## The Conch\_SophikaKostyniuk.mp3

**Julie Kuchepatov** [00:00:04] Hello, my name is Julie Kuchepatov and I'm the host of this podcast, The Conch. We are continuing our journey with this podcast, talking about seafood and the ocean. Most importantly, we're uplifting some of the incredible people working in the seafood sector, sharing their journeys, the challenges they face, and the triumphs they've achieved. Today, we are excited to have a great guest joining us, Sophika Kostyniuk! Sophika is the Managing director of the Aquatic Life Institute, an organization that seeks to reduce the suffering of aquatic animals in the global food system by focusing on the highest-impact welfare interventions. Welcome and thank you, Sophika, for joining me today on The Conch. Let's get down to business.

**Sophika Kostyniuk** [00:00:46] That sounds great. Thank you so much. I'm thrilled to be here, Julie.

**Julie Kuchepatov** [00:00:48] Yeah, I'm really excited to have you here. You know, I say this quite a bit on the podcast that I've known you for a long time, but we haven't really been in touch for a long time, so I'm really excited to be reconnected with you.

**Sophika Kostyniuk** [00:01:01] And likewise, and you know, it's been a few years, but it feels like just a minute or two.

**Julie Kuchepatov** [00:01:08] That's right. That's right. And there was a global pandemic in between in those few years. So was another reason, right?

Sophika Kostyniuk [00:01:16] Very true. Yes.

**Julie Kuchepatov** [00:01:18] So tell us about the Aquatic Life Institute and what you're up to there.

Sophika Kostyniuk [00:01:21] Yeah, I'd be thrilled to. So Aquatic Life Institute is a relatively new NGO. We just secured our 501 C3 charitable status last fall, based out of New York in the U.S., and we're a fully remote team. We were established really interestingly by a hedge fund trader off of Wall Street that was very involved in the animal welfare movement as a funder. And of course, hedge fund traders like to run a lot of analysis and dig into the details. During his analysis, he realized that in the animal welfare movement itself, aquatic animals were completely neglected and had no protections and there were no organizations working to increase their own welfare protections. So Aquatic Life Institute was born. And, as I mentioned, we're a fully remote team. We focus on three primary pillars of activity. One is engaging seafood certifiers because they are the standard holders. They form this really, really wonderful pinch point in the supply chain. They have the ability to influence up to their buyers and down to the producers. So we work with certifiers to strengthen their standards. We work with global policy makers as well as country level policy makers. So, for example, a year and a half ago, a Canadian salmonid code of conduct was updated, and aquatic animal welfare was written into that updated standard. We have to start thinking about how we treat the animals that are in this system. So, we work with policy makers, with certifiers. And lastly, we act as a global hub for over 130 organizations across the globe, in 66 countries, six continents. Many of them actually don't regularly engage in aguatic animal welfare, but they're in academia, or they're already advocating for animal welfare for land-based animals, for example, and feel that similar considerations should be extended to aquatic species as well.

**Julie Kuchepatov** [00:03:45] That's a really great recap and introduction to your organization. So, congratulations on attaining a 501c3 status because I think that's very difficult, right? I mean, it's not difficult, but it's a challenge.

**Sophika Kostyniuk** [00:03:57] It's a challenge for sure. There is a lot of hurdles to jump over and hoops to jump through. But yes, we were successful. The next step is figuring out how to file taxes for the first time.

**Julie Kuchepatov** [00:04:14] Yeah, that sounds like a challenge also. And you're based in Vancouver, Canada, so I imagine you have people in, you said, New York that are handling all of that stuff, I would imagine.

**Sophika Kostyniuk** [00:04:25] Well, as the managing director, I have the distinct pleasure of dealing with all aspects of organizational health where we're a still pretty small team, just under ten people.

Julie Kuchepatov [00:04:36] Hmm.

**Sophika Kostyniuk** [00:04:37] And we're remotely distributed. So, I'm in Vancouver. We have staff in Madrid, Mexico City, Sao Paolo, outside of Pisa. And that is somewhat by design because we want to have representation in as diverse a geography as possible. But that also means that most of the operational requirements and obligations still fall onto my lap. So. Yep. Support wherever I can.

**Julie Kuchepatov** [00:05:10] Yeah. Yeah. You have to take that one on, I'm sure. So that's the burden of leadership, right?

