

Introduced | The FLOW of art and science

[MUSIC PLAYING]

JENNA MERTZ: Welcome back to *Introduced*, where Great Lakes stories meet invasive species science. *Introduced* is brought to you by Wisconsin Sea Grant and the Great Lakes Commission. I'm Jenna, a writer at Wisconsin Sea Grant and producer of *Introduced* and I'm joined today by Tim Campbell. Hey, Tim.

TIM CAMPBELL: Hi, Jenna. And yes, I'm Tim. I'm the aquatic invasive species specialist for Wisconsin Sea Grant.

JENNA MERTZ: So as we were planning for season 3, one of the topics we were particularly interested in was art and science. You just kept stumbling into people who were doing art about aquatic invasive species, which really isn't something that you stumble into, but being in Wisconsin Sea Grant, it's something we were encountering.

And being a writer myself, I love talking with artists. I feel like I could talk with writers or visual artists about their process all day long. I'm really fascinated how they create the things that they do and I feel like artists also offer pretty powerful perspectives on science, and particularly when it comes to emotions and the importance of emotions in science.

TIM CAMPBELL: And as I've started to grow out of my phase of being strictly a scientist that didn't need any creativity or art to help me with things, I've been really interested in trying to explore how art and science can work together or just be a part of the same process so we can better communicate and work with the issues that are impacting the Great Lakes and invasive species.

JENNA MERTZ: So art and science exist in the same ecosystem, maybe we should think of it that way. So, Tim, as part of my art and science exploration, I recently attended an art exhibit here at UW-Madison. So we are here inside the water at UW FLOW Project exhibition, I'm looking around and there are a bunch of people meandering around looking at lots of great art.

The art in this exhibit was created by college students and each art project was based on scientific research related to water. So, for example, we saw there was a stump with a sink in it and there were beads of water coming out. And I think this was based on PFAS research. Some of the pieces of art were a little bit more interactive. There was this tank of water where you could go magnet fishing for these little handmade ducks and fish.

It reminded me almost like a carnival game or something. But then there was one piece in particular that caught my eye immediately when I walked into the exhibition hall. One that's hard to miss is this large beetle on a pallet in the middle of the floor. And so I started talking to people who were wandering through looking at this beetle just to get a sense of how they were reacting to it. So tell me what you're seeing and what your reaction to it is.

SUBJECT 1: Well, I'm seeing the most incredible giant piece of art that I've ever seen. It's an insect of some sort, giant larva, and I love it.

JENNA MERTZ: What feelings does it bring up for you.

SUBJECT 1: I want to give it a hug.

SUBJECT 2: I want to hug it. It's so cute. It feels really approachable, I don't know, it's like a bug, but it's adorable.

JENNA MERTZ: Thank you. Awesome. So today on *Introduced*, what happens when you come by one undergrad, a boatload of fabric, a DNR scientist, and some purple flowers? We're exploring art in aquatic invasive species. This is a topic we'll return to a few times throughout season 3 of *Introduced*.

So Tim, what's your relationship with art like? Do you make any art? Do you enjoy art? How do you feel about art?

TIM CAMPBELL: So I enjoy art and I feel like as I have grown a little bit older, I enjoy it a little bit more and allow myself to feel a little bit more as I experience a piece. But I'm an outreach specialist, my background is in science, I feel like I've always been a science logic person for work, I research aquatic invasive species outreach. I write a lot of research papers on behavior change.

There's not always a clear connection to art there. And so I feel like I've always been a good distance from art professionally and personally. I don't make any art, I don't feel like I have any artistic bones in my body.

My kids will ask me to draw with them and usually I have no idea what to draw, so I just draw the same scene of a green Eureka Timberline temp, the same one I've used in Boy Scouts since I was about 10 years old. There's a fire pit nearby, a river I can fish in, and then the same like 10-year-old style pine trees, and that's about it, that's as artistic as I get.

So, Jenna, same question right back at you. What's your relationship with art? Do you make any art?

JENNA MERTZ: So I'd say my brain is like somewhere in between, being a science writer here at Wisconsin Sea Grant, I am thinking about the science, I'm thinking about communicating the science, the research to a nonexpert audience. And so to me, that feels like a working writer, almost like a trade in a sense of here I am doing this type of writing versus something like a poem or a short story or a play or something like that.

