

**Season 3, Episode 5: How Healthy Fish Create Happy People**

**Host:** ESF President Joanie Mahoney

**Guest:** Dr. Josh Drew

**Josh Drew:** The types of educational opportunities that were afforded to me because my past professors decided to go and run a class like that. The paths of life are rarely straight and predetermined. I think it's one of the things that I love about teaching. I like providing students with the tools to take whatever life throws at them. It really drives it home when you see people who have to leave everything out of their house, just pulling out family photos that have been ruined, pulling out recliners that have welcomed them home for decades. Everything that they had, they lost. It really put that personal touch to climate change. You don't have to vote one way or the other. Just vote how you think best. But just make sure you vote because you want to make sure that the will of the people is represented.

**Joanie Mahoney:** Hi, this is Joanie Mahoney, the ESF President, back for another episode of our Campus Conversations, the podcast. As those of you who have been listening know, I am absolutely thrilled by the opportunity I have to speak with some of our faculty here that do very interesting work. I just appreciate that they stop what they're doing and talk about it a little so we can tell the broader community about the good work that's done here at ESF. Today is no exception. I am joined by Doctor Josh Drew, who's an assistant professor in the Department of Environmental Biology. Welcome.

**Josh Drew:** Thank you so much. It's an honor and a thrill to be here.

**Joanie Mahoney:** Well, I am a little intimidated because I'm talking to a veteran podcaster. You know how to do this probably as well as anybody.

**Josh Drew:** Well, hopefully. We'll see how it turns out. But yeah, I've had the chance to do some podcasting since 2018.

**Joanie Mahoney:** Interesting. I like it. The subject is so interesting to me. I say this, but I really mean this sincerely. I can't believe that I can just ask people to stop what they're doing and sit down and have these really interesting conversations with me. The reason for you to do it is because I'm sharing it more broadly. But the fact that I get to sit here and ask you questions and learn about what you're doing, it's really a great job that I have here.

**Josh Drew:** Yeah. Well, we're a state institution. A big part of what we do here is to serve the people of New York. There's many different ways we can do that. If we can reach out to our alumni, to fellow citizens of New York and beyond, then why not do it?

**Joanie Mahoney:** I've found that a lot of these conversations are hopeful. The media shares the ever-more alarming news about our environment, our planet, our climate. When you hear about some of the work that's being done here at ESF, it gives reason for people to be hopeful that there are really smart people that are on it. If I'm not mistaken, you are a, like me, Upstate New York native?

**Josh Drew:** I am. I was born and raised just outside of Albany, New York.

**Joanie Mahoney:** Central New York area. Spectacularly beautiful. How lucky for you to have the career that you have and not have to travel far to be able to put your expertise to work. Were you in college here in New York as well, or did you travel out for your education?

**Josh Drew:** I traveled all the way down to Northern New Jersey for my undergrad. That remains, to this day, the furthest south I've ever lived. But no, I grew up in the Capital District Region. I went to Bethlehem Central High School. We always had an opportunity to go take full advantage of being in the beautiful part of the Catskills for weekend tours during leaf season. My dad and I, one of the great memories I have is I was about 16 or 17, and we hiked up to Marcy together. I remember just that feeling of exploration and something great to be able to do with my dad.

My grandparents had a little bit of land behind the house that they lived on. One thing I really love about it is that when my grandparents passed, my dad moved into the house. So now, when we go up to visit him, my kids are able to go on that little plot of land. He moved into the house in the early ... well, in the mid-'50s. So three generations of us have walked on that same piece of land. It's been really fun to talk about how we've seen that land change, and the neighborhood that it is. The neighborhood that it's around it has changed, too. It's just been a great opportunity to talk about land use change, which is maybe not the easiest thing to bring up, but also just about how special it is to have a place and a sense of home to it.

Now that we're at ESF, first of all, it's always a thrill to find people who are from the same area that I am, as my students. I think there is a connection. I went to Hudson Valley Community College for a brief period of time. I saw a student in my class last night wearing an HVCC sweatshirt. The community college is such a great aspect of SUNY. It's wonderful to be able to show him that I started my career out at HVCC, too. It's a great launching pad. Those connections, I think, are really humanizing with my students.

