MAREE STEWART: It doesn't feel now like I've done this big, momentous thing, but it really has made such a difference. And it's just really amazing how many people have been impacted by a science project that I did when I was 12 years old.

[MUSIC PLAYING]

BONNIE WILLISON: This is *Introduced,* where Great Lakes stories meet invasive species science. Hey, Jenna.

JENNA MERTZ: Hey, Bonnie.

BONNIE WILLISON: How are you?

JENNA MERTZ: I'm doing well.

It's really beautiful weather outside right now. Sun is shining. 70 degrees. Trees are budding out. It's really good.

BONNIE WILLISON: Yeah, it's so beautiful. I wish we could record outside, but there'd be too many bird guests.

Yeah, we're approaching summer here in Wisconsin. So we're also approaching boating season.

JENNA MERTZ: Yeah. And where Sea Grant offices are, we can tell that we're on the lake. The waters are warming. There's more boats out there. I know my dad, who fishes on this little kayak, is like chomping at the bit to get out there.

BONNIE WILLISON: Yeah, I feel like a lot of people are feeling that right now. And here in Wisconsin, boats are pretty important. We have one of the strongest traditions of getting people out on lakes. We have the third most boats per capita in this state, in Wisconsin.

JENNA MERTZ: Don't tell me Minnesota's number one.

[LAUGHTER]

BONNIE WILLISON: They are.

JENNA MERTZ: Oh, OK.

BONNIE WILLISON: And then South Carolina, randomly.

JENNA MERTZ: Oh, what?

BONNIE WILLISON: Yeah.

JENNA MERTZ: OK.

BONNIE WILLISON: But did you know we also have one of the strongest traditions for getting people to volunteer for their lakes?

JENNA MERTZ: I did not know that.

BONNIE WILLISON: Yeah. We've arguably got the country's strongest volunteer force working to prevent the spread of aquatic invasive species. And what I've learned through researching this episode is we did not always have this volunteer force.

How did we get here? Today, I want to tell you the story of some special people who laid the foundation for this powerful volunteer force decades ago. They created a program called Clean Boats, Clean Waters. And I sat down with someone who knows a thing or two about this program.

OK, I'm here with Bijit. Bijit, how do you know me?

BIJIT: I'm your partner.

BONNIE WILLISON: OK. So you did Clean Boats, Clean Waters, right, when you were a college student?

BIJIT: Yeah. I went to a school up north. And as part of my summer job, we were expected to volunteer to do boat inspections for Clean Boats, Clean Water. I went to Lake Namakagon and just did boat inspections, and then talking to people as they came and went by the landing, just making sure to check for any invasive species, and then just remind them to clean up their boats before they go into another body of water.

BONNIE WILLISON: Do you remember what your conversations were like?

BIJIT: At first, it was definitely awkward to approach random people. But once people knew what I was doing there, most of them were interested in learning about it and talking to me. And most of them were doing what they were supposed to. So.

BONNIE WILLISON: Did you know that Clean Boats, Clean Waters was started by middle schoolers before I told you?

BIJIT: I had no idea. No. I thought it was a federal level idea that came through, I don't know, USGS or something. But it was pretty interesting to learn that it was actually high schoolers, you said?

BONNIE WILLISON: Middle schoolers.

BIJIT: Middle schoolers, yeah. That's-- yeah, that's pretty amazing.

BONNIE WILLISON: So, Jenna, as you know, when we were brainstorming stories for this season of the podcast, Tim mentioned that Clean Boats, Clean Waters was started by middle schoolers. And he didn't know much more about that when I asked. So I was super intrigued, what was this middle school project?

How did it get started? How did it transform into a 20-year running state-funded program that inspects close to 150,000 boats per year? I really wanted to find out. So I found one of those middle school students.

Well, she's not in middle school anymore. She's in her 30s.

MAREE STEWART: So I'm Maree Stewart. And I grew up in Minocqua, Wisconsin.

BONNIE WILLISON: So it was 2001, and Maree was entering middle school. So picture this. Just imagine Britney Spears-- oops, I did it again-- echoing down the hallways.