I do have my master's in fine arts and creative writing though, so I have done more creative things. I took a printmaking class, I took a drawing class. I can't really say any of those things made me better at drawing or printmaking, but they were fun. So the art that I have done or I've written about has always gravitated towards nature.

And so I think that was why I was excited when I heard about this FLOW Project. Just because these artists are making art about things happening in the natural world and related to water too.

TIM CAMPBELL: I actually participated in it a few years ago. And if you don't know, FLOW is a program that's coordinated through the University of Wisconsin and pairs undergraduate artists with water scientists. They get a chance to chat a few times about the research between the mentor and the artist and then the artist gets to work on an art piece about whatever water subject they're interested in.

JENNA MERTZ: So be honest with me, were you suspicious at all or did you have your doubts over what this art could do for aquatic invasive species science?

TIM CAMPBELL: I think a good scientist, I'm always a little bit skeptical. I feel like I knew that there was some risk that whatever the artist created might not do what I thought should be done or that I might not connect with it. I just might be like, that's a really pretty piece, and just be very stoic about it and unemotional, but I was willing to see what happened. I guess my curiosity got the best of me here.

JENNA MERTZ: So I was really curious at first to talk to an artist at the beginning stages of this FLOW Project just to figure out how do you start taking this big scientific complex concept and then turn that into art? And then secondly, what can artists and scientists learn from each other through this project?

Scientists have this reputation and maybe you can corroborate this, Tim, of being logical and precise. And then artists are known for being more whimsical and intuitive and just more creative. And I feel like with those two, we don't always get each other and so these artists are bridging that gap. So I wanted to talk to someone who is operating in both of those different worlds.

So Tim, I wanted to tell you about a student artist that I met recently, Astrid. Astrid actually participated in FLOW this past school year. And so when I talked to her on a cold February morning, she was just in the beginning phases of her project.

**ASTRID
HOOPER
LOFTON:** My name is Astrid Hooper Lofton. I'm in my final year in undergrad at the University of Wisconsin, Madison. I am studying human development and family studies and getting certificates in public policy, studio art, and environmental studies. So it's a whole boatload of interests that have led me to the whole FLOW experience.

JENNA MERTZ: Astrid really liked art as a kid, but didn't really get to take formal art classes until she got to college. She'd always been really drawn to working with fibers and fabrics, though.

**ASTRID
HOOPER
LOFTON:** Throughout my undergraduate degree, I've really been pretty expansive in the mediums that I've worked with. But I would definitely say primarily I am most comfortable and have the most ideas with fibers. I love knitting and crocheting, that's what I do a lot in my free time, and that's pushed me to try sewing more art.

I don't know, I feel like it's made me a more confident person and I think it's made me see a lot of things very differently and cause me to interact with my environment with a different eye, which has been really, really cool. When I took ceramics and we just learned about how you make a bowl. That's a really simple thing, but then you start picking up bowls and you look at the foot of the bowl at the bottom, and that means something different to you after you learn about how to make that thing.

JENNA MERTZ: And I can say that as someone who's worked in ceramics before, the foot's really hard. So Astrid brings up a really good point there. So Astrid heard about FLOW because she got an email and then decided that, that art science connection was something that she was really interested in. So she applied to the program and got in. And then this year, Astrid was paired with Jeanne Scherer, who does aquatic invasive species work at the University of Wisconsin division of extension and the Department of natural resources.

**ASTRID
HOOPER
LOFTON:** I'm working with Jeanne at the DNR. She works with aquatic invasive species and trying to limit the damage that they are doing on aquatic environments. I've had one meeting with Jeanne so far. I've been emailing with her though, and talking about different ideas, and she has provided different specimens for me of different invasive species like zebra mussels and different flowers and stuff.

**JEANNE
SCHERER:** I'm Jeanne Scherer. I'm the aquatic invasive species outreach specialist for Wisconsin. I know we've got some very creative, even artistic scientists out there, but having somebody who's more purely the artist take a look at what we're doing every day and the things we're dealing with, they see things we don't and think of ways to put it out there that we're like, oh, yeah.

ASTRID Something we talked a lot about is the project that she's worked on that is trying to prevent the spread and
HOOPER habitat damage from purple loosestrife, which is a beautiful purple flower that grows along like marshes and in
LOFTON: wetter soils and stuff. But if not held within our relationship with other flora and fauna can become very
aggressive and spread, which is why it can throw off ecosystems.

