more people should as well.

Eric Moody:

During the lunch break, while attendees and ravens were equally fighting over their lunches outside of the meeting, we sat down with the president of the Desert Fishes Council, Krissy Wilson to talk about the mission of this organization.

Krissy Wilson:

The mission of the Desert Fishes Council is to bring together a diverse array of folks that can have impacts on the habitats and the species that occur within those aquatic habitats.

Krissy Wilson:

So being the Desert Fishes Council, we're very concerned about desert fishes. They seem to be overlooked quite a bit. So this council, that's basically our focus is what can we do to improve those habitats and protect those habitats and for those species that occur within those aquatic habitats?

Krissy Wilson:

The other part of our mission is that we get together on an annual basis to share information and share our research, so that we across the 11 States that are included within the Desert Fishes Council, we can assist each other by learning from other researchers what has worked, what hasn't worked and it's a cooperative effort between all of us.

Eric Moody:

This is the 50th Anniversary Meeting of the Desert Fishes Council. So would you be able to speak to like what are the biggest accomplishments in those 50 years?

Krissy Wilson:

So, there are 11 States that are contained within the Desert Fishes Council geographic scope. So it's mostly in the West, obviously in the desert. There are about 600 different species of fish, native fishes, that are, that occur within these 11 States. To date, probably 35% of them are listed species. Probably 75% of those are in peril species.

Krissy Wilson:

So to date, well, I know, we've only had one species that has been delisted. We've had a couple that are in the process of being downlisted, but it seems like it's very, very difficult to make any progress with downlisting and delisting.

Krissy Wilson:

And if you think about what the threats are to these species, so many times the habitats have been so severely altered that to try to get back to restoring the habitat, getting rid of the non-natives, it's a very long process and that grows exponentially in time when you look at bigger systems.

Krissy Wilson:

So for example, think of the Colorado River, the Green River, those are big river systems. So when you talk about degradation in habitats to those habitats, 50 years, at least 50 years to get the habitat back and to get rid of the non-native then to just have your native species, or at least non-natives that are not as impactive as some others. So it's a long, hard process.

Krissy Wilson:

It seems very discouraging. But, the things that we are making headway are, is acquiring water. That water is habitat for fish, so you have to have water. So many of our States have now passed regulations and laws that allow the agencies to own water, which you can then use to restore your habitats. Conservation easements are a big tool that we use and that protects the habitat. And a couple which were still in private ownership, it's now protected under a cooperative easement.

Eric Moody:

So given those challenges, where would you like Desert Fishes Council to be in the next 50 years?

Krissy Wilson:

Well, it would be great if we don't have any more species listed, but I think the best thing we could do is to address those that have been listed and focus on those habitats. That's our biggest issue is protecting that habitat, acquiring water, make sure you have water, try to get your system back to a natural hydrologic regime. Those are all big, big challenges.

Krissy Wilson:

If you look around the room at the folks that we have here for the meeting, we had got some of the brightest, sharpest people and dedicated people. This becomes their life. They go out and do this work on their free time, so it's not just a job that they're getting paid for. People are very passionate about conservation of native fishes. [crosstalk 00:05:02].

Krissy Wilson:

One of the things I would really like to see happen, and there was a couple of talks here that talked about it today and it's basically, how do you talk to the public and have the public appreciate native fishes the way we do?

Krissy Wilson:

So many of folks in the public, the fish that they like are like the aquarium-type species. They want something bright and flashy. So we've got to somehow get over that hurdle of getting them to value these native fishes the same as we do.

Krissy Wilson:

I just retired from the Division of Wildlife Resources in Utah and one of the things I was really pushing that hopefully will continue to move forward is Colorado pikeminnow is listed endangered. Well, it's the largest minnow in North America. It got up to five feet in length, which is astronomical, if you think about that in a desert system. They're listed endangered, but at one time it used to be a sport fish.

Krissy Wilson:

And so, that's what I've been trying to push is what we were hoping to do within Utah was we identified one reservoir that where we were going to put Colorado pikeminnow and allow the public to fish for them. And so, we're hoping that we can create this destination where people want to go here and catch this big, huge native minnow and get the public on board with what a great fish this is.

Krissy Wilson:

And to me, the whole focus should be legacy. I'm from Utah. I was born and raised in Utah and I love Utah. And I would love to see all of our native fishes recovered. And the pikeminnow, I mean how cool would that be to have it to the point where it is in the river? And there is so many of them, it's now a sport fish. It will probably never be something that they harvest, but catch and release. It is definitely a sport fish. And so, we need to find those types of methods to get the public involved in and love these fish the same way we do.

Eric Moody:

So maybe you answered this question, but what is your favorite desert fish and what would you want people to know about it to help them understand why it's so cool?

Krissy Wilson:

Wow! When I worked in Utah, I was over all of the native fishes. And so, we have 32 fish in the state of Utah, one's extinct. And all of them are so unique and have such amazing life history strategies, but I would have to say it's probably the Colorado pikeminnow.

Eric Moody:

Yeah.

Krissy Wilson:

But if you think about a five foot fish, no teeth.

Eric Moody:

Yeah.

Krissy Wilson:

It's a minnow.

Eric Moody:

Yeah.

Krissy Wilson:

When people say, "Oh, it's not a minnow." It is. It is a minnow. It's the largest minnow in North America. I think that one is just extremely fascinating.