JENNA MERTZ: Or if you're me, it was definitely Backstreet Boys on a Walkman, because I was definitely a side Backstreet Boys and not in sync. Britney Spears is OK, but BSB forever.

BONNIE WILLISON: You were in the fandom?

JENNA MERTZ: I was. I had hand drawn pictures of all like the band on my walls. I was 100% in in 2001.

BONNIE WILLISON: Yeah, you can picture it now. So at this time, Maree had just entered seventh grade. And she got an interesting opportunity. So along with the everyday classes that you take in middle school, English, social studies, math, she could sign up for a special class. And in this class, she'd be working for a whole semester on a science project of her choosing.

MAREE STEWART: Back when I was in seventh grade, there was an opportunity to put teams together for this nationwide science competition. And the goal was for each group to come up with some kind of problem in their community, and then a scientific solution to that problem.

BONNIE WILLISON: So as you can probably tell, this was not the typical class. It was a class that took seventh graders and basically turned them into community problem solvers. So Maree got to class, and she was paired with some teammates, Luke and Janelle. And they had class together every other day, and they started brainstorming for community problems that they could solve.

JENNA MERTZ: Yeah. I'm just thinking, what kinds of problems can seventh graders fix or feel like they can solve? When I was in seventh grade, I think my biggest problem was trying to figure out how to avoid track and field practice.

At the end of the day, I signed up for the team just for the sweatshirt, but I hated running. And I did not want to go to practice. So yeah.

BONNIE WILLISON: I wish I could have teamed up with you to try to solve that problem in middle school. Yeah, I probably would have been like, it would have been tryouts for the school musical, and I was trying to deal with the fact that I got a background chorus role.

JENNA MERTZ: Pain.

BONNIE WILLISON: Tough times. But Maree's group started thinking about their community, Minocqua. And it is in lake country.

MAREE STEWART: Well, I grew up on a lake. The other two students I was paired with, Luke and Janelle, I don't know if either of them lived on a lake, but of course, living in MInocqua, there's lakes everywhere. And so that was a cause that was important to all of us.

Three students aren't going to fix climate change or anything like that, so it had to be something actionable. At first, we were actually looking into focusing on zebra mussels. But in doing a little more research at that time, they were not as prevalent or as much of an issue in the Wisconsin lakes where we were. And Eurasian watermilfoil was definitely becoming more of a problem.

LISA AHLERS: Well, I had never heard of it. It looks like carrot tops to me.

BONNIE WILLISON: That's Lisa Ahlers. Or as Maree knew her, Mrs. Ahlers. She was a gifted and talented teacher at Maree's school, and it was her idea to devote a class to this community problem solving contest.

LISA AHLERS: I didn't know there were things in our water that weren't supposed to be there. And then with the Eurasian watermilfoil that it blocked sunlight and did a lot to destroy the habitat for the fish. Oh, and just, you can look out on some lakes and you just see this whole green floating island.

BONNIE WILLISON: So Lisa said there that she had never heard of Eurasian watermilfoil before the students came up with this idea. That was probably because this was back in 2001, and it was just a totally different time in aquatic invasive species world, especially in Northern Wisconsin.

So invasive species weren't necessarily new, but they weren't as prolific as they are now. At this time, zebra mussels had just started moving into inland lakes in the '90s. And Eurasian watermilfoil, it had become established in some of Wisconsin's Southern lakes, in more populated areas where there were a lot more people living and a lot more boaters.

But what was happening was those people from down South were buying cabins up North and bringing their boats and trailers up North. Northern Wisconsin was also having fishing tournaments, which means a ton of people coming from far and wide, bringing their boats to these lakes. They were starting to see more Eurasian watermilfoil.

Internally in science world, at this time, we really just didn't know that much about Eurasian watermilfoil. There were all these questions, like, how would it survive in cold water versus warm water? And what chemicals can control it, if any? Does it take over every lake or just some, and why?

So it was really understudied, and we just didn't quite know how to approach it. And that was scary. And there was another thing going on here. Wisconsin had virtually no invasive species education going on. And virtually no prevention was happening.

So there were a few people at the DNR and at Sea Grant here trying to address aquatic invasive species, but there was hardly any state funding for it. And without funding, you can't purchase, say, signs for boat launches.