TIM CAMPBELL: Purple loosestrife is something we know something about. If you've been a long time listener to *Introduce*, Jill, remember that we did an episode in season 1 about this. The episode is called Bringing Home the Beetles. We talked to Jeanne and now retired extension specialist Brock Woods about purple loosestrife.

JENNA MERTZ: As far as purple loosestrife goes, I've seen it, I think a lot of people have seen it. Tim, because you've worked with it a little bit more, can you tell us a little bit more about what it is, what it does?

TIM CAMPBELL: Yeah. It's a wetland plant with bright purple fuchsia flowers. The initial introductions to North America were both accidentally in ballast water from Eastern Europe, and it was also purposely brought over as an ornamental plant because it is a pretty plant that's hard to deny.

And it is invasive and really the big thing it can do is become the most abundant plant in a wetland setting, a wetland with only one plant or that's dominated by a single plant, isn't a particularly healthy wetland and doesn't provide abundant food sources for different things or different habitats for different bugs and animals.

So we really diverse wetlands with a lot of different species. And when purple loosestrife comes in, it tends to be the most dominant plant there. Luckily, there's a really interesting method for controlling this plant, it involves beetles.

ASTRID And so a project the DNR is working on is growing purple loosestrife beetles, which eat the purple loosestrife,
HOOPER they're also called Galerucella, I'm pretty sure.
LOFTON:

JEANNE So this program is fascinating. What I learned in the first season of *Introduced* is that the Galerucella beetles,
SCHERER: which some folks also call Cella beetles, eat purple loosestrife in their native home, so where they come from. And scientists have figured out that if we bring those beetles here, they don't want to eat anything else.

And so the DNR has a program where volunteers can raise beetles in their backyards and set them free on a stand of purple loosestrife. And then these beetles help control the population of purple loosestrife, which is pretty cool.

TIM CAMPBELL: So this is all called biocontrol, which is just generally a pest control strategy that uses natural predators to control problematic animals, plants, and diseases.

JENNA MERTZ: Jeanne and Astrid also talked about biocontrol in their first meeting.

ASTRID So she was talking about how she really wants to advocate for biocontrol and also sometimes even just leaving
HOOPER invasive species alone and just seeing if the problem spreads. She said sometimes she'll see a patch of purple
LOFTON: loosestrife or other similar things and then they'll go back and check and it's gone. Sometimes there doesn't
need to be a huge, intense explosive reaction.

And that was just a really interesting conversation because it's not something I would have ever anticipated from someone working at the DNR, because the common message that I've been hearing is like, invasive species, we need to get rid of them, we need to act immediately. And it was really interesting, and I feel like it made me think about invasive species differently.

JEANNE SCHERER: I had read a book by Jane Goodall I think several years ago, I think it was *Seeds of Hope*. And she talks about invasive species in there and she says, they're just trying to survive. Their genetics and their evolution gave them certain traits that causes them to be able to easily get their seed out or spread rapidly by rhizomes or whatever characteristics it might be.

It's not their fault. And then, of course, you throw in the fact that people are the ones moving them all over the world, primarily. So I mean, there may be some outliers there, but it's not the plant's fault or the birds fault or the pigs fault. They're all just doing what nature set them up to do.

JENNA MERTZ: So this realization about invasive species, just trying to survive and don't mean any harm, that's something that got Jeanne thinking about how she speaks about purple loosestrife.

JEANNE SCHERER: I have a stack of old articles that someone who's no longer at DNR had left. They were articles he hadn't written, he might have been quoted in. And they'll say things in the text like the purple loosestrife is going to kill all of the other plants, or there's the one that said it had no ecological value. And I just laughed at that because now I totally flipped that script.

I talked to folks about doing biocontrol because it's a way to reintroduce the species that could control it in the first place, manage it. But our goal is not to get rid of it, it's to just help it play nice with others because it's on the landscape and we're never going to get rid of it. So I think a lot about how we can work with these other species that didn't start here originally and have caused various issues.

TIM CAMPBELL: I really like that idea of helping species play nice with others. To Jeanne's point, eradication is really, really hard. So just trying to get invasive species populations to levels where they don't cause problems can be a really achievable goal.