Sophika Kostyniuk [00:05:14] You've got it. Absolutely.

**Julie Kuchepatov** [00:05:17] So I'm surprised. Well, I'm kind of not surprised and surprised at the same time that aquatic life was absent from the discourse or was not included into the larger animal rights movement. Is that correct?

**Sophika Kostyniuk** [00:05:34] Yeah, that's absolutely correct. And just like in the early days of the sustainable seafood movement, when it was really hard a lot of the time to get people to care, to feel a connection to the creatures that are below the surface because they're not as relatable as, you know, animals that we see every day, or we read about them in books. Everyone certainly knows what a cow, a pig, a sheep, you know, a chicken looks like, right? So, I would say sustainability for those animals was incorporated quite a bit before sustainability considerations for aquatic animals. But now animal welfare kind of the next big movement also experienced a similar trajectory where land-based animals were given considerations and kind of had greater appeal for a broad audience well before aquatic animals.

**Julie Kuchepatov** [00:06:36] That's why I say it's surprising but it's not surprising because seafood in general and blue foods tend to be left out of conversations around, you know, feeding the planet and food security. You know, it's becoming less so but it doesn't surprise me because of that.

**Sophika Kostyniuk** [00:06:52] For sure. For sure. The really, really encouraging piece of this is that the landscape is dramatically changing. So, you have one Netflix documentary, for example, My Octopus Teacher. Everyone falls in love with the octopus overnight and is

mesmerized by its majesty, its intelligence, it, kind of, makes us think about life underwater and all the species that have been inhabiting this blue planet for hundreds of millions of years, longer than we have. So, we definitely have, in my opinion, a moral and ethical obligation to start treating them with far higher regard than we have been to date.

**Julie Kuchepatov** [00:07:39] I want to ask you kind of a two-part question. So, on your organization's website, I read that you research and advise on aquatic animal welfare and operating from effective altruism principles, Aquatic Life Institute seeks to reduce the suffering of aquatic animals in the global food system by focusing on the highest-impact welfare interventions, which I mentioned in the opening segment description of you. So, I have again, two part question here. So, what are effective altruism principles because I actually had never heard of that sentence before or that movement or it's an idea, of course? And then what are some of the welfare interventions that you promote?

Sophika Kostyniuk [00:08:19] Fantastic question because I am also new to the effective altruism movement, we'll call it. It just kind of came roaring onto my own radar about two years ago. I was sitting in a broad coalition call when I was still overseeing Canada's largest seafood ratings agency, Ocean Wise, and we were talking collectively about priorities in seafood certifications for large buyers to start wrapping their minds around what are the must haves as they consider purchasing, you know, fish, crustaceans, and so on, seafood, that is at a high bar. And animal welfare, aquatic animal welfare, was introduced into that conversation. I was like, What? What is this? I've been in this space for almost 20 years, and it had never crossed my mind. So you start thinking about the individuals in the system rather than thinking of tons, starting to think about individuals. And that was kind of a bit of a paradigm shift for me. So that was really interesting. I started digging into it and it turns out that it's really the effective altruism movement that had started at that point in time, putting animal welfare on the map. So effective altruism, it's kind of a philosophical approach. Very unfortunately, it has been center stage over the course of the last six months. If you've been following it all what's been happening with Sam Bankman-Fried, the FTX cryptocurrency collapse, he really promoted himself as an effective altruist. The philosophy is all about prioritizing efforts while doing good so that you can help others do as much good as possible. And it really embraces the notion that you must use evidence and careful reasoning, so science, analysis, to work out how to do the most good with the limited resources that exist. So, it's not impulsive. It's not emotionally driven. It's a very rational kind of analytical approach. And that's kind of the effective altruism philosophy and mantra. And then taking action based on whatever is discovered to be the most effective approach using your limited resources. So, it's been really interesting. It is very kind of analytically driven. I've personally been challenged many times over the last two years in terms of my own assumptions, in terms of my own approach as I've started to embrace the effective altruism approach.

**Julie Kuchepatov** [00:11:22] That's an incredible description. And honestly, I did not know anything that you just told me.

Sophika Kostyniuk [00:11:28] Okay, there we go.

**Julie Kuchepatov** [00:11:30] Yeah. No, this is great because this is all about learning, right? So, I definitely will look into that more after we hang up here. I imagine it's also really almost not difficult, but a challenge, because when you're thinking about animal welfare, right, it is a very emotional thing. It's emotionally charged, right?