Like, you know now how there are signs at every single boat landing about cleaning your boat? There were no signs back then. So many people who lived in Wisconsin had never heard about invasive species before. And certainly not Eurasian watermilfoil.

So when Maree learned about Eurasian watermilfoil from her mom, and she was a science teacher, she was concerned and thought that it was a problem that maybe she and her classmates could try to tackle.

JENNA MERTZ: Yeah, no pressure, just save the Northwoods from aquatic invasive species. I wish I had the ambition of a seventh grader. It's impressive.

MAREE STEWART: The main thing that we had to do was come up with a solution.

LISA AHLERS: My mind was always thinking, OK, yes, it's a problem, but what is the solution going to be? Where it kind of pushed me as I had to be willing to let the kids start something that didn't have an obvious answer. You had to let go a little bit of the reins because it was their project, and that was the whole point of it.

MAREE STEWART: I think at first, we really felt like we needed to come up with something tangible. We just-- that's how you think when you're 12. Like, of course, you need to come up with an invention, right? Like a physical item that can solve the world's problems.

We had this, like, scope that we came up with that was-- essentially, it had a mirror in it. And you could put it into the water and see if there was any milfoil down there. But as we got into it, we just realized the power of this is going to come from behavior changes of people.

And how do you do that? By interacting with other people and word of mouth. And that takes a long time to change, but it's more powerful over time.

BONNIE WILLISON: So by this time, the students had connected with the Department of Natural Resources, the DNR. Sandy Wickman, who worked in their area, she was helping them get more information about Eurasian watermilfoil and AIS, aquatic invasive species.

And that's when they realized that in order to stop the spread of AIS, they had to change people's behavior. To change people's behavior, you have to talk to people, you have to educate them. And this is kind of where I stop also and I congratulate these seventh graders.

Because when I was this age, I was scared to talk to any adult, even the ones I knew, not just like strangers. So I'm really impressed they came up with this idea to basically talk to strangers about boats.

JENNA MERTZ: And I'm still somewhat afraid of talking to grownups. I'm one of those people that when I have to make a dentist appointment, I have to give myself a pep talk and work myself up to the phone. And so to be like 12 or 13 and just working with adults is, yeah, super impressive.

BONNIE WILLISON: So the students came up with two ideas. They, one, wanted to put together educational material, get that in the hands of lake associations and lake groups. And then two, they wanted to have conversations with boaters to tell them about the risks of aquatic invasive species.

And what better way to do that than to talk to folks at boat launches while they're launching their boats?

JENNA MERTZ: Yeah. And that's meeting people where they're at, while they're doing the activity. I think that's a really great idea. Was that idea new, or had anyone thought of this before?

BONNIE WILLISON: Yes and no. The idea of boat inspections was kind of floating around in Wisconsin's DNR community. Our neighboring state, Minnesota, they had a boat inspection program at this time. And actually, their state was devoting $5 million to aquatic invasive species prevention and education.

JENNA MERTZ: That's a lot of money. Wisconsin and Minnesota, we have this kind of rivalry. So I have to ask, Minnesota is spending 5 million, how much was Wisconsin spending on this?

BONNIE WILLISON: In 2000 and 2001, we were spending $50,000 a year. It's a lot less.

JENNA MERTZ: A lot less.

BONNIE WILLISON: Yeah. So that's like one full time salary or a few signs for a few boat launches. But what the students wanted to do, it was a little bit different than the traditional boat inspections that other states were doing anyways.

Boat inspections had traditionally been done by wardens, like law enforcement officers who were there to enforce the law, who could give you a ticket if you were breaking the law. The students wanted to take a different approach and train volunteers, like everyday people, to talk to their neighbors. So focusing on educating people, not really enforcement.

So there was a growing number of people in the state at this time who were really concerned about their lakes and concerned about this growing threat of invasive species. And this volunteer program would empower them to do something rather than having them just sit around and worry about it. And I think that was a new and novel idea, especially in Wisconsin.

So the students spend their fall semester writing and researching.

MAREE STEWART: We spent a lot of time on the project. Like, some of the time that we would have been spending in science class was devoted just to working on this project because it was very time consuming.