JENNA MERTZ: And I like that phrase too because I think it's something that we as humans can understand. I mean, I think playing nice is something that we're told from the time we're in kindergarten and I mean, that's something that we're trying to do as adults now. I think that concept is something that really makes sense too at a human level.

So let's go back to our artist science duo here. So in their first meeting, Astrid and Jeanne talked about purple loosestrife and they talked about the Cella beetle that can be raised to eat purple loosestrife. And they talked about why we might not want to aim for eradicating the plant, but rather help it play nice with others. So now, with all that knowledge, it's Astrid's job to incorporate all of that into an art piece.

Tim, if you had to make this piece of art, how would you approach this? How would you start? Would you start by drawing your tent? How would you start?

TIM CAMPBELL: Yes, green tent, little creek, fireplace. And then I might put a little beetle on a stool and have them make a smore. That's probably where I'd start and then see what came to me after that.

JENNA MERTZ: Well, here's where Astrid's brainstorming started.

ASTRID And so my initial idea for the project that I came into before my talk with her was like, I'll make a big collage with
HOOPER paper or something and represent all the different invasive species that we were talking about and stuff like
LOFTON: yellow irises, purple loosestrife. And then just a couple of weeks ago, my idea changed and I realized that what I really want to talk about is the beetle.

We talk all the time about the invasive species like, if what Jeanne is really focused on is the balance and the relationship, why not just focus on the beetle? So I want to create a huge beanbag-sized *Galerucella* beetle out of fabric. Whenever you take something and make it big, I feel like it increases its presence in your mind or in some cases its importance.

And so I feel like I just want to make something that you can't ignore. I want to make something big that people see and want to understand what exactly this beetle is about. And I really like doing pieces that people can interact with. And yeah, I'm really excited about it.

JENNA MERTZ: Astrid's first step after talking to me, going out and search of fabric.

ASTRID I just got back from shopping at the thrift store Dig & Save, looking for fabrics for my project because I need a
HOOPER bulk amount of brown fabric to make my big, huge beetle. My plan now with the lighter tan color is to potentially
LOFTON: try to dye the light tan sheets in certain areas to mimic the pattern of the *Galerucella* beetles. I would like to potentially use coffee as a natural dye.

JENNA MERTZ: After securing the fabric, the next step was to figure out just how to construct this three dimensional bug and the time is ticking.

ASTRID The deadline for FLOW is rapidly approaching, which means that this week I am starting to put my nose to the
HOOPER grindstone and start working on constructing the actual piece. So I started by making a sample bug out of
LOFTON: different colored fabric that I had just to test out the shapes that I wanted to do and the stitches and just the overall construction, because my sewing skills are not the most honed.

I definitely have not had a ton of sewing practice particularly in making something like this and so I wanted to practice. And the first one was truly the most hilarious creation I've ever seen. And then I tried again and it got better, so now I'm moving on to cutting out the actual fabric that I want to use for the bigger piece.

This is the third day of my spring break week of actually working on the FLOW Project and I'm feeling pretty happy about it. I definitely like I said, I'm learning a lot and it's taking all my brain power to figure out what the heck I'm doing. I have finished sewing the sheets together for the head, the middle part, and the butt, the thorax, I guess.

It is now April 2, which means I have been working on the FLOW Project a lot more intensely for about the past week, doing at least a little bit every day. And it's been a lot of fun and I've also hit the middle part where I'm really worried about how it's going to turn out, which always happens when I'm working on an art project where you get to the middle and you're like, oh, it's not looking exactly how I thought I was going to look.

I spent a bunch of time fluffing up the stuffing and trying to get it to look less lumpy than it was appearing, which it's still looking very lumpy. And then I'm going to have to hand sew together all of the body sections, which is going to be a very long process. Hand sewing is going to take a long time.

Just sewing the small sample bug for one section took about an hour, and so I anticipate that it'll probably take probably about four hours, would that be an accurate scale up? I'm not sure. So yeah, a lot of hand sewing is in my future, but that means that I get to sit and listen to podcasts and watch TV, so that's OK. And then I'll figure out how I want to do the eyes and antenna and legs.

JENNA MERTZ: So that moment where Astrid says it's not looking exactly how I thought it was going to look, and she's like feeling stuck. So I empathized hard with that, I can totally relate to that. That's basically every single writing project I've ever done, even emails, up to short stories like that middle part being in the middle of that is so hard.

