

The Sea Grant Files

Fresh news about fresh water.

For Sept 13, 2016

JESSE: Hi I'm Jesse Schomberg and you're listening to the Sea Grant Files. I'm here in the studio with Claire Freesmeier. Claire an undergraduate at the University of Minnesota Duluth who was Minnesota Sea Grant intern this summer. Thanks for joining me on the Sea Grant Files, Claire!

CLAIRE -- -happy to be here, thanks for having me.

JESSE: So, I know you were working with Sea Grant on spreading messages about controlling the spread of aquatic invasive species, but what did that work look like? What did you actually do day to day?

CLAIRE -- This summer I was basically helping promote the mission of stop aquatic hitchhikers and habitattitude campaign. Both campaigns are focused on preventing the spread of aquatic invasive species. Mostly through education outreach. I spoke to over 1000 individuals at events across the Northland this summer. Park Point garage sale, Grand Marais Fisherman's picnic, Tall ships festival. At the events we were handing out educational materials. A lot of the work was actually just talking to people about what invasive species are, how to prevent their spread and which ones are in their local lake. We usually brought along preserved specimens. People were really shocked to find out the species like the sea lamprey are in Lake Superior. Just having the see those really was shocking to a lot of people.

JESSE: They are pretty ugly.

CLAIRE: But really the fact of the matter is that only 2% of our lakes in Minnesota are infested with invasive species. That moves the conversation to what do we need to do to prevent our other lakes from being infested with invasive species. That's where I think this public outreach part that Sea Grant provides is really important. Also with my internship I worked on a special project. With this special project I was studying climate change impact on Lake Superior and the invasive species that are in Lake Superior right now and what new invasive species we can expect to find in Lake Superior if the Lake keeps warming up at the rate that it is.

JESSE: A couple of questions for you. One it'll go back a little to when you were talking with folks at different events around the area. Generally I mean how did folks respond to the message? Did they get that they had a role to play in reducing the spread? Did they see themselves as being able to get involved?

CLAIRE: Yea definitely, one of my favorite things actually was people have this ah-ha moment where they are like oh, this is something that we as boaters and people enjoying recreation, we

can actually make a difference. A lot of these invasive species are spread through recreational equipment and so it makes sense to them why they have to do it. People who have personal stories of oh my lake is infested with zebra mussels, it's no fun to swim because it hurts to walk around on the beach because of all the shells and they are all over our boat. People definitely understand. It makes sense to them why this is a really important thing that we have to make sure that we are clean, draining and drying our boats off when going between lakes.

JESSE: My second question was with your special project. I'm pretty interested in that. Were you able to identify specific species that we should be worried about because they could be coming into this area because of climate change.

CLAIRE: Yea so I spoke with Michael Hoffe of the U.S fish and wildlife service. He has completed risk assessments for many aquatic invasive species. We are able to figure out a list of species that would be most likely to end up in Lake Superior if the lake keeps warming up. The species that we were specifically looking at, we have the Golden Mussel and they are from Asia. Not currently found in the United States right now but they are found in South America but they are one of those species that could be transported by ballast water. They have very similar impacts to Zebra Mussels. Zebra Mussels are obviously something that is present here in Minnesota. We also have an aquatic plant called the Hydrilla. It is currently present in the Southern United States. It is considered one of the aquatic invasive species in the southern United States right now. It's been called the perfect aquatic plant because it is so versatile and aggressive that it can out compete all of the native species. Another one, we have the killer shrimp which is a scary sounding name

JESSE: The killer shrimp?

CLAIRE: Yea they are from the Caspian Sea and basically they eat fish eggs and they also spread parasites. That another species that could come from ballast water. Then of course we have the Asian Carp with its catch all name for silver carp, grass carp, and bighead carp. People are most familiar with the type of fish that jumps out of the water. The sound of the motors bothers them and they actually jump out of the water. It's a physical danger to the boater.

JESSE: People have gotten hurt by these jumping fish.

CLAIRE: Yea very hurt. So that's a scary one that could possibly end up in Lake Superior and basically all of these species they are able to live in a lot of different habitats. They are not restrained by water temperatures or water clarity. They are able to live pretty much anywhere that they are able to get a strong foothold and then out compete species. They are usually more aggressive and often times don't have natural predators so that's why they are such a big deal

JESSE: Makes sense

CLAIRE: Yea.

JESSE: So, Claire, what did you like most about your internship this summer? You're still finishing up a few things right?

CLAIRE-- Yea, still finishing up a little bit. Our last event was the Tall Ships Festival here in Duluth a few weeks ago. So I am not doing any more events. I would say the most rewarding thing for me was like I talked about earlier when people have that ah-ha moment. When the message really clicks in their head. They say this, this is why I have to do my part. Also a really rewarding part for me was talking with kids because I know this is something that I have been interested in. I have always loved biology my entire life growing up so seeing kids getting into it and seeing their faces light up was really rewarding. I grew up on the St. Croix river. Zebra Mussels started to get into the river probably when I was about 7 or 8 years old. Seeing that was really what got me into biology and invasive species. So it was really amazing to be working in this field and feeling like I was making a difference hopefully inspiring people to be interested in this kind of work as well.

JESSE: So what's your major again? Is it biology?

CLAIRE-- -I am an environment and sustainability major and I'm minoring in natural history.

JESSE: Alright, so how do you think this internship will contribute to your career as you move on from college?

CLAIRE-- So definitely outreach skills. So taking the knowledge that I have which is probably somewhat more complex than general public. Finding ways to communicate this knowledge to the public in an accessible and engaging ways is definitely something that I will take away from this internship. Learning how to connect with all sorts of people because you know some people are really into this so they have the knowledge coming into it. So being able to connect with them but then also people who have never thought about invasive species before. Don't even know what invasive species are, being able to have a dialogue with them

JESSE: So Before we go, and as a lead-in to an upcoming reptile, fish and aquatic plant surrender event we have coming up, I wanted to give Claire a chance to give you a Habitattitude message, which she had to repeat countless time this summer. The mic is all yours, Claire.

CLAIRE-- Habitattitude is an attitude toward the environment and your pets and garden plants. If you've grown weary of caring for them or simply can't. **DON'T RELEASE THEM.** Find alternatives like donating them at Sea Grant's upcoming surrender event. It will be at Animal Allies on September 24 from 10-4pm. All reptiles, fish and aquatic plants will be accepted; no questions asked.

JESSE: Thanks for joining us, Claire,

CLAIRE: Thanks for having me.

JESSE: And thanks working with Sea Grant this summer. We certainly don't need to see more alligators in Brainerd or goldfish in local lakes; we value your help in spreading the Habitattitude message. This episode of the Sea Grant Files was produced by Sharon Moen, Mariah Schumacher, and me Jesse Schomberg. To listen to more episodes of The Sea Grant Files and to subscribe to our podcast, visit the Minnesota Sea Grant website at www-dot-seagrant-dot-umn-dot-edu. You can also follow Minnesota Sea Grant on Facebook or Twitter. Thanks for listening.