BONNIE WILLISON: So remember, the goal of this whole project was to submit it to a nationwide competition, the Christopher Columbus Foundation community grant. So they wrote up their pitch. Their teacher, Mrs. Ahlers, edited their reports. And in January, they submitted to the competition.

MAREE STEWART: And then at the conclusion of that, however long we worked on that and submitted the project, we were selected as a top 10 finalist to go down to Disney World and compete.

LISA AHLERS: They picked 10 groups of kids from the entire United States. So that was a big deal.

BONNIE WILLISON: So, Jenna, did you go on any fantastic field trips as a middle schooler?

JENNA MERTZ: I did. So, Bonnie, have you ever heard of Medieval Times before?

BONNIE WILLISON: Yes.

JENNA MERTZ: So for those who don't know, Medieval Times is like this. It's like Renaissance fair light. And it's this venue in the Northern burbs of Chicago. And it's where they do-- they reenact medieval times stuff. So there's jousting and horses. And this came after like our medieval times segment of social studies class.

And the thing I remember most was that they had their jousting competition. And they divided the arena into four sections. My section was for the black and white knight. And the black and white knight was throwing out roses, and so everyone was clamoring for a rose.

And they thought that he had stopped throwing out roses. But I was very persistent. And I kept on being like, he has one more rose. And he did. I got the rose. He threw it to me. And it is sitting somewhere pressed between a heavy fantasy book and a Tupperware in my basement. So that was my fantastic middle school experience.

BONNIE WILLISON: Very fantastic. Wow! That really beats my middle school field trip of coming to the Wisconsin capital, which we did every year. And what I remember from that is a lot of marble that they-- came from various different countries. And they really tell you where this rock came from and everything.

JENNA MERTZ: No jousting, but Wisconsin history is just as cool.

BONNIE WILLISON: Yeah. So can you imagine Disney World?

JENNA MERTZ: No. I would have flipped as a middle schooler.

BONNIE WILLISON: Yeah. So imagine how the students felt as they flew down to Disney World escorted by their teacher.

MAREE STEWART: It was probably one of the coolest experiences that I'm ever going to have, honestly. Of course, we got a free trip to Disney World when we were 12. 12 and 13 and stuff, so that was fun.

LISA AHLERS: It was a total week. They had so stay with me. I wouldn't let them go anywhere by themselves. They got to go to the big Cirque du Soleil presentation. They got to go to the Space Center on Cape Canaveral or I think whatever. So they had a lot of experiences. But they were kept busy too.

BONNIE WILLISON: Jenna, have you ever seen Shark Tank?

JENNA MERTZ: I've seen bits and pieces. I'm familiar with it, where it's like people bring their invention on the show, and then the investors grill them about what does it do? What's it good for? Will it make money? That kind of thing.

BONNIE WILLISON: Yeah. So like Maree said, part of the trip was all fun and magical games, but the other part of the trip was more like Shark Tank. Shark Tank if the premise was about solving the world's most pressing problems, and if the contestants are 12.

MAREE STEWART: When we went to compete, we had to present to a panel of judges. And we had to do press interviews, like media interviews. We also had to do a presentation, which we did this play or skit that we came up with, with myself and Luke in a boat that we made, and we were like fisher people. And we were fishing, and oh, no, what's this weed?

And so then our other teammate, Janelle, we put together this outfit that she wore that was like, she looked like a Sasquatch, basically. But she was like the big bad milfoil, OK?

LISA AHLERS: It was a pretty cute, dramatic presentation. Janelle was tall. So imagine the brown and greens, and then it was cut in strips. And it was all-- I don't know if it was sewn onto like a snowmobile suit. There were all some-- too, something on her head. So she looked like a big monster.

And it was all this stuff hanging to kind of simulate the way milfoil grows in those long, long pieces.

MAREE STEWART: We did this little skit and presentation and showed how we inspected the boat and encourage other people to inspect their boats. So yeah, there was a lot that went into that. And it definitely cured any potential fear that I might have of public speaking for the rest of my life, because we had to do so much.

So after this week long competition and interviews and all these different things, there was a banquet or something where they were going to announce the winners. And so I think there was like third, second, and first place, and then there was this grand prize, which was $25,000. And that was to be used for the subsequent year to implement the solution in your community.