Then the opportunities that we have at ESF, up at Cranberry Lake, the biological station we have up there and some of the properties in the Adirondacks, I mean, they're just stunning and amazing places to do research. It's all right here. I like a lot of things about New York. One of the things, we've got the Excelsior Scholarship, which provides an opportunity for students from New York to go to

SUNY colleges. It's a great opportunity and one that I hope a lot of people take advantage of. One of the aspects of it is that they have to stay in New York for a number of years after. I'm like, "Well, what a great state to be able to stay in, because there's so much variation." You could work in Lower Manhattan, in the heart of one of the greatest cities in the world, or you could go up to Constable, New York, out in the middle of the North Country, and have such a varied experience. The state has so many things to offer. It's a real honor and privilege to be part of the state's educational system.

**Joanie Mahoney:** Yeah. I couldn't agree more. I love New York. My husband and I have four sons. They all live in New York. Not all here in Central New York, but they're all still in the state of New York. So I think we feel the same way. That sense of roots that you described with three generations on that land, I lost my dad earlier this summer. My mother lives in the house I grew up in. So my kids are over there. They moved into that house in 1966. It's interesting because the neighbors that were there before they got there just moved out. You can pretty much see their house from here at ESF. They're right close by. Where did your interest in your area of research happen for you in your life?

**Josh Drew:** As a kid, I always grew up hiking around and walking out in the forest. Snow days, I would always go outside until my jeans were snow-crusting. Then I'd come in and put them on the radiator and put another pair and go back out. I always loved being outside. When I was an undergrad taking ecology classes, it was great because we would go for hikes. But the information I had, it was like unlocking this other layer of information. I loved going for a hike, but then all of a sudden I could identify what the plants are. I knew the tracks. It was almost this magical way of expanding the joy that you could get from being out in nature. I was like, "Wow. You can do a career in this?"

I also had the real pleasure to travel internationally early on. I went to Mexico during the winter of my sophomore year. Part of that, I went to a place called Isla Mujeres. It's near Cancun. It's on the Yucatan part of Mexico. I did one of these discover scuba. It was the first time I went underwater. It was pretty perfunctory. There were a dive master right by me, but I got buzzed by a green turtle. It just flew from behind my head, over my head.

**Joanie Mahoney:** Wow.

**Josh Drew:** It was maybe five feet away from me, this massive carapace just swimming gracefully, the arms just moving up and down. I was like, "Wow. That is amazing that you could take all the cool parts of going out in nature and going for hikes, but then do it in a place where you can get buzzed by sea turtles."

**Joanie Mahoney:** There's this whole other world. It is fascinating what's happening in our oceans. That is answering the question for me. How do you grow up in Albany, New York,

and have this interest in marine science? But you got the bug through that experience with that green turtle?

**Josh Drew:** Yeah, exactly. Once it got hooked in me, I couldn't say no. I was really fortunate to take another course which was a temperate marine biology class. We had two one-week expeditions or field trips at the end of it. One was to the Marine Biological Laboratories in Woods Hole, Massachusetts. Immediately after that, we went to the Isles of Shoals Marine Biological Station, which is on the Maine-New Hampshire border. I look back, and it's really amazing because I ended up going to school for my PhD in Woods Hole at the Marine Biological Laboratory. Then I met my wife at the Isles of Shoals Biological Station. So, in this two-week period-

**Joanie Mahoney:** Wow.

**Josh Drew:** ... marine biology brought me my great intellectual and my great emotional loves in a two-week span.

**Joanie Mahoney:** That speaks to the importance of these field experiences. ESF does them better than anyone. Our students have every opportunity to go and explore. I think you're going to do that soon. Did I read that you're taking a group of students to Vieques?

**Josh Drew:** Yeah. Those personal experiences really seeded doing this trip to Vieques because I think about how formative that sea turtle encounter was, how formative it was to go to Woods Hole, the types of educational opportunities that were afforded to me because my past professors decided to go and run a class like that. They didn't need to.

**Joanie Mahoney:** That is a gift to your students, that you're taking the time and making this effort. Let's back up a little bit. What is your area of study that earned you a PhD?