Sophika Kostyniuk [00:11:55] Of course it is. And so, it's all about how you frame your assets and where you choose to show up in the movement. Like any movement, there is a really broad spectrum of actors for the animal welfare movement. Of course, I would say the animal welfare movement is best known for abolitionist kind of radical animal welfare activists. Classic case PETA, for example. That's a very, very hard-line, clear-cut approach. No, right? There is no negotiating, no animal testing, no using animal products, No animal protein. And then all the way across to the very other end of the spectrum, there are certainly a lot of actors in the animal welfare sphere that work very closely with corporations, with governments, provide solutions, but aligning with the same principles of doing the least harm to individual animals in the system, ensuring that their suffering is minimized if they're caught in the system. So Aquatic Life Institute, we definitely are very passionate about protecting animals, aquatic animals especially, but we only in two instances take a very clear abolitionist approach. And that's with the pursuit to ban octopus farming and banning insect feed for aquaculture. And I can talk a little bit about that more later if you're interested. But otherwise, we approach our daily business in a very, very proactive way. I sort of like to call ourselves solutions brokers because we know that we need everyone on board if we really want to achieve our goal. And it's really easy to turn people off that are in key decision-making positions if you go in with a very hard line, "no" stance. It's just a natural human response is to put up a wall, walk away and close your ears. So, we want to actually, you know, fire up people's passion for this issue. Light bulbs in people's heads and kind of show the path forward with solutions, whether it be technology, innovation, or just conceptually solutions as to how to go about their practices a little differently to improve the lives of aquatic animals.

**Julie Kuchepatov** [00:14:42] That's great. And we are definitely going to talk about octopus farming, and I'm definitely interested in hearing about your approach to insects in feed for aquaculture. So, let's put a pin in that for a second. Could you give us a few examples of welfare interventions that you do promote?

Sophika Kostyniuk [00:15:01] Yes, absolutely. In 2021, we rolled out the first edition of our five key welfare pillars for aquaculture, so farmed species, and we had over 87 organizations, stakeholders, and academics signed on to it. It's very similar to what a lot of people will be likely familiar with for land-based animal farming, and it's predicated on the Five Freedoms approach. So, we address issues of water quality. Of course, it has to be of a high quality to ensure that the animals are existing in a system that supports their needs. So, water guality, stocking density, environmental enrichment, which is a bit of a newer concept, ensuring that the animals are stimulated in the system. Not bored, not depressed, not aggressive. So, introducing things like obstacles or bubble curtains, for example, varying their feeding times and feed locations, so they're not just kind of automatons stuck in the system, but actually have to engage some of their natural instincts. And then the feed and feed composition. So, looking at things like the use of fish meal and fish oil, as well as alternatives to fish meal and fish oil, to lessen the pressure on wild fisheries. And then lastly, of course, and I would say primarily most important to even get into this space is stunning prior to slaughter and we unfortunately know that almost all aquatic animals are not stunned prior to being killed. So, they suffer quite horribly in the last moments before they're killed. They're eviscerated alive. They're crushed to death, they're asphyxiated. They're dismembered. We can do better. We have to do better. And for us, that's just the very first place to start applying attention and resources because we just, we know that that's no longer acceptable.

**Julie Kuchepatov** [00:17:27] This is really fascinating. That was a really helpful explanation. One of my questions to you was about the first edition of a welfare-based

aquaculture certification benchmark tool that analyzes current welfare requirements within the main farming standards of six global seafood certification schemes. And so, you basically already broke down what are the important things, the Five Freedom approaches, right? That's kind of what you were talking about there.

Sophika Kostyniuk [00:17:55] Yes. And it's predicated on the Five Freedoms approach.

Julie Kuchepatov [00:17:58] Right.

Sophika Kostyniuk [00:17:59] But it's the five key welfare pillars for aquaculture.

**Julie Kuchepatov** [00:18:04] Okay, great. I wanted to confirm that because this is, you know, a hot topic right now, right? Aquaculture is getting a lot of press. Governments, especially in the U.S., are like looking at it and trying to figure out how to make it safe and equitable. And I'm honestly not even sure if they're even having discussions around animal welfare within the expansion of aquaculture, specifically within the U.S. Do you even know?