Krissy Wilson:

My other favorite one is June sucker. June sucker occurs only in Utah Lake. It's only the one location with that is endemic to Utah Lake. At one time, it used to be some of the early Cope when he was there in the 1800s he said, "This is the greatest sucker pond in the universe," because there were so many June suckers in there. So we've been working to recover the June sucker.

Krissy Wilson:

It's again, the same thing. It's a lake species and there is only three other species that are lake species similar to this one and one is the kwewee that's up here at Mid Lake and then there is the one in the Klamath, the Klamath drainer. So those are the only three lake species and June sucker is being the other one. So they're not like a sucker. So they're not on the rocks and on the bottom sucking, they're midwater planktivores. They're so interesting, and they live in 40, 50 years and they're a pretty cool fish too.

Susan Washko:

The history of Desert Fishes Council is so interesting. I'm really excited to see what happens in the next 50 years?

Eric Moody:

On the final night of the meeting, over a campfire as dinner was being prepared, we talked to a few other newer members of the Desert Fishes Council to gather their thoughts on what they see as the future of desert fishes at the 100 year anniversary meeting of this organization.

Melody Feden:

I'm Melody Feden and I'm here at the 50th Anniversary Desert Fishes Council Meeting. So when I think about the future of desert fish, it really depends on how human attitudes change in the future. I kind of feel like we're at a tipping point where we either have to choose the environment or choose to ruin the environment. I think it could go either way.

Melody Feden:

I think if we choose that the environment and ecosystems and species are really valuable, we could preserve these species, but we could also choose not to. Like, climate change could ruin everything and we could choose not to try to fix that and we could choose to let people use water rights however they

want. And so, those species could go instinct. So I guess, I think it could go either way at this point for desert fishes.

Christy Kruse:

Hi, I'm Christy Kruse. After attending the 50th Desert Fishes Council Meeting, I am walking away with a little bit of optimism about the future of desert fishes.

Christy Kruse:

So some of the presentations today suggested, or over the course of this program, suggested some alternative ideas for maintaining desert fishes as part of our desert landscape.

Christy Kruse:

So one suggestion was using wastewater systems, which is a source of water, not necessarily ideal, but desert fish are well adapted for handling extremes. So there is some potential there. Another idea was alternative eradication methods using sex chromosome altered fish, so that is an idea. And then the addressing the human dimension component. There was a talk about the effectiveness of videos in changing people's attitudes towards the natural world. And so, there is some potential there as well as emphasizing that education is an important component.

Christy Kruse:

It seems realistic to have grassroot community supported native fish conservation, not just the management doing the work, but the community saying that we want this work to be done. And so I feel optimism that some things could change.

Hannah Moore:

Hello, my name is Hannah Moore. I want to say I have an optimistic outlook for desert fishes. I'm really passionate about them, so I hope that they'll end up being okay. But I think that it's a lot of the human dimension that needs to be taken into consideration and I think that, that oftentimes isn't. Instead, oftentimes managers are focused on these species specific questions where they're only trying to save a species that's already on the brink of extinction without taking into consideration everything else that's going on.

Hannah Moore:

So how do we gain public interest in these species? How do we make people want to get behind them and to root for these species? And the only way that we really can end up saving all of them is by changing the human perspective of desert ecosystems and even just science in general.

Hannah Moore:

So I hope things work out. I will be devastated if they don't, but I'm really rooting for you guys. But I think it's hard in that there is just a lot of minds that need to be changed and that it's our job as scientists to work on changing those minds and educating the public on that.

Eric Moody:

And finally, we heard from Dave Lytle, as he made his way over from tending the carne asada on the fire to our table, about what he thinks is the future of desert fishes.

Dave Lytle:

The future is the entire ecosystem, not just the fishes.

Bystander:

Woo, preach.

Dave Lytle:

I love it.

Bystander:

Ecosystem level science.

Eric Moody:

Where is this going?

Susan Washko:

My favorite part of the meeting was when founding member, Phil Pister was giving his presentation on projector slides, old school style, and showed a slide of the article about the Supreme Court ruling in favor of the pupfish and preserving Devil's Hole. Phil teared up at the memory of that success and brought everyone in the room to tears with him.

Susan Washko:

Although the work of desert fish conservation is extremely difficult, the fact that we've been successful in the past bolsters us for the obstacles of the future is a really meaningful moment for the 50th Anniversary of Desert Fishes Council.

Eric Moody:

Well, let's return to Krissy Wilson, the president of the Desert Fishes Council and hear why she thinks that everyone should love desert fishes, whether it's for the fish themselves or as Dave suggested, because we should really care about these whole ecosystems.

Krissy Wilson:

The benefit of protecting the fish is restoring the habitat, which is the benefit to everybody. So I think everybody loves a nice, healthy riparian corridor and water in the river for recreation, whether it be fishing or whatever. Everybody loves a healthy riparian corridor and a river. That's how we need to find a way to tie people into, help us with these fish and this is what you get in return besides the fish, you get this healthy corridor. So we have to keep looking for those social opportunities to get people on board with why and how and how do we get them involved.

Eric Moody:

Great. Well, thanks so much.

Krissy Wilson:

You're welcome.

Susan Washko:

Yeah, thank you.

Outro:

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