**Josh Drew:** Actually, I don't do what I did my PhD in. The paths of life are rarely straight and predetermined. I think it's one of the things that I love about teaching. I like providing students with the tools to take whatever life throws at them. But to answer your question, I started doing work describing new species of coral reef fish and looking at how to set up protected areas in the tropics, and looking to see how those protected areas might be linked. In some ways, it was fish based, but I don't do the molecular genetic part anymore.

One of the great opportunities of my work was that I would live out in communities in Fiji for about two months at a time during my PhD work. That gave me a real opportunity to think about how to talk about my work in a way that resonates with the people who need to hear it the most. That was a lesson that I was very glad that I learned early. It's one that I truly try to impart with my

students. It's one of the reasons why I'm glad ESF has the digital storytelling studio, because you want to meet people in an avenue that resonates with them.

**Joanie Mahoney:** Yeah. We've talked about that here in previous podcasts, about how this fascinating research is done. It has real-world applications that can be really meaningful. But unless we have the ability to communicate that to the people who need to know and the policymakers and the people that you want to implement these, we're not all that we can be. I appreciate this storytelling the same. This podcast is part of that. What is your area of research now? How would you describe what research is about today?

**Josh Drew:** Yeah. I basically describe it as looking at how healthy fish can create happy people and how happy people can help make fish healthy. I look at the way that sustainably-managed fish populations influence people and vice versa. I'm trained as an ichthyologist, or as a fish scientist. But the more I spent out in Fiji, the more I realized that it's really working with the people that is ultimately going to make a difference. So I had to reframe my research less about looking at fish DNA and thinking more about, well, what does a healthy reef mean for these communities that I'm working with? We in the lab still carry that idea of the link between healthy aquatic biodiversity and supporting strong and healthy communities. We look at that everywhere from as far away as Fiji to as near as down the road in Lake Onondaga.

**Joanie Mahoney:** Some of these conversations have been very specific to one thing that someone is diving very deeply into. Then some of these conversations that I've had have been about what I'm, as a faculty member here, researching, how it correlates to something that somebody else is doing, and you can look at it in a bigger way. Now, this is the first that I've really talked about a deliberate look at how the human population and the biodiversity interact with each other. What are you finding? How do people make happy fish? How do fish make people happy?

**Josh Drew:** Well, one of the things we're looking at a lot is the way that communities, particularly Indigenous communities in Fiji, but also folks here in Syracuse, the way that having a robust and rich and healthy and diverse aquatic ecosystem can support them. It runs the gambit, from food security, making sure that you always have something to eat, to cultural ties.

Those cultural ties can be local. We have a student who's working with the Onondaga Wednesday Night Bass Fishing Tournament. That's a community that gets together because we now have healthy bass populations in Onondaga Lake. That's great. Or they can be as far field as a group of community members in Fiji view sea snakes as an extension of their ancestors. If the sea snakes are unhappy, it means that their ancestors aren't happy. They have these really deep feelings of reciprocity with existing species. And anywhere in between. It can be as formal as being able to go out and commune with your ancestors. Or it can be

as informal as being able to go out with your daughter or your son and go fishing on the lake and having that as a quintessential Central New York experience.

**Joanie Mahoney:** This lab that you're referring to, first of all, I'm curious whether you're the one who named the lab.

**Josh Drew:** I am. I forced it on my students, but they seem to be running along with it.

**Joanie Mahoney:** What is the lab?

**Josh Drew:** We are the Coupled Human and Aquatic Organism Science Lab, or the CHAOS Lab.

**Joanie Mahoney:** How old is the CHAOS Lab?

**Josh Drew:** I started here in September or August, I guess, of 2019. So we're new, but we're hopefully having a pretty big impact.

**Joanie Mahoney:** Are you all affiliated with marine biology, or do you have an interdisciplinary connection at all here on the campus?

**Josh Drew:** We definitely are putting out feelers to other departments. I don't know if you've had a chance to talk to Josh Cousins yet. Besides sharing a name, he looks a lot like me as well. He does really interesting water governance work. Josh and I are definitely looking for projects that we're working together on. We also have a couple of members that are outside of ESF. We have a strong collaboration with an environmental anthropology lab at the University of Maryland. We also have a couple of lab members who are at the University of the South Pacific, which is-

**Joanie Mahoney:** How do you put those partnerships together?

**Josh Drew:** Zoom.

**Joanie Mahoney:** Interesting. Yeah.

**Josh Drew:** Man, Zoom makes it so much easier, especially for the Fijians because it's really hard and expensive to do long distance phone calls that way. But their 8:00 a.m. is our 4:00 p.m. They get on right before work, and we get off as we're finishing work. We have an opportunity to chat and collaborate. We're analyzing data together. We're writing papers together. I think that it gets to one of the points about my lab that I'm really excited about, working with people from the communities where we are blessed to be able to do research. We don't want to do work in Fiji but have no Fijian collaborators or have no Fijian members.

**Joanie Mahoney:** That is one of the silver linings to this whole pandemic, the ubiquitous presence now of Zoom. It has made some of these collaborations, I would imagine, easier. What then does the lab do? How does it work?

**Josh Drew:** Well, we have a lot of different projects running on. They're all over the place, literally, but they're all unified by this idea of looking at how healthy biodiversity influences people and vice versa. We have a number of projects run out of Fiji, which are looking at the ecosystem services that mangroves, seagrasses, and coral reefs provide to local communities, Indigenous Fijian communities, and trying to figure out what are the species that really matter the most to those communities, and finding ways to set up conservation programs centered around them.

It's closer to home. We've got a project in Long Island where we're just kicking it off now. On Long Island, and this is funded by New York Sea Grant, we're looking at how to find areas of commonality around stakeholders who are concerned about oyster aquaculture. It's a really big industry in Long Island, but it is also one that is not without contention. We're trying to find commonalities so that these environmental conversations aren't always viewed as oppositional.

**Joanie Mahoney:** I just was reading something about the 10th anniversary and about the effect of the oysters on resiliency, which I had not been aware of before that. I know about the restoration work that's going on with the oysters, but I didn't connect it to the actual ability to play some role in mitigating climate change.

**Josh Drew:** Yeah. I was living in The Bronx during Superstorm Sandy, so that has a really personal view. I remember we were fortunate. The areas I was in was fairly elevated. Our building was moving, which was scary because of the wind. A couple buddies of mine went down to Staten Island later that week to help just clear out debris. It really drives it home when you see people who have to leave everything out of their house, just pulling out family photos that have been ruined, pulling out recliners that have welcomed them home for decades. Everything that they had, they lost. It really put that personal touch to climate change. I think that was a moment we were like, "All right. This is legit. This is something that is not just that scientists are talking about." This is something that everybody really saw.

We pivoted to thinking very creatively about how to address that. These living shorelines, which often include oysters and seagrass restoration, that is a great tool because that living aspect can absorb the water. It can absorb the storm surge in a way that a concrete barrier can't. For the times when we aren't inundated, it's a place for biodiversity. It's a place for carbon sequestration. It's a place for recreation. Frankly, they're beautiful. That's something you don't get with a hard brutalist architecture, storm wall type of thing.

- Joanie Mahoney:** I've been interested in hearing about you and reading a little bit about your work, the unique ways that you have of translating some of this. You do some kind of comedy show that involves sharks?
- Josh Drew:** Yeah. I used to live in New York City. We had the opportunity to work with a science speakeasy called Caveat, which was down on the Lower East Side.
- Joanie Mahoney:** It's a science speakeasy?
- Josh Drew:** It's a science-themed speakeasy.
- Joanie Mahoney:** Okay. It's the same as a speakeasy where you got to know the code and get in, and then what? Everybody's talking about science?
- Josh Drew:** They put on something like 110 shows a year, a tremendous amount of variation, but the shows are all science based.
- Joanie Mahoney:** Oh, my gosh. So interesting.
- Josh Drew:** Yeah.
- Joanie Mahoney:** I never have heard of this. I would definitely drop in.
- Josh Drew:** It's definitely the bar I would create if I was making a bar. They have science-themed cocktails. They have bookshelves that are filled with Ed Yong books on there. They've antique biological illustrations up on the side, and then they've got a stage. With the prodigious amount of shows that they have, they're always looking for people to come in and service guests. So I've had a number of opportunities to work with them on a variety of shows, usually shark or coral reef themed because it's what I do. But getting back to this idea of meeting people where they are, science doesn't always have to be a peer-reviewed article. Science can sometimes be me getting dressed up in a ridiculous suit and telling tawdry jokes about sharks. If it gets the information across, then it gets the information across.
- Joanie Mahoney:** Right. I think there's a ton of value in reaching people from outside the scientific community, as evidenced by how long scientists have been ringing alarm bells, and until people saw it up close, really get the sense of urgency that we're finally putting behind the effort to address climate change. Blood in the Water is the name of the program?
- Josh Drew:** Yeah. That was a super fun one. That went for a couple of years. The idea there is that they would pair a scientist with a drag queen, and we would do a 15-minute sketch where I would go and present a couple of interesting slides about sharks. One year we did the diversity of sharks. Another year we did how sharks are represented in human societies. They were, I hope, interesting in of themselves.