TIM CAMPBELL: Can you elaborate a little bit on that, Jenna, because I don't imagine that you ever get stuck on anything?

JENNA MERTZ: Oh, my God. So I think what's difficult about the middle part is you are not at the beginning and you're also not at the end. And so you don't have that beginning energy of like, I'm starting this cool thing or if you think of this in terms of running a race, there's music, there's people, you're in a big group and you're jumping up and down, getting ready to start the race.

There's that energy and then at the end of the race, you see the finish line, you might be sick to your stomach, but push it for 30 more seconds and then you're good. In the middle it's like a slog and you're lost with, where am I? Is this good? Is this bad? You lose a sense of the whole thing.

Can you relate to that at all with your science or with your work? I know you're a big bike rider too, so what can you tell me about that?

TIM CAMPBELL: Well, I mean, glad it's not just me, but I know my writing isn't creative or artistic. I feel like scientific writing is often just writing you have to do with all the fun stripped out of it. I get really stuck on framing and introductions for papers and presentations.

And I end up knowing what I want to say at the end, but have to link it all together in a compelling and motivating way all the science and research builds on each other and I'll rewrite things over and over and over again, and it can be really frustrating. And I think a lot of people, when you're stuck on something, it's easy to be fixated on the problem and then you can't come up with any solutions to move past it.

So it's really tough and just having the opportunity to iterate and try a bunch of different things for me has always helped. I used to race on the velodrome or the track, the banked curves, and bikes with no brakes with a single gear. And what was really cool about that, relative to other bike races, the bike races were really short, relatively short, like 5 to 10 minutes each. So I could race a bunch of different ways all in the same night and eventually figure out what works for me.

And I've tried to take some of those lessons and apply it to work when I'm stuck, just try a whole bunch of different things, see what happens, and sometimes it works.

JENNA MERTZ: So Astrid offered a little bit more insight about that stuck feeling that we're talking about.

ASTRID HOOPER LOFTON: I feel like no matter what level of art you are creating, when you are working on it, you do not like it, and that's just every single artist ever. And I feel like people are just really critical of themselves and I think that we just all need to trust ourselves more and just enjoy the act of creating. And a lot of the times, if you just push through, you can end up with really cool stuff.

And I need to say that to myself because I do not draw very often because whenever I try, I'm like, oh, this looks so bad, other people my age are like so good. And it's like, well, but how do you get better is you practice. And so I've been doodling more and stuff and it's been a lot of fun. And I feel like you just eventually figure out the style that you like working in and even if it's not perfection, it's still enjoyable.

I don't know, I want that for myself and I want that for other people. It probably applies to any work that people are doing in science and in studying things and even just working with other people, is that a lot of the times before you get to a breakthrough, you need to reach a point of frustration. And I think that it's just important to practice mindfulness, seriously, to just take a moment, take a breath and realize that probably in a lot of cases, it's not that serious and you can figure it out.

And if it is that serious, then it's important to take your time and be patient and trust those around you and work with them. And yeah, I feel like maybe if you're a scientist, practicing art could help you with that process because when you practice stuff even if it's a different situation, it might help you make those neural pathways or whatever.

TIM CAMPBELL: It's a bummer to hear that Astrid hit that dreaded low point on the project, but I think it's something we all hit at some point in time with a big project. I think every document I've ever written at some point in time, I'm sick of seeing it. So really interested to see how she got out of this low point and moved on to hopefully finish in time.

JENNA MERTZ: Well, thankfully, Astrid did come to that moment where everything started to turn around for the better.

ASTRID And so I really was waiting to put the eyes on because I feel like every time I put the eyes on one of my little guys
HOOPER that I make, it's like, well, I can't hate it now because now it's a little guy and I have to be nice to it.

LOFTON:

JENNA MERTZ: And I'll say the eyes on this bug are black and shiny, and she made them out of these clear plastic ornaments.

ASTRID I think the last thing I did was sew on the antenna, I'm pretty sure. And it was just getting on those last body
HOOPER parts and looking at it, it's like everything's on, I don't have time to fiddle with it. The day I finished, it was
LOFTON: actually the day of the eclipse. And so we took it outside, me and my girlfriend, and we put it on a table we had outside and we were taking pictures of it and then we got to sit and look at the eclipse.