And so I remember we were at the banquet, and they're calling the third, second, and first place. And there were some really great projects. Like there was a group that did something with an alarm system, like if someone accidentally left an infant in a car, that kind of thing. So there were a lot of very significant issues that people were tackling.

So they were announcing like third, second, first. And they get to first, and we're like, OK, we did not get it, of course, because. And then they announced this grand prize, and it was us. And we were, oh, we were, of course, so excited.

LISA AHLERS: Oh, my God! When they announced it, I just remember all this confetti coming down on top of us. I just thought it was so great that they even got there. But no, I was probably just as surprised as the kids were when they took the big-- That's really the big prize, winning that much money to further your project.

I was just so happy for them. And then also a little bit of oh no, now it's more work, because then it was, you're exhausted. You've been around kids all week. You've been go, go going the whole time. And then they won. And I mean that was fantastic.

But now they had something really to prove. Now it was like, OK, you said you were going to do this, now do what you said you're going to do. Can the kids really pull this off?

BONNIE WILLISON: After the break, do the kids pull it off?

[MUSIC PLAYING]

LISA AHLERS: I kept scrapbooks of things that the kids did. And I'm just going to grab-- now I'm interested too. I want to see what do I actually have? I'll pull my other--

BONNIE WILLISON: So the students left the happiest place on Earth and returned to Minocqua. And I asked their teacher, Lisa Ahlers, what happened next. Thankfully, she had some scrapbooks to jog her memory.

LISA AHLERS: Oh, yeah, here. I have all the-- yep, here it is.

BONNIE WILLISON: First of all, the students came back famous, if you can imagine.

JENNA MERTZ: Small town heroes.

BONNIE WILLISON: For sure. They were in a parade. They were interviewed for the news.

LISA AHLERS: The governor was up in Minocqua. And the kids, they got to talk to him. And there was, of course, a lot of-- there was a lot of newspaper coverage. Even Channel 9 in Wausau came and did an interview. OK, here's from this Lake Tides Newsletter for people interested.

There's an article, and it says what to do with 25,000. Some of us may think that spending 25,000 in nine months would be an easy task. But just ask the students at Minocqua Hazelhurst and Lake Tomahawk Middle School. Maree Stewart, Luke Voellinger, and Janelle Zajicek now have the overwhelming job to develop an educational tool that reaches within the school year, the goal of the Milfoil Masters program.

These students are now designing information brochures, instructions, and activities that youth and lake associations can engage in to help stop the spread of Eurasian watermilfoil in Wisconsin lakes. And then yeah, so the students will get professional help with the grant application and implementation plan this fall.

BONNIE WILLISON: So it was summer. Students took the summer off to bask in the glory of being hometown heroes. And in the fall, they went back to school. Maree is an eighth grader now. And they met someone else, a professional who would help them in this next phase of the project. Her name was Laura Marquardt.

LAURA MARQUARDT: I believe they called me, their teacher called and said they won the national award. And I'm like, OK. What was that about? [LAUGHS] So that's when Sandy Wickman from the DNR and myself from Extension met at their middle school so they could explain what they won, how they wanted to go about it, and what's feasible and what was not.

And so as we all sat down and kind of brainstormed a little bit, it started to flush out what they wanted to do. They had to distribute materials. So that's how we decided workshops. But they didn't know how to go about the context.

How we would arrange workshops, how we would get the word out, where would we get specimens? How would we meet people? Do we just show up at the landing? All of those little things.

BONNIE WILLISON: So Laura and the students, along with Sandy, who would help them with the proposal, they started meeting every week. And they had a lot of details to hammer out. So one thing was the kits, the kits with the educational materials to give out at lake associations.

What was going to be in the kits? Who was going to write it? How long is it going to take? And then the workshops themselves, how are they going to do these presentations? Who's going to say what? They also developed a plan to teach the folks at these workshops how to inspect boats. How do you find invasive species on the boats? How do you get them off?

They did role playing activities. Like, How do you handle a crabby boater who doesn't want to talk to you? How do you handle happy voters? And lastly, they wanted to teach people how to identify aquatic plants, because if you can't identify the plant, you can't monitor for it.