**Sophika Kostyniuk** [00:18:30] We do know because we've for three years now have been trying to work with the Fish and Game Department on the Hatcheries program because there's a very active Hatcheries program in the U.S. and just trying to introduce higher welfare or just welfare considerations at a bare minimum into those facilities. We have not yet gotten anywhere. But I would say that certainly it's very possible that this issue will come on to the government's radar soon because anyone who's involved in aquaculture operations by default, whether they know that they're doing it or not, has to care about animal welfare at some basic level because they have to ensure that the animals that they're rearing are going to live and to grow up to market size so they can sell them. So, they have to monitor the water quality, they have to feed them, they have to care for them. But they're not necessarily thinking of it yet as animal welfare. Right. However, that opens a wonderful door into conversations because you can say, hey, you're already doing some of this. Let's do better.

**Julie Kuchepatov** [00:19:54] Yeah, I totally agree. And I'm glad that you've got your finger on the pulse there because it's honestly, again, it's something that I don't think about and because I'm worried about the people behind the seafood, right? About the fish that we're eating. But again, which I say constantly, is you can't neglect the social system for the biological system or vice versa. So, you have to think about these things as interconnected because they are, right? I'm happy that you're thinking about this and I'm happy that you have, you know, introduced this tool to benchmarking standards and certifications that exist and really providing the public with considerations and opportunities for improvement. Could you name a few opportunities where certifications or standards could improve?

**Sophika Kostyniuk** [00:20:44] Absolutely. And we've been working with certifiers for over two and a half years. So, we work with six of the largest global aquaculture certifiers and they have been really stepping up to the plate. It has been incredibly encouraging. There is still kind of a broad range in terms of how they're scoring. But again, our approach is to lift all boats because it all matters and we can't afford to leave some behind and then have everyone fall to the lowest common denominator. So, where there have been some significant advances is in that one of the five key welfare pillars categories - environmental enrichment. So, starting to think about the habitat in which these animals are reared, you could do something as simple as introducing a gravel substrate. Immediately that changes the environment. You can paint the walls of the pens. That changes the experience of the

animals. You can change the lighting. That changes the experience of the animals for the better. So, there have definitely been some improvements in that regard and strengthening in standards. One of the big certifiers, Global Gap, last June actually introduced a ban very interestingly on insect feed for aquaculture species that are carnivorous. And this has been somewhat controversial because for the aquaculture industry moving away from fish meal/ fish oil towards alternative sources of protein for fish feed like insects has seemed like the golden bullet, but from a precautionary principle approach, Global Gap has decided to put a ban on that practice and redirect their producers towards plant based seeds, towards algal feeds, towards other alternatives. And what we do know about insect farming, even though it's quite a new industry, is that it can be incredibly energy intensive. We actually don't know really enough at all about the pathogens that can breed on these insect farms. We certainly know that we don't want to experience additional animal borne, insect borne diseases and have that spread around the world. So, you know, we're just maybe coming out of the last one. So, we want to sort of skip ahead to the greener pastures place where we want to be. So Global Gap took that leap. Another place where we're seeing improvements. And this is also going hand-in-hand with the fact that fish meal/fish oil is very expensive and there is sort of a diminishing supply of that feed for carnivorous fish, shrimp, other species, is just kind of limiting the amount of fish meal and fish oil that's acceptable in seafood production. So, there have been some significant improvements and we're continuing to work with certifiers to keep them going in that same trajectory.

**Julie Kuchepatov** [00:24:28] Those examples are really helpful, and I'm just absolutely fascinated by this discussion. So, I want to return really quick to the insect farming again, because, you know, you mentioned that and octopus farming are what the Aquatic Life Institute takes an abolitionist stance on, right? Those are the two things.

Sophika Kostyniuk [00:24:45] Yes.

**Julie Kuchepatov** [00:24:46] I assumed automatically that your abolitionist stance towards insect farming had to do with also animal welfare because they're animals, right, and they're produced to go be feed for other animals, right? So, but it's more about the climate like connections and the lack of information about how intensive it is to grow these kinds of insects into feed for feed purposes, right? But also, again, like you mentioned, the pathogen potential that these have, right? So, I got that right?

Sophika Kostyniuk [00:25:22] You have it right, but it's actually both.

Julie Kuchepatov [00:25:24] Right.

Sophika Kostyniuk [00:25:25] So you have it right two times.

Julie Kuchepatov [00:25:27] Okay.