And it was really cool, it was like a very fun, artsy moment. And it was like a really exciting time to just actually see it fully realized because I was really, really worried for a few days and really stressed and I was hitting really close to the deadline. I was working up right to the wire. I was talking with Lily and she was like, can you drop it off today? And I was like, I can do that for you, I will make that happen for you.

JENNA MERTZ: I love the drama of the eclipse and then the beetle is finished. What a strange confluence of events but it's beautiful.

TIM CAMPBELL: It seems so artsy.

JENNA MERTZ: It does. It does seem very artsy. So, Tim, Astrid has been describing this beetle. You must be dying to see the beetle at this point, so here I'm going to show you a picture.

So what are you seeing right now? Tell us how you're reacting to this thing? Tell us what it looks like?

TIM CAMPBELL: I'm just seeing a big beetle on a pallet and I love it.

JENNA MERTZ: It's big, I'll add, and it's tan. It is body pillow size. So, if you wanted to, you could spoon with this beetle. I don't know if anyone is interested in that, but it is definitely like a 4 foot, maybe size beetle. It's got these six long legs coming off of it.

TIM CAMPBELL: Being awash and stuffed animals in the Campbell household, they're all codified a little bit. They got a smiley face and they're intentionally cuddly. And I like how realistic this is that I don't think Astrid tried to make it cute. She just made the beetle, and it's big, and I want to give it a hug too.

JENNA MERTZ: I mean, it's a lot of fun. It's a little creepy, but it's fun, and it doesn't look lumpy at all. I know Astrid was worried about it looking lumpy, it's very smooth at least from this perspective.

TIM CAMPBELL: It looks professionally stuffed.

JENNA MERTZ: Yes, this is definitely a professionally made Cella beetle, the only professionally made Cella beetle. I finally got to see this Cella beetle in person at the exhibition at UW-Madison, which I mentioned at the beginning. So when I entered the exhibition hall, it was the first thing I saw.

SUBJECT 3: I liked this piece because I think it accomplished what it was intended to do. I was drawn to it because it's unusual, it's a physical piece, it's made of cloth. And reading through what the artist intended was to make this beetle seem approachable. I thought that was really interesting.

SUBJECT 4: I really like the emphasis on making the solution more visible than the problem. And so I think that's really cool and it looks like it took a lot of work.

JENNA MERTZ: So at the exhibit, I caught up with Astrid to ask her more about the debut of this piece. So it actually debuted at an art show in Stevens Point, Wisconsin, at the Lakes and Rivers Convention, and she just finished her piece in the nick of time before whisking it off to Stevens Point. So I wanted to hear from her like how people were reacting to this when they saw the beetle for the first time.

**ASTRID
HOOPER
LOFTON:** It was honestly an amazing experience just to have so many people give me such positive feedback. I don't feel like I've ever had people outside of my mom or my close friends ever look at me and be like, wow, what you made is really cool and means something. And even just hearing as I was walking by, I heard some be like, oh, that's the person that made the bug. And the other woman was like, oh, my gosh.

And I was like, it's just it was so affirming to feel like, I can make things that people outside of my family or the people in my class or my friends enjoy and find interesting. My FLOW Project partner, Jeanne, she took a really funny picture of her sitting next to the bug with the bugs arms around her and it's so funny. It's really excellent, and she just loved it.

She loved getting to interact with it and show it off and stuff and it was really cool. And it was super nice because one part of the wing broke on my piece, it started ripping where it was attached to the bug and so she emailed me and she was like, I'm up here and I found a needle and thread like, can I fix it for you? So there is now some thread that has Jeanne's touch on it too. So it's partially her piece as well now.

People definitely had questions about the explanation for biocontrol and the beetles and what was going on. People were really interested to hear about biocontrol as a way to help control invasive species populations in Wisconsin and other places. So that was really cool too. It felt like I was communicating science for real, which is always very, very exciting.

JENNA MERTZ: So I think what's so important to remember with art is that there's an audience and art depends on that relationship with the audience. How are your readers, how are your viewers reacting to this thing. And I'm really glad to see this piece is doing that and it's doing it in the context of aquatic invasive species.

And that's where I think art's powerful, is that it can elicit that discussion, that type of response versus science, which is usually telling you like, this is how this thing works or this is what we discovered. There might be a little bit less of an invitation to react and have a discussion with.