So all that material had to be developed, presentations had to be written, and the kits had to be assembled.

LAURA MARQUARDT: They were gifted and talented eighth graders, that's for sure. Well spoken. No problem. And teacher, of course, took on a lot of the responsibility because the kids had other classes. Which they tried to also get their classmates involved. And so that's where the 150 kits got made.

We brought all the materials and all the things, and we just went around in a circle and just kept stuffing like an Easter basket. Just keep stuffing them in.

BONNIE WILLISON: Lastly, the T-shirts need to be printed. T-shirts that are now kind of iconic, that volunteers would wear at boat landings.

LAURA MARQUARDT: This is a funny story, because we were trying to make this message on a T-shirt that we were going to have everyone wear at the boat landing so they knew who are these people in blue?

Being from Extension, we have-- sometimes we get a little wordy. Well, I took the design and the message to the T-shirt printer. And he called me up, and he said, oh, I really like the design. The original one was a circle with milfoil in it.

And I don't know, it had some other very long word like keep our lakes clean and protect them and blah blah blah. And he goes, too many words. Keep it simple. Clean Boats, Clean Waters. And we're like, all right, that sounds good.

JENNA MERTZ: Wow! That's-- thank you, printer. [LAUGHS] That is fantastic. That's like one of those just moments in your life that someone says something, and it changes everything forever.

BONNIE WILLISON: Yeah. That printer goes down in history too, and he might not even know it. So the T-shirts were done, the kits were assembled, and so they started booking these workshops with lake associations. And it turned out that people were hungry for them.

How were those workshops received by the public? Were people really interested in them, or were they a little bit like, hesitant?

LAURA MARQUARDT: Oh no, they loved it. Oh no, oh no, they loved it. Especially when we talked about, it was called the Eurasian watermilfoil workshop. Well, that drew them in like crazy. The kids got involved, they showed them where to find the weeds on the boat, and they helped out. We put them into roles where they felt comfortable.

So we limited so we could maximize as many people from different lakes as possible. So we would have like A representative from a lake. So if we had 25 participants, we had 25 lakes covered.

JENNA MERTZ: It sounds like it was really successful.

BONNIE WILLISON: Yeah. And at the time, the DNR didn't have any staff devoted to aquatic invasive species. So it was a success. The project was helping to solve that problem. And when folks came to these workshops, they learned about Eurasian watermilfoil, and they started looking for it, and they started finding it.

So we see more Eurasian watermilfoil discoveries in new lakes at this time. And that also fueled more people to attend the workshops. And more people were just getting hungry for information about invasive species.

So in the end, Laura and the students did workshops in 25 counties. They distributed 150 kits. So that's 150 more lake associations that had these resources and could train volunteers.

JENNA MERTZ: That sounds like an awful lot, once again, for middle schoolers. And their teacher and Laura, that's a lot of extracurricular stuff that they're doing on top of their teenage life.

BONNIE WILLISON: Totally. And they all felt that as they neared the end of the school year. And that's when the grant was coming to an end, too. So here's Maree. She's now ending her eighth grade year.

MAREE STEWART: I think we all kind of needed a break from it after that year following receiving the grant. By that time, I had just finished middle school, and we're entering high school. And so, yeah, that's a tough time of adolescent years to be focused on saving your community.

We were all just a little bit like, oh, we're done with this for a little bit. I must say, I still to this day hate group projects. No, we all pulled our weight, and everyone brought something to the table for it.

You spend a lot of time, you spend a lot of time with these people. So we spent a ton of time together. And it was great to get to know them too, because otherwise, we would not have been like in the same friend groups and such. It was fun.

JENNA MERTZ: So what happened with the program? We're hearing about all the effort they put into this, what happened?

LAURA MARQUARDT: After that first year when the kids, they went through the money, they are all done with everything, the program was kind of coming to a halt. Because of the interest of the public and how they responded to this, it really opened the eyes.

For me personally, I saw the passion on these lake folks. I saw them at workshops and talked to them on the phone daily about many different issues. And so I kept track of whenever I had a phone call, what was the topic?

Because let's say I had 100 phone calls, 50 of them were about invasive species. Can you help us? Is there materials? Can you come talk to us? Can you do this? Can you do that? That finally justified we need to have someone that is involved in invasive species. And that's when they decided, we need to keep this ball rolling.

BONNIE WILLISON: And this is the moment when Laura was actually hired as the first Clean Boats, Clean Waters coordinator. So this was now her full time job. This program that students started, it became official.

LAURA MARQUARDT: Without the kids, we probably not would-- probably not would have continued. We probably wouldn't have taken a long time to get together, like a cohesive effort, I'd say. But more of a county wide effort. Like, I'll do this, and ther I'll do that, and maybe I'll do that. And so this made us all one message, one unit, which was nice.

BONNIE WILLISON: So this decade that we've been talking about from 2000 to 2010, things changed a lot in Wisconsin aquatic invasive species management. When the students started this project in 2001, let's just say there's an aquatic invasive species dial.

And in the state at that time, it was around a two. There was barely any education going on. There was barely any budget. Aquatic invasive species was not a priority. In 2004, when Clean Boats, Clean Waters becomes official, I'd say the dial is at a five.

After that, it ramps up to full blast. Aquatic invasive species becomes a hot topic. Because of Clean Boats, Clean Waters, boat inspections skyrocket. In 2004, 6,000 boats were checked. In the next year, 30,000 boats were checked. So almost five times as many. And that number continues to go up each year.

Another thing that was happening at the time was that more state and federal money started coming in for aquatic invasive species management. So when that money came in for watercraft inspection, the Clean Boats, Clean Waters program was there, it was the perfect place to put that money. So that program continued to grow.

There was a big explosion of hiring for aquatic invasive species coordinators. And finally, more and more people were realizing that our invasive species laws were not working. So at this time, it is against the law to launch your boat with aquatic plants on it.

But what people were realizing was this law was almost impossible to enforce. So people start pushing for a new law. A new law that would make it illegal to transport invasive species, to move them from lake to lake. And that law was sorely needed at the time.

Volunteers, lake groups, and nonprofits, like Wisconsin Lakes, they started bringing decision makers up North to see Eurasian watermilfoil, to see this stuff happening. Folks started talking to their legislators.

And finally, in 2009, Wisconsin's new and improved invasive species rule was passed. You'll also probably hear it called NR 40, that's the official name of the law. So thanks to these grassroots efforts, we had a law that made it illegal to transport invasive species, which made it much easier to prevent the spread of invasive species in our state.

And I really see a through line here from this original student project, because the middle school project, it got people and agencies communicating. It got funding where it was sorely needed. It got a cohesive effort going. And it got passionate people educated about aquatic invasive species. It gave people an action to do.

So more than 20 years have gone by since the start of Clean Boats, Clean Waters. And when I talk to folks now, they say that people from other states look at Wisconsin, and they're envious of our program. They're mystified at how we have so many people ready to volunteer for this kind of thing. They're like, how do you get so many people to do this work?

Well, Laura Marquardt, she retired in 2007. And I caught up with the person who took on her role as Clean Boats, Clean Waters coordinator, Erin McFarlane. These days, Erin doesn't struggle for volunteers for Clean Boats, Clean Waters. She doesn't even really advertise. People just come to her.

ERIN MCFARLANE: The program's been successful because of the commitment and enthusiasm of so many of our partners around the state with counties, nonprofits, universities, federal groups, Sea Grant.

It's been successful because it allows people, just members of the public-- a lot of them are with lake organizations-- to go out at a boat landing and talk face to face with their neighbors, with people who come to boat or fish or enjoy the water, and just have a conversation about something that they're interested in, concerned about, passionate about, the health of Wisconsin's waters.

There's not a lot of opportunities nowadays to have those actual in-person conversations about what you're passionate about from a standpoint of just wanting to share that passion and your concern.

JENNA MERTZ: Yeah. So I'm thinking about Laura Marquardt, who helped start this program with the students. Was at 2004. So how does she think about the fact that Clean Boats, Clean Waters has continued for 20 years? Like, here we are, and it's still this big thing in the state.

LAURA MARQUARDT: When I was working for UW-Extension, my boss, how would I say? He was more of an adult educator than a kid educator. OK? And so many times, he'd shake his head at me going, now what are you doing? Now what are you doing?

And he'd say, Laura, this is the deal. He said, what we hope for UW-Extension is to create something that will become a legacy. When you're gone, it will carry on without you there. And to this message, I say I did.

BONNIE WILLISON: She certainly did. I feel like we owe her a lot in Wisconsin, along with a handful of talented middle schoolers. Here's Maree.

MAREE STEWART: We did not at all think as 12 and 13-year-olds that we would work on a project for school that would make such an impact where we live and beyond where we live, and truly employ a whole lot of people.

And it's gone so far beyond what any of us ever thought it would, which is really great. I'm really glad that it has. And I think, too, another way it's impacted me is like, I now work in the nonprofit space because I kind of saw the impact that people can have from a young age.

[MUSIC PLAYING]

BONNIE WILLISON: So as you head out to the lakes this summer, take a moment to think about the people who protect them. And if a 12-year-old can kickstart a movement, just imagine what the rest of us can do.

So how can you get involved? Well, you can volunteer with Clean Boats, Clean Waters. Not the worst thing in the world to stand out at the lake in the summer talking to your neighbors. And if you're not in Wisconsin, you're actually in luck, because Clean Boats, Clean Waters has kind of been expanded to the whole Great Lakes region.

Every summer, there's a two-week period where folks throughout the Great Lakes region, even into Canada, get out at the boat landings and talk to people about invasive species. And that's the Great Lakes Landing Blitz. It happens over the 4th of July weekend, where so many people are out on boats. We can talk to so many people.

Lastly, just have conversations with your neighbors. Talk to them about lakes. Talk to them about invasive species.

JENNA MERTZ: And I'll add something to that list. I think we should all listen to 12-year-olds a little bit more too.

BONNIE WILLISON: I think so, yeah. So one of the things that makes Clean Boats, Clean Waters a big success is the folks that volunteer, the folks who do this work. So let's hear from a few of them.

JUDI FELLOWS: Hi, this is Judi Fellows from Townsend.

LINDA BOGDALA: My name is Linda Bogdala. I've been participating in the Clean Boats, Clean Waters program for about 10 or 11 years.

KEITH MONTGOMERY: My name is Keith Montgomery.

MARY DODEN: My name is Mary Doden. I have been the Clean Boats, Clean Waters coordinator for Butternut and Franklin Lakes since 2015.

JUDY FELLOWS: I was at the landing one day when a dad and his nine-year-old son were leaving the lake and loading their boat. We talked about the need to clean their boat well so they didn't carry weeds to another lake, and why that was so important.

The young boy was suddenly under their boat trailer. Just because there was still a tiny weed hanging there, he came out with this triumphant look on his face. He was proud indeed and said, dad and I will always check.

LINDA BOGDALA: It is hard work. What keeps me going is knowing that I'm doing my little part. It's keeping the lake free as much as I can of invasive species.

Fishermen, they all seem to understand it and are very appreciative of the work that we and-- me and the other volunteers do.

KEITH MONTGOMERY: I think I have a sense of stewardship in the lake. It's been passed on to me and my generation, and I have a feeling I should pass it on to the next generation.

JUDI FELLOWS: My family has been on these lakes for three generations. That's what keeps me going. I want this water to be healthy for generations to come.

MARY DODEN: My most memorable experience was enjoying all four of my children working as Clean Boats, Clean Waters interns as their summer job. Not only did it influence them to want to protect our beautiful lakes, but it taught them to communicate that passion to others.

My kids also learned how to survive outdoors among hordes of mosquitoes. What to do when your battery dies in your vehicle, and how to navigate to 15 different lakes in the national forest without using Google Maps.

LINDA BOGDALA: I am just glad that someone is taking an interest in this program in Wisconsin. And thank you to those middle schoolers, the milfoil masters, who started this program way back in the early 2000s, I believe. And thank you to the state of Wisconsin and for this program.

JENNA MERTZ: This season of *Introduced* is written and produced by Bonnie Willison, Jenna Mertz, Tim Campbell, and Nichole 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]