**Sophika Kostyniuk** [00:25:29] Precautionary principles from climate impact, disease pathogen transfer scenario. Also, from not knowing what we don't know yet. And there is a very high chance that insects are also sentient. Yeah, they have also been around even longer than fish. We rely on insects for, what is it, one out of every three bites of food is due to insect pollination. We just don't need to mess with any other systems that are already out there. So, it's really holding other animals in higher regard.

Julie Kuchepatov [00:26:14] Right.

**Sophika Kostyniuk** [00:26:15] And just one other thing in the effective altruism movement is a little bit of a mantra is keeping human egos, or attempting to, in check. And we know we have gone down so many dark roads on so many occasions because we always think we know best. We think we know when it's okay to intervene in a natural system. We think we know what a dog is thinking. Yeah, although we've probably made some really good progress there. We think we know what farmed animals are thinking. Taking this speciesism approach and continuing down that road is quite dangerous. And I would say that we certainly should have learned our lessons by this point in time that we are a part of the natural world. We are totally susceptible to fluctuations in what's happening in the natural world. So, if we're smart, we should take care of it as much as possible.

**Julie Kuchepatov** [00:27:19] Yeah, that's the key phrase if we're smart. So, let's learn some lessons, right? I think it's kind of funny. I don't know anything about that Sam Bankman-Fried other than like, I would see his name come across and I knew, I hate to say it, but I knew I didn't like him straight away because of the things that I was reading. But I would assume that he has a pretty big ego. I don't know. I'm just throwing that out there.

**Sophika Kostyniuk** [00:27:42] I mean, I've never met the man myself before, but I think I'm with you on that one. Absolutely.

**Julie Kuchepatov** [00:27:50] We might just make that assumption anyway. Let's keep it on track. I'm interested in seeing future reports essentially around insect farming and how climate intensive it is versus raising, you know, plant-based fish feed, right? Are you doing that? Is someone doing that, I'm sure? Making some sort of comparison.

**Sophika Kostyniuk** [00:28:17] We're not doing that. We do have an insect agriculture, we call it insect agriculture, statements. So just a position that we hold and it's just a few pages long, so there's some good information in there. But yes, other smart, analytical people are digging into exactly what you're speaking about is systems comparisons, economics comparisons, and all kinds of projections. So, I imagine in the next year or two, we'll have lots of fantastic data and analysis available.

**Julie Kuchepatov** [00:28:50] That's great. I'll keep my eyes peeled for that also because I'm just fascinated now. You also work on improving animal welfare in the fisheries sector. So, we just talked a lot about aquaculture. So, tell us about that and what might be some differences between the practices in aquaculture and fisheries other than the obvious that, you know, wild fisheries are wild, they're moving. Aquaculture farms are stationary and generally set in a place. So what are some of the differences and similarities?

**Sophika Kostyniuk** [00:29:21] Yeah. Great question. So, in terms of numbers of animals in the wild fisheries space versus aquaculture, it's staggering. So somewhere between 2 to 3 trillion, capital T, trillion aquatic animals are killed every single year around the globe. In the farmed space, so in aquaculture, we know that around 100 billion fish are grown and killed and then 350 to 400 billion shrimp, the world's most popular aquaculture product. So, you know, comparing those side by side, it's obvious that we also need to significantly change practices in the wild capture fisheries space. But that is tricky. The notion of animal welfare in wild fisheries is so much newer than it is in the aquaculture space, again, because the interaction that we and the fishing community, fishing industry, has with the animals is just at the very end of its life. It's in the capture/retrieval/onboard handling/storage and then stunning/slaughter phases. We don't interact with these animals at all throughout their lifecycle, and I would say that it's probably really difficult to argue

that the lives of animals in wild systems are not, you know, 100-fold, 10.000-fold better, most of the time, than those in farm systems because they're living the life that they were intended to live until they're caught. Mm hmm. Yeah. So, it's just in those final phases of their life where the suffering can be unimaginable and intense. And this is anything from long lining to bottom trawling to purse seining technology the way that they're hauled up onto the ships, the way they're handled on the ships, and the way that they're ultimately killed or processed and killed. So, the similarities are there, but really, we look at those four final stages. So, capture - what kind of gear is being used. Can there be some type of innovation in the gear that minimizes stress, injury, pain in that gear? Absolutely yes is the answer. In the retrieval - on board handling, storage, and then again, stunning and slaughter. We have to start introducing adequate stunning technology. And the machinery is there. It is available. Places like Norway actually have federal laws in place that all animals, including fish, need to be fully stunned through to death/slaughter. So let's look to Norway as a shining example in this case anyways. And interestingly, coincidentally, just yesterday, I believe it is, we published the second edition of our report that's called Marine Capture Fisheries Best Practices for Aquatic Animal Welfare, and this is really a user's guide of the technology that's presently available. Some of the pricing associated with the technology manufacturer information to help those in the seafood industry understand what some potential solutions are and give them the tools so that they can start making the changes that they need to make to get along on their welfare journey.

**Julie Kuchepatov** [00:33:21] That's really helpful and I'll definitely put a link to that report in our show notes. And the example of Norway is also really helpful because, you know, you and I came from the same circles, right? These sustainable seafood movement conversations. And I don't even remember ever having a I mean, maybe we had one or two conversations, not with you, but I mean, in general, in our Conservation Alliance meetings, about animal welfare. But it's just absolutely fascinating. And I think, for some reason, we're always late to the table here. Like you said, terrestrial animals are visible. We see them, we think about them more. And that's why they're more advanced in these techniques of ethical dispatch, I guess you could call it. Can we put a real pin in this? You are not suggesting that we stop eating fish?

**Sophika Kostyniuk** [00:34:11] I'm not suggesting that we stop eating fish. Lots of other people are, right. We want to be solutions brokers in this space. And it's just, in our opinion, not realistic to expect people to stop eating fish right now. If everyone did, problem solved in terms of, you know, suffering for all of those animals, but that's not very realistic. So, we're saying if you continue to choose to eat seafood, if you continue to choose to produce seafood or if you have to because that's your primary source of protein and you don't really have options, which truly is the reality for many people around the world, let's do things better.

Julie Kuchepatov [00:34:55] Yeah.

**Sophika Kostyniuk** [00:34:56] Let's be respectful of the animals that we're relying on for our own sustenance. That's really our message.

**Julie Kuchepatov** [00:35:06] Thank you for that. So, I want to understand the second thing that you mentioned, that you have an abolitionist stance on, a hard "no" is octopus farming.

Sophika Kostyniuk [00:35:17] Yeah.

**Julie Kuchepatov** [00:35:17] It's becoming more and more discussed in, you know, seafood trade journals, newspapers, etc. And so, what should we know about octopus farming? And I should mention, I eat practically everything, but octopus is the one thing that I don't eat.

**Sophika Kostyniuk** [00:35:35] Okay. Well, I mean, if I was to reverse the interview and put on my interviewer hat, I would be really curious as to why that's the case.

**Julie Kuchepatov** [00:35:46] This is the thing. People will say, well, why don't you eat them? And I say, because I think they're so smart. They're fascinating. They do so much in these very short lifespans. I mean, they literally are super smart. And, you know, then people will come back and say, well, pigs are smart, you know, cows are smart, etc. And I am like, yes, I realize that. It's not that I have a rational explanation for this. When I did eat octopus in the past, I thought it was great. I loved it. I thought it was delicious. It's just one of those things. I can't explain it.

Sophika Kostyniuk [00:36:14] Okay. Well, part of that is actually factually correct. So, in addition to your emotional response to not wanting to eat them, they are incredibly smart. They are the absolute poster child for sentience. Meaning that they exhibit, and we know, that they can experience sensation, fear, aggression, joy. You know, you observe them playing. You observe them using tools. They are really magical. But that's not a great argument to take someone who wants to produce it or a policymaker that wants to approve this practice. What is a very sound argument is that it is highly unsustainable. These are carnivores. Food conversion ratios, so meaning the amount of animal protein or fish, other aquatic animals that you have to feed octopus to grow, is 3 to 1. So you're losing protein kind of globally if you start farming these carnivores intensively. Two, it's incredibly inhumane. They are solitary animals. They're cannibalistic on the farms where they're trying to grow them. And there is a farm in Mexico. There was a farm that was kind of operating in Hawaii that was recently shut down because of permit challenges. And there is one in the Canary Islands run under a Spanish company that's trying to receive its final permits. But they've been sort of testing and trying to grow these animals. There is upwards of 52% mortality on the farms. 30% of that is due to cannibalism. They are not meant to be in close confines with each other. There is also no humane way to kill them because we know that an arm of an octopus can continue to operate independently for something like 30 or 40 minutes on its own after it's been severed from the rest of the body of the octopus. So, you can't actually kill them humanely. It's going to be more of a luxury product. So, the argument that this new form of aguaculture is going to go feed a hungry world doesn't work, in my opinion. We also know that they're highly venomous. There is a lot of disease that they can spread. So, this is also kind of a biosecurity concern, I would say, for the farms and the actual individual farmers that would be engaging with these species on a daily basis. The industry is not yet established. There is no successful commercial scale octopus farm yet. So, our message is let's not go there. It's the wrong thing to do for all the reasons that I mentioned.

**Julie Kuchepatov** [00:39:27] Those are really compelling reasons. And really, again, like you said about humans, right, is just because we can do something doesn't mean we should. And I agree with you, and I hear that argument a lot about aquaculture, where, you know, this salmon farm or this, you know, finfish farm is going to be the food of the future, right? Feed the growing planet. And I'm like, no, it's not actually because this is a luxury item in my mind.

## Sophika Kostyniuk [00:39:55] Yep.

**Julie Kuchepatov** [00:39:56] But, you know, for a variety of reasons, it's not just for whatever you're working on, animal welfare wise or, whatever is happening. That's not the argument that we should be making. So, I agree with you in terms of octopus. That's not going to feed the planet and for all those other reasons, I didn't realize that they cannibalized each other. I didn't realize that their arms were working after their, it just sounds so horrible.

Sophika Kostyniuk [00:40:18] Oh, yeah.

**Julie Kuchepatov** [00:40:19] We could talk about that for another hour and a half, I'm sure. So, I want to transition us out. I'm curious, you mentioned you worked at Ocean Wise, and that's where I met you at. And I just am curious if you could give us a little background on your own career journey. How did you end up even at Ocean Wise? What was the path there?

Sophika Kostyniuk [00:40:40] It was non-linear. Let's just call it that, so.

Julie Kuchepatov [00:40:43] That's always the answer.

**Sophika Kostyniuk** [00:40:47] It was emotionally driven, and it was impulsive. So, kudos to all these smart young people that are like, I know where I want to go. This is what I want to be and this is how I get there. That was not me. I went to university in the dark ages in the last century.

Julie Kuchepatov [00:41:04] Yes.

Sophika Kostyniuk [00:41:05] Which is astounding. In the last decade of the last century. So maybe that's not so horrible. But I studied ecology, so the interaction of all systems with each other, which I think has really underpinned my entire approach, whether I was movement building, whether I was working to reform policies and legislation, whether I was engaging corporations to change their sourcing policies, whatever it was. And I think that that continues to underpin my approach to animal welfare. As you mentioned earlier, we cannot think that our issue, our agenda, operates in a vacuum and it doesn't. Everything is interrelated whether you want to call it the butterfly effect. A butterfly flaps its wings on one side of the planet, something happens on the other side of the planet because of that tiny little action. That is how complicated the world is. Yes. So, I studied ecology. I actually started my working career at an engineering consulting company outside of Toronto, conducting environmental assessments on streams and rivers where giant developments were being proposed to see what type of environmental impact there would be from these new developments. Lo and behold, every single report said there was going to be significant negative impact. After a few years of doing that and not seeing my work going anywhere, apart from into these really, really big reports, I decided that it was time for a change. So, I moved out west to Vancouver. That was my first stint in Vancouver, and I discovered the nonprofit world. I was like, wow, these people, kind of, I relate to them so much better. There is way more equity. I feel like it's a far more democratic system and I see where my work is going. I'm connected to the outcomes. So that really inspired me to stay in this space. I got involved in the ocean conservation space and in the sustainable seafood movement, and then eventually I ended up at Ocean Wise, so overseeing Canada's largest seafood ratings agency. And we had over 750 business partners, including the largest retailers, restaurant chains, all of this. And it was all focused on the key tenants of sustainability. So doing better, having traceable seafood supply chains,

understanding what's going on, ensuring biodiversity was protected as much as possible, habitats were protected, so on and so forth. Animal welfare didn't come onto my radar, as I mentioned, until two years ago, and it sort of shook me pretty hard that that's not something that I had been considering up until that point. And I think that's probably what's given me a lot of energy to try to do good in this space.

**Julie Kuchepatov** [00:44:28] Yeah, thanks for sharing that. I mean, you're clearly passionate about this, and I'm really grateful that you came on the program to share this really great knowledge with us and all of this information because it's amazing. So, I want to switch gears just a little bit. You know, this podcast is to inspire people working in or thinking about starting a career in the seafood sector. And, you know, as someone who has been around in the, you know, sustainable seafood movement and the sector for a while, I'd love to hear any advice that you have that you would give to people already in the business or thinking about starting a career in this industry?

**Sophika Kostyniuk** [00:45:03] Yeah, absolutely. I would say everyone is passionate about this issue and creating change has a lot to offer. Don't shy away, experiment. If you're a brand-new intern somewhere, don't get intimidated. You know, ask for quick coffee meetings or quick Zoom meetings with people who inspire you and who make you curious about the work that they do. So, be bold. This space, obviously, and I'm speaking to the person who can speak to this much better than I can, has historically been dominated by males.

Julie Kuchepatov [00:45:42] Yes.

**Sophika Kostyniuk** [00:45:43] But we know absolutely that women support the entire industry in every corner of the planet. We need to be represented and, you know, shutting out the female voice is not a path to solutions. So, we need to be bold. We need to be really tenacious. And I would say, Go for it. Learn a lot. Attend conferences. Network with people. The information's readily available. Ask tough questions. And see where your path takes you.

**Julie Kuchepatov** [00:46:21] That's great advice because my path, as well as your path, as well as everybody who I've talked to practically on this podcast, their paths have been non-linear. That's the way to go. And don't expect it to be linear because it's really not. I agree with you. It's like kudos to the young people who know where they're going to be in their career, but I don't think anybody knows, right? So,

## Sophika Kostyniuk [00:46:41] Yeah.

**Julie Kuchepatov** [00:46:43] So SAGE is about uplifting and amplifying diverse voices in the seafood sector and this podcast is one of the ways we are doing this. This is your opportunity to uplift someone or some people, depending on who you want to uplift. So, I'd like to give you that opportunity. Who would you like to uplift and why?

**Sophika Kostyniuk** [00:47:01] That is such a wonderful question. And I'm going to be honest, I can't single someone out. I'm going to say Julie, though. Julie uplifts me.

Julie Kuchepatov [00:47:12] Thank you.

**Sophika Kostyniuk** [00:47:12] And I'll say why. For many reasons. But really, to me, anyone who exemplifies restless leadership is a hero. Anyone who is committed to

continuous improvement is a hero. Anyone who's able to keep their ego in check and be vulnerable. But also, able to accept feedback is a total hero. We have to keep doing better, right? We have to be collaborative. We have to be inspired and energized. And no one can do this alone. There's just no room anymore for one big famous person in the space. We really need to hold each other up. To shine the light on those that don't have a voice and the collective action piece is something that really means a lot to me and inspires me every day.

**Julie Kuchepatov** [00:48:22] That was great. And I love that term, "restless leadership." I've never heard that before, and I feel like that does adequately describe my life. Definitely restless. Trying to do something. And I feel the same way about you. And I want to thank you also for uplifting and being the voice of these aquatic animals that, you know, they can't speak for themselves. So, thank you for representing them. We've come to the end of our time here. But I am just so impressed by you. And I'm really thankful that you came on the show and shared about the work of the Aquatic Life Institute. And I look forward to learning more and actually digging in deeper into your reports and papers and following your progress. So, thanks so much, Sophika, for coming on.

**Sophika Kostyniuk** [00:49:05] And thank you so much, Julie, for having me. This has been the highlight of my week and like I said, it feels like we were chatting just a few days ago, not several years ago. So I really, really appreciate your interest in this topic and the wonderful questions.

**Julie Kuchepatov** [00:49:22] Thank you. Thank you for tuning into The Conch podcast. It would be amazing if you could take just two seconds to leave a review and share this podcast with your ocean loving friends. Thank you!

**Announcer** [00:49:39] The podcast is a program of Seafood and Gender Equality or SAGE. Audio production, engineering, editing, mixing, and sound design by Crystal Sanders-Alvarado for Seaworthy. The theme song "Dilation" is written and performed by Satan's Pilgrims. Funding for The Conch podcast is generously provided by The David and Lucile Packard Foundation and Builders Initiative.