But the real gift was being partnered with my friend Kiko Soirée, who is just an amazing comedian. They were able to just do their thing and be catty and hilarious and drag the sharks through the streets.

**Joanie Mahoney:** I will bet you the people who witnessed that know more about sharks-

**Josh Drew:** Oh, absolutely.

**Joanie Mahoney:** ... than they ever thought or than we would've been able to if we were to give them a free lecture online to tune into. Right?

**Josh Drew:** Yeah, absolutely. The other thing that's really important about that is shark science, by and large in the media, has been very dude dominated. It ties into these ideas of hypermasculinity, where you're out, and there are these big, bloodthirsty creatures coming to get you. That, I think, can be off-putting to a lot of people who want to study sharks. By couching the shark science delivery in a way that celebrates our LGBTQ communities, I think it makes it a lot more accessible. It makes it not so steeped in toxic masculinity, but makes it more approachable. I think we owe ourselves the service of being explicit about incorporating diversity in the way that we deliver, and trying to think about ways to make that science more inclusive.

**Joanie Mahoney:** The fact that you're stopping and thinking about it and being deliberate in your efforts is really impressive. Let's pivot just a little bit because I started out here by telling everybody that you're an experienced podcaster. Does this podcast have anything to do with the comedy work you were doing in New York or just your willingness to try different communication outlets?

**Josh Drew:** Yes. It's called Dugongs and Seadragons. Stay with me here because it's a nerd-cubed thing because it's a marine conservation biology themed podcast using Dungeons and Dragons.

**Joanie Mahoney:** I can't imagine. I am looking forward to tuning in and hearing it. Is that something you're doing right now?

**Josh Drew:** Yeah. We're recording tonight as a matter of fact. It's been weekly. The idea is that storytelling is a really, really important way to get information across. Not everybody wants to hear a story that's delivered in a scientific paper format. So we're trying to use Dungeons and Dragons, which is a game that is centered around people telling a story together. We're all marine scientists, so the story that we tell is this fantasy game, but we interlace those fantasy elements with real scientific facts. So you can listen to the podcast, and you go away feeling as if you've learned. I'm actually writing up a paper with Jill Weiss, who's in environmental studies here, where we put out a survey, and we showed that people who listen to the podcast really do feel like they're learning more marine biology. The thing that I'm most excited about is we looked at the demographics

of the people who were listening. Only about half of them were marine biologists. We really were bringing in half our audience from people who were just there for the gaming. It's like, come for the game, stay for the marine biology.

**Joanie Mahoney:** Can I come for the marine biology and stay for the game because I'm not a Dungeons and Dragons ... Would the podcast work for somebody like that?

**Josh Drew:** Yeah, absolutely. It's a story.

**Joanie Mahoney:** I'll be able to follow along?

**Josh Drew:** Yeah.

**Joanie Mahoney:** Okay. Good.

**Josh Drew:** We all have different voices. The actual game mechanics are largely edited out because it's pretty a boring podcast to listen to us add up numbers on dice. We try to focus more on storytelling. I guess, circling back to the other topics we've had, that's another way to get information to people in a way that they feel comfortable with.

**Joanie Mahoney:** You're really making science accessible, which is great.

**Josh Drew:** That's the goal.

**Joanie Mahoney:** Does any of this translate into your teaching style? You're a teacher here. I would imagine that a lot of this knowledge that you're gaining from these unique ways to deliver marine science subject matter, can it translate into the way you teach?

**Josh Drew:** Yeah, absolutely. So much of what I learned about storytelling translates into lecture. The idea of storytelling, whether it's with a drag queen on the stage or if it's telling stories about Dungeons and Dragons, it's all about a narrative arc. So I really try to think about having a narrative arc when I create my lectures. I gave a lecture on extinction the other day in my conservation biology class. I used passenger pigeons as an example. That's a story that, especially at ESF, everybody knows the gist of the story. Telling a story that everybody knows the end to, or telling a joke that everybody knows the punchline to, seems like a tough way to do it. But I really dove into the history behind it.

I talked about how there used to be hunts for passenger pigeons here on Onondaga Lake. They would catch 700 birds in one net at a time. I talked about the way that people were really concerned about the loss in them. They didn't realize that they could. This enormity of we don't see aggregations of life that size. I try to put it, again, in terms they understand. There's a report of a passenger pigeon flock that was one mile wide and 300 miles long. For my

students, I asked them to imagine going to the corner of Westcott and Euclid, which are two streets about a mile away from campus. I said, "Well, that's one mile wide." Now, the New York State Thruway, if you take it from Buffalo to Albany, is 296 miles long. So imagine the thruway-

**Joanie Mahoney:** Covered.

**Josh Drew:** ... one mile wide-

**Joanie Mahoney:** Wow.

**Josh Drew:** ... a flock of birds.

**Joanie Mahoney:** What era was this?

**Josh Drew:** That was in the late 1600s.

**Joanie Mahoney:** I think we have the second to last known passenger pigeon in our collection, the Roosevelt Wild Life Collection here.

**Josh Drew:** Yeah. I would love to get them to see it, but because they're so rare, I let them know that we have one there. But I don't bring it out for class because I don't want that responsibility, honestly.

**Joanie Mahoney:** I'll say that one of the previous SUNY chancellors, when he was here on campus, it was the thing he left talking about. That storytelling ability must make you a fan favorite among your students. That's pretty cool.

**Josh Drew:** It's a fun thing. They seem to like it. The other cool thing about it is just another fun ESF connection. After the passenger pigeon died, really, people were like, "Wow, we can do that?" We didn't know we could drive things to extinction, really. Again, it became manifested in front of us. That spurred a large amount of legislation. One of the things that came out of it was an act that looked at international migration. It was attributed between the UK via Canada and the United States, but it also looked at migratory birds within the US. There was some concern early on about that violating state's rights. Louis Marshall of Marshall Hall gave expert testimony in front of the Supreme Court arguing for conservation at that particular time and for that particular legislation. So for students who always wonder who are these people that the halls are named after, it's really cool to be able to bring in some ESF history that seamlessly translates into the lecture that we're giving.

**Joanie Mahoney:** I hadn't heard that. His testimony apparently made it so that we didn't have to abide by geographic borders within the country, in terms of conservation efforts for birds?

**Josh Drew:** Yeah. Yeah.

**Joanie Mahoney:** That is fascinating. Before I let you go, I know about you that we share the passion of encouraging people to vote. Where does your particular passion come from for voting and encouraging others to be voting?

**Josh Drew:** I mean, it's always been part of my family tradition. My high school and middle school used to not give Election Day off. But my dad, I don't know if I should say this, he always let me play hooky on Election Day.

**Joanie Mahoney:** I think you can say it.

**Josh Drew:** Okay. Sorry, Bethlehem Central Middle School and High School. When he had Election Day off, he figured I should have it off, too. So we would go. This was back in the '80s and '90s when we had the big election booths. You go in, and they're ...

**Joanie Mahoney:** Yes.

**Josh Drew:** That felt so momentous. As a little kid-

**Joanie Mahoney:** Curtain closed with that big lever like we were The Wizard of Oz.

**Josh Drew:** Yeah. He let me pull the lever. It felt really, really cool. Then he would say, "Well, we're not just going to blow off school." We would then go do something-

**Joanie Mahoney:** Civic minded?

**Josh Drew:** Yeah. I remember one year we went out to Lexington and Concord. We would go to the state museum. We would do something kind of-

**Joanie Mahoney:** What a great tradition.

**Josh Drew:** Yeah. Although I don't let my kids do that. I don't let them do that because I work as a poll worker, so I'm busy all Election Day.

**Joanie Mahoney:** Oh, that's great. You're a poll worker here in Onondaga County?

**Josh Drew:** I am. I'm off doing early voting tomorrow, and then I actually canceled classes on Election Day, at least from my class, because I want to make sure that they vote.

**Joanie Mahoney:** I share that same passion. I've thought for a long time that it should be on September 11th. It should be a national day off for people to have the opportunity to vote. I just think that it could be in November as it is right now. But it's just such a good reminder of why it matters to do it on a day like that. But I do think we should have the day off for people to vote. I have had experience in

local government. I was an elected official before I came here to ESF. I can tell you from the inside how much it matters. I believe the cynicism people have is earned. I think that it's been just such a mess for so long that a lot of people have thrown up their hands. But I go and talk to people when I can about the fact that it's one day where you can very dramatically impact your world.

If you take a neighborhood in the city of Syracuse and you get everybody riled and you show up at the polls, it doesn't even matter who you vote for as much as the fact that you did vote. Even if you just go, I tell people, and sign the book and register that you were there, that's what people in elected office will sit up and take notice of. They'll want to make sure your street is plowed and your trash is picked up and that you are happy with your local government because they know that you're going out to vote, and you have the power to take them out of their jobs. When you have large swaths of the population that aren't showing up to vote, they're making it easy for people to ignore them. The more you dislike the way things are going, the more you should want to vote.

**Josh Drew:** Yeah, absolutely.

**Joanie Mahoney:** Instead, it's been the opposite. People have gotten apathetic because they just don't feel like their vote matters, and they're not seeing the changes that people promise out on the campaign trail. I will say, "If you want stagnant, backwards, status quo, then just ignore the whole process. But if you really want people to feel like they have a boss, which they do, we pay the taxes that employ these folks, then they need to hear from you the one day of the year that you can really make your voice known." I've often thought that we should do something like give people a tax credit or something for voting. It's that important. That's my soapbox on voting. I was very happy to hear that you share that. Anything I can be doing to help you and your world, and I'll call on you to do the same in mine, because I think we could really make a difference if we could get people out to vote.

**Josh Drew:** With my students, it would be inappropriate for me to tell them to vote one way or another.

**Joanie Mahoney:** Of course.

**Josh Drew:** I think it's actually illegal. Even if it wasn't, it's inappropriate. But at an environmental school, I want them to understand the links between civic action and the environment. So we talk about what environmental laws or proponents might be on the books, what various candidates have about them. I had them take a look to see what candidate has on their website about it. So I don't tell them what to do, but I ask them to be informed.

**Joanie Mahoney:** I'll tell you, this year, if you are affiliated with a college like ESF, there is a bond proposition on the ballot. You have a direct ability to tell the government

whether you want to borrow money to spend on the environment and on mitigating the effects of climate change. It is a direct question, yes or no. Everybody associated with ESF should show up for that reason if no other.

- Josh Drew:** Yes. Unfortunately, it's on the backside of the ballot. So I'm just reminding my students to flip their ballots over as well. This will be too late for them to go on there.
- Joanie Mahoney:** But I will say, as a poll worker, I bet you tell everybody who comes in to not forget to flip their ballot over.
- Josh Drew:** Absolutely. You don't have to vote one way or the other. Just vote how you think best. But just make sure you vote because you want to make sure that the will of the people is represented.
- Joanie Mahoney:** All right. My last question, too, before I go, we used to bring apples or donuts or candy to the poll workers to thank them for what they were doing. What's the favorite thing that you would get from somebody who came in with a treat to break up your long day?
- Josh Drew:** Oh, just people coming in and thanking, it feels great. But I do want to say, we did have this very, very quintessential Central New York moment in the 2020 Presidential Election. We got into this big debate about what the best type of apple was. Nothing was more Central New York than people arguing over if it was a Pink Lady or an Empire. I was like, "We are amongst our people here."
- Joanie Mahoney:** That's funny. Well, I will leave it on that note. It's been a pleasure to sit and talk to you. I will tune in and hear the Dugongs and Seadragons Podcast that you're putting together. Then I will just watch you from afar as you continue your creative ways to communicate this really important work that you're doing.
- Josh Drew:** Awesome. Thank you so much. This has been a real pleasure.
- Joanie Mahoney:** Yeah. Thank you very much for taking time.