TIM CAMPBELL: I must think about it like going around to a poster session, oftentimes at academic conferences or meetings, some people will put their research on a poster, they cram all the graphs and all the information in there. I go talk to somebody because I can read the title and I know the thing that I'm interested in talking about.

And this almost seems flipped where people could be drawn to things that they didn't even know they were interested in and have these really interesting and enlightening conversations about a topic that everywhere a poster session probably just would have walked on by.

JENNA MERTZ: It's so funny you mentioned the poster session because when I'm ever at a conference and not being a scientist, seeing those, I'm terrified to go strike up a conversation. I'm like, I don't know what to do, I'm just walking past staring at people. And so that's what I like about this piece with art is like, I don't know, I just feel like more invited in than just staring at a poster and wondering if I should make small talk with the person standing there, what I should say.

TIM CAMPBELL: At a poster, all of the information is there, but there's no right or wrong way to interpret the beetle. And you can see the beetle or the piece of art and talk to the artist or anyone else there about anything that it makes you feel, which as long as you're able to feel things, is probably a lot easier and more fun.

JENNA MERTZ: And I like the sense of humor too, with this whole project. It's a good reminder that if you're working on art, but also probably for science, this can be a joyful thing. It's OK if it's happy, it's OK if you get a lot of joy from it. And I know that's something that I have to work on because I think it's really easy for me to get involved in my writing and take it too seriously and take myself too seriously and be upset when something goes wrong.

And so hearing Astrid move through this process, hitting her low point, putting the eyes on having Jeanne so a part back on, there's joy and humor in this. And I think that's a really good reminder for me, and I'd assume for scientists as well who are doing this hard work of creating knowledge or creating art, which can feel very serious and heavy sometimes.

So Tim, at the beginning of the episode, you started telling me about your experience with FLOW, have you thought any more about using art in your own work because you do, do research, but you're also doing stuff beyond that. You're working with people, you're trying to encourage people to change their behavior. How do you see art in your work?

TIM CAMPBELL: I think that as I've been diving more into social science and the communication aspects of what I do, there is a lot more room for art for me if I can figure out how to engage people and create the communication pieces that we need. We all think people are rational beings that collect data and facts, they weigh the pros and cons and make the decision that's best for them.

But there's these things called emotions and feelings that get in the way and influence decision making. And I probably can't make anyone feel anything with just data alone except maybe board and storytelling and art can help do that.

JENNA MERTZ: And Astrid had some similar thoughts now that her piece is finished and out in the world.

**ASTRID
HOOPER
LOFTON:** I definitely think that art is a wonderful way to communicate with a lot of people. And I think that a criticism that I've heard people talk about with academia is the problems are with disseminating knowledge that is held in academia and within research and stuff. And I think that trying to dismantle some of that and make information available to the public is really important.

And I also think that this is a wonderful way, especially in this exact case to raise public awareness about a really important issue that we are trying to disseminate and it's just can be hard to get everyone on board and get everyone aware. And I think it's a wonderful way for researchers to share the research that they're currently working on as well.

[MUSIC PLAYING]

JENNA MERTZ: This season of *Introduced* is written and produced by Bonnie Wilson, Jenna Mertz, Tim Campbell, and Nicole Angell. Please subscribe, rate, review, and share this podcast with a friend. This podcast is a production of Wisconsin Sea Grant with support from the Great Lakes Commission. Thanks for listening and see you next time.

[MUSIC PLAYING]

**MARGARET
HOOPER:** My name is Margaret Hooper. My daughter, Astrid Hooper Lofton made one of the art pieces here.

JENNA MERTZ: Did she get her art skills from you.

**MARGARET
HOOPER:** Not at all, from my sister, her aunt Elizabeth. And just somewhere in herself because not me, nope.

JENNA MERTZ: So this is the first time you're seeing it?

**MARGARET
HOOPER:** Yeah. Well, I saw pictures, but this is the first time I'm seeing it in real life.

JENNA MERTZ: You're one of the people I was seeing that's actually touching it.

**MARGARET
HOOPER:** Well, I read the description and then I saw there was a sign on the other side that said, please touch. And I was like, oh, thank goodness, because I knew I was going to whether I had permission or not. I just didn't know if I needed to wait until later or if I could do it now. So anyway, love it.

JENNA MERTZ: A lot of people have been saying they want to hug it.

MARGARET It's very huggable.

HOOPER: