

Sz5Ep3_KortneyOpshaugh_TheConch_FINAL.mp3

Julie Kuchepatov [00:00:04] Hello, my name is Julie Kuchepatov and I'm the host of this podcast, The Conch. We are making some serious progress along our journey with this podcast, talking about seafood and the ocean. And most importantly, we're showcasing some of the incredible people working in the seafood sector, sharing their journeys, examining the challenges they face and the triumphs they've achieved. Today, we are excited to have an incredible guest join us. Kortney Opshaug. Kortney is the CEO and founder of Blue Ocean Gear, a startup company that provides technology solutions for IOT tracking on the ocean that creates hi tech buoys that can track gear in the marine environment, including detecting and locating lost or entangled fishing gear. Welcome, and thank you, Kortney, for joining me today on The Conch. Let's get started.

Kortney Opshaug [00:00:53] Thanks for having me, Julie.

Julie Kuchepatov [00:00:55] I just said an acronym in your biography in the introduction here. And so could you tell me what is IOT? Again, it was in your bio, so I hope you know.

Kortney Opshaug [00:01:06] IOT stands for the Internet of Things. And it's a term that usually applies to networks of devices that have sensors that can collect and share data through connectivity, whether it's through the internet or some other central database system.

Julie Kuchepatov [00:01:23] Thank you so much for that definition because that's probably something that I have heard, but I don't remember and I'm not really in that field. So that was a really helpful explanation. So, tell us about Blue Ocean Gear and what you do.

Kortney Opshaug [00:01:37] Sure. So Blue Ocean Gear is a California based startup, and we provide smart buoy technology for commercial fishing fleets so that they can track their gear out on the ocean, while the same time collecting mission critical ocean data. Why we do this is because, you know, out in the ocean, it's a very challenging environment, very volatile conditions, and so a lot of fishing gear is lost. It's about 640,000 metric tons of gear lost in our oceans around the world every year. And it's one of those problems that nobody really talks about because it's not in our immediate line of sight when we look out on the ocean. So that lost gear has a very significant financial as well as environmental impact on the fishing industry. So, from an environmental perspective, that gear continues to fish without ever being harvested. So, it depletes fishery stocks. Everything that was captured dies and becomes bait for more fish to become captured. It's a cycle known as ghost fishing that's very detrimental to marine ecosystems. And it's also the single largest source of ocean plastics, you know, when they look at the Great Pacific Garbage Patch, over 70% is from fishing related sources and from a financial perspective, fishermen, if they are losing their gear, they have to pay to replace it at the end of every season but they're also spending a lot of time out on the water, wasting it, looking for their gear when it's foggy or night, or difficult conditions, you know, high seas or strong tides. And so being able to track their gear really helps them address these problems, be able to get to their gear more quickly, more efficiently. And at the same time, we're providing more sensors so that they can know more about what's going on out on the ocean.

Julie Kuchepatov [00:03:12] So that is really helpful. And we haven't talked about ghost fishing on this podcast yet too. So, this is really great that your gear not only provides a solution for ghost fishing, but also for collecting data to understand other things that are

happening in the ocean. And I want to talk about those in a second. But you mentioned the economics of it. And, you know, if people are out there searching for their gear, it's also spending a lot of fuel, right? I mean, that's thousands and thousands and millions of gallons of fuel that they're using. So that's also good for the environment.

Kortney Opshaug [00:03:42] It's very true. The carbon footprint of a fishing vessel is quite significant. And, you know, we have a lot of fishermen who say they spend 6 or 7 or 8 hours just looking for the end of their lines or their surface gear because they're fishing in deep water. So, they might have a lot of extra scope on their lines. It might swing, you know, a mile radius in less than a day, or they might, you know, have strong tides or currents that pull the gear underwater so that they'll go out to haul gear. And if it's all underwater, they can't haul. So, they've wasted all of that time and fuel going to that string of gear to harvest. So, using the buoys to be able to time their trips better is something that the fishermen actually came up with in terms of being able to provide something that makes them more efficient or fish a little bit smarter.

Julie Kuchepatov [00:04:28] Okay. You say it's a buoy. So, I have an image in my mind of what a buoy looks like. I haven't seen the gear. Could you just describe, like, is it two feet by three feet round thing, or how does it look?

Kortney Opshaug [00:04:41] Sure. It's a seven-inch diameter sphere, and it's a hard-shell buoy. So, it's made of a hard plastic material, and everything is inside, you know, we spent a lot of time working with fishermen to design this buoy and now they would say, like, kind of anything sticking out because they're just going to break it off. You can't have an on/off switch because we don't have time for that. It has to be depth rated because a lot of times our gear get dragged underwater. So, all of this went into the design. So, it's this spherical design, which is the best for being pressure resistant. Inside we have several sensors. We have GPS, an accelerometer. We also have a depth sensor and temperature sensor. We're adding things like wave height and salinity as well to the next version. And all the sensor data is then transmitted either via radio or satellite back to our cloud database. And then they can interact with that data in a variety of different ways. We have text alerts if something has gone wrong like it's moved beyond a certain threshold, or if it's been underwater and just came back up. We have a web interface and a mobile app, but most useful for the fishermen is we can interface with their onboard GPS chart plotter system. So, they attach the buoy on as what they call a trailer buoy to their main gear, and then they can be able to see where it is at all times and they'll get an alert if something funny has happened. One of our engineers likes to say we're giving them a superpower, which I like to think of it in that way too.

Julie Kuchepatov [00:06:06] It sounds like it. I don't know how big a net is, you know, depending. So obviously nets come in all different sizes and gear comes in all different sizes. So how many buoys does an average fisherman use or need?

Kortney Opshaug [00:06:18] We work with all different gear types, including pots or traps and gillnets and long lines and aquaculture farms and research equipment. So, it really depends on the gear configuration that that vessel is using. So, some fisheries, like the snow crab fishery in New Brunswick, they have a snow crab pot that sits at the seafloor. And then a line goes to the surface and a single buoy. And so, they might need one for every pot. So, if they have 150 pots, they would have 150 smart buoys. But in the king crab fishery in the Bering Sea, they might have like 50 pots all strung together on the seafloor and a string of buoys at either end, and they might have maybe 40 or 50 of these strings. So, they might need, you know, 50 buoys. A long line fisherman might only have 2

or 4. So it really does depend on what their gear configuration is like. And so, the same technology works for every different application. So that was kind of one of the things that we set out to do is make a technology that was really simple but also really versatile, because there are some solutions that exist for very niche fisheries. But we wanted to make something that could be used by anyone.

Julie Kuchepatov [00:07:31] Yeah, that's a really great explanation because it sounds like who's using it. It's everyone, essentially, regardless of fishing method or gear, right?

Kortney Opshaug [00:07:39] Yeah. And one of the other things that we're just about to start working on is giving other vessels the ability to see where there might be gear set in the water, so they don't run over it or set on top of it. It's something called gear conflict. If other vessels, like a trawler vessel, might run through an area of pot and it damages the trawl, it might damage the boat, it damages the pots, and nobody wins. So being able to see where that gear is very high value. So, we have a device now that goes on the boat and can see where the gear is and put that on their chart plotter. We'll be working on this in the lobster fishery in Massachusetts. And we're going to be working with not just the lobster fishers, but also the mobile gear fishers, so that they can see where the lobster gear is. And again, all of this is with the agreement of the fishers to share their data. But the mobile gear fishermen will have that information. Hopefully they can avoid any of the fixed gear.

Julie Kuchepatov [00:08:34] Yeah, that's actually a really great feature and benefit of this gear it sounds like. When you describe the gear, the buoy and you said the sensors and all the things that were inside it, you mentioned that you're adding wave height and salinity and so are these things you're adding because throughout your consultations with fishers who are using the gear, they're like, we need this. And specific to salinity, why would you need that?

Kortney Opshaug [00:08:58] Well, some of the features are used by the fishers who are deploying the gear. Some are for researchers that might want access to data that the fishers have agreed to share. Aquaculture farms, particularly kelp farms also, do need to know things like salinity and wave height. We're seeing more and more aquaculture farms go further offshore. They're no longer in like little protected fjords and doing finfish. They're going further offshore and doing so much more volatile environment. But they still need to know what the ocean conditions are. But the ocean data side of things is particularly interesting. I think we've been asked by fishers, in some cases, to share the data from their gear so that, for instance, with the National Weather Service. So we have a project in the Bering Sea that's supported by NOAA, that data from the fishing gear that's deployed is shared with the ice desk, so that they can get better sea ice or validate some of their models for sea ice and freezing spray using the gear that's actually where they need it, because it's a very important forecast you have for the boats that are going through that area, because it's a safety issue. If ice forms on the deck, it's an issue for ghost gear. If they set their gear and then they go back to shore to offload, they might not get back out for another three weeks. And if the ice comes in, it slices off all their gear. So having better predictions and better models is in everyone's best interest, so it's a nice way to transform fishing gear into an ocean data platform.

Julie Kuchepatov [00:10:24] Yeah, that's really, really cool. In preparing for these conversations, I do research on you essentially, and in my research, I read the title of an article that described, quote, how Blue Ocean Gear Inc Hopes to Make Commercial

Fishing Sustainable, unquote. So, tell me more about the link between Blue Ocean's gear and sustainability?

Kortney Opshaug [00:10:47] Sure. I think we've talked a little bit about ghost gear and fuel use, and I think those are the main things that we are looking to solve here is being able to prevent gear loss that would otherwise result in ghost fishing. I think we see a lot of gear cleanups or gear recovery, whether it's on shore or at sea, and those are great efforts. They tend to be quite expensive. They don't happen that often, and the rate that we're losing gear at is not sustainable. So being able to prevent it from the source is really, I think, it can provide a nice benefit for helping the fishery become more sustainable in that aspect. It's actually the new MSC requirements that have just come out or certification plan includes ghost gear prevention as well as endangered species protections. Whale entanglement is another aspect that we work on. Whales can become entangled in the lines and nets that are in the water, and it's a particular problem in the northeast, where the North Atlantic right whale is almost extinct. There's about 350 of them left. Two main ways in which they're perishing is ship strikes and entanglements in fishing gear. So, if we can make sure that all the gear is off the water off season that helps prevent any potential entanglements there. The buoys also have the ability to detect and locate an entanglement event and give that information to a disentanglement team. And then we also work in partnership with some of the gear on demand systems that are acoustic release devices that can pop up gear to the surface, and they put a smart buoy on it so that they know when and where it surfaced. For many fisheries, this is becoming more and more of an issue, and so being able to help solve that problem can help that fishery coexist with marine mammals and help with the sustainability there. And then I think, you know, again, from the fuel use perspective, I think being able to save fuel out on the water, the greenhouse gas savings, it translates into money as well for the fishing vessel, right? Like any time that they're spending out on the water looking for gear that they could have just steamed right there. They feel that on a daily basis. And so, it's good when you can find that sweet spot where a solution that is good for the environment and can increase sustainability can also save the operator money and save them time. I mean, even time out on the water is something that they want to be able to save. It becomes a safety issue at some point. I think that's the way that we think that we add to that aspect.

Julie Kuchepatov [00:13:09] Yeah, those are some compelling reasons, for sure, about the compelling connections between your gear and sustainability. And I was thinking about that, too. It's like the less time you spend on the water, the safer you're going to be, and less time you spend on water. It is a money issue, so it's more money in your pocket potentially if you're saving gas and saving time. My next question is about some unintended benefits. And I think you and I had a call a while ago about learning about each other. And I did ask you this question. And so, I'm going to ask it again. So, when you started out with this business and your ideas about the benefits of using these buoys and what they're going to do, is there any kind of unintended like benefits that you've noticed or the fishers have noticed and have suggested that you try to amp that up?

Kortney Opshaug [00:13:53] Absolutely. You know, when we first started out and had fishers trying out prototypes of the technology, we started saying, you know, here's this smart buoy. Here's how some people are using it. You tell us how you would use it and it was fascinating, some of the things that they came up with. One of them was gear theft detection. So, poaching of gear and catch is something that unfortunately does happen out on the ocean. The smart buoys know when they left the water and when they've been reset. So, they'll send a text message to the fisher or the owner of that buoy. And, you know, it says when it's left the water. And if they're on land and on the couch or eating

dinner and they know that something's happening with their gear. We have quite a few customers who are using this for potential gear poaching detection. The other thing is, in general, to paraphrase one of our customers, just peace of mind. I think when you think about putting thousands of dollars of assets out on the ocean, I mean, it's not like you left your phone on a table and left the room and came back and it was still there. You are putting all of the equipment that you use to do your job and in the most volatile conditions on the planet, and hoping that when you come back, it's all still there and it's all in the same place. If you can check in on that while you're on shore or somewhere else harvesting gear elsewhere, it is a peace of mind for the fishers. They know that they're going to get their stuff back. They know where to go. They know how to time things better. We even have a couple of times spouses have mentioned that they feel better, and they'll get the text message, and they'll know that their partner is safe because they know where they are and they can see what's going on in the water. And we're continuing to learn as more gear gets out on the water with more and more fisheries. They wanted to use them in Australia for detecting when sharks are in the area near public beaches. For some of the aspects there, disentanglement teams have the buoys to be able to put them on an entangled whale so that they don't lose track of it, and so that if they can't disentangle it that day, they now know where it is and they can go after it another day. They haven't done it yet, but there's a few teams that have them. And so again, these are uses that other folks have come up with. We have researchers who have the buoys to just protect their very expensive research equipment out on the ocean. So yeah, it's interesting. It's one of those things where it's easy to track stuff on land, right? Like we have Apple tags and Find My Phone, but out on the ocean we don't have that. And so trying to replicate that type of functionality. There's all sorts of stuff that people, you know, need to track out in the ocean and be able to get it back.

Julie Kuchepatov [00:16:26] That's really cool, and I'm sure there's going to be much more interesting uses of this gear in the future, it sounds like. Going back to my research, I read an interview where you were asked if you have any advice for future founders who want to take a leap and start a company. You said, quote, there is an incredible network of ocean tech companies and resources that they can tap into. Designing for the marine environment has its particular challenges but connecting with a community that knows how to face them is valuable beyond words, unquote. I have a two-part question. So, what are these particular challenges? You've talked a bit about the challenges, but I'm wondering if there's any that we might have left out in the conversation prior to this. And then B. why is connecting with communities so important in your work?

Kortney Opshaug [00:17:13] Designing gear for use out on the ocean is one of the most challenging things from an engineering perspective. Having worked in both aerospace and in the marine environment, the marine environment is way harder and it's because we have things like seawater, which are corrosives. So, if you try to put electronics in that environment, the most unfriendly place you can put a set of electronics. So, you have to have something that protects all of that. A lot of people think that buoys just stay on the surface and float very docily. But in fact, when you're out with fixed fishing gear and it's effectively anchored by a trap or some other device on the ocean floor, it can get pulled underwater from the tides or strong currents. And so now you have pressure that's acting against this device that is protecting all your precious electronics. You also have the fishing industry, which they are not gentle on equipment. So, watching videos of fishers who are dropping the buoys on the deck and slamming them against the side of the boat, you have to make something that is absolutely, you know, just completely rugged for their handling. In addition to out on the ocean where you have hurricanes, you have storms of a level of volatility that can exceed what we have on land. So yes, they have to be able to

withstand those types of events as well. So, all of that is acting against anything you design. So, I think that there's a wide range of design challenges that get converted into design requirements. But I think, you know, the second part of your question of having a community that knows how to face these types of challenges is valuable. I can't emphasize enough how important that is, because, you know, a lot of these problems have been solved before. So, you know, you don't need to reinvent the wheel and start from scratch every time you want to design technology for the ocean or for fishing. And partnership always gets you further. So, we have tried very hard to create strong partnerships with fishers, with vessel owners, with engineers and scientists in the field, and we've worked with marine mammal biologists to understand how marine mammals behave normally, how they behave when they're entangled. We work with other gear companies. Smelts is one of the fishing gear companies that we work quite extensively with in partnership and developed technology that works together. A lot of times you're all working towards the same thing, so you can get a lot further if you work together. And I think the ocean community in particular is a very strong one. I think there's a lot of collaboration that goes on, and I think it's the only way we're going to make progress in this type of environment.

Julie Kuchepatov [00:19:50] That's good to hear and I totally agree with you. And we also like to, I call it partnering for impact.

Kortney Opshaug [00:19:55] Yeah, it's a great term.

Julie Kuchepatov [00:19:57] It's corny, but it's true because you really can go farther, like you said. I mean, there's that old adage if you want to go fast, go alone, and if you want to go far, go together.

Kortney Opshaug [00:20:05] There you go.

Julie Kuchepatov [00:20:06] Right?

Kortney Opshaug [00:20:06] Yes, I love that.

Julie Kuchepatov [00:20:07] Me too. You've mentioned throughout this conversation around the carbon footprint of the fishing industry around fuel use. I think a lot about climate change and how we should all be working to address the serious climate crisis that we're experiencing now. And you were recently at COP 28, in the United Arab Emirates. So as a refresher, is it COP or C.O.P? What do people say? Because you were just there.

Kortney Opshaug [00:20:34] People say COP 28.

Julie Kuchepatov [00:20:35] COP 28 okay, so as a refresher, COP stands for the Conference of the Parties to the UN Framework Convention on Climate Change and is an international climate summit. So, at COPs, world leaders gather to work together on solutions to tackle climate change. So, I think we already have established that your buoys and Blue Ocean Gear is definitely a climate solution. So, I guess my question is, what was COP like? And I'd love like a quick kind of rundown on what you experienced and how you felt when you left and how you felt when you were there. And what was the vibe.

Kortney Opshaug [00:21:08] You know, I really wasn't on the ground for very long, and it was pretty overwhelming. There was so many people and so many different activities and talks and dialogs going on and displays of what different countries or entities are working on. So, it's overwhelming, but it's also encouraging. I think seeing the merging of so many

cultures, which is really difficult to do this as an international level of bringing together what everyone is working on and exposing where the vulnerabilities are, where we need more resources, where we need to focus some of our efforts. And I think that's where, I think I mentioned before, what we're working on in the Bering Sea of using data from the fishing buoys for the National Weather Service or meteorology to have a better understanding. I think, you know, the Arctic is a region where it's very difficult to get ocean data, which is critical for understanding what's happening with our climate. And same thing with some other regions that might not have the resources or maybe it's more challenging to operate in. So, I think it's having events like COP are really very valuable to be able to understand where resources need to be focused, where countries or entities or regions need to work together. I think, you look at the globe, the oceans are what connect all of us, and so having policies in one region can have an impact on other regions simply because of flow of the oceans around the Earth. And so being able to see some policies or some efforts be made that are cross boundaries, I think are going to be, you know, hopefully where we see some progress being made in the future.

Julie Kuchepatov [00:22:43] That's great. I've been at maybe not that magnitude, but at international conferences, and they're just so overwhelming. I don't even know how anything gets done. I kind of I'm skeptical that anything does get done, you know what I mean?

Kortney Opshaug [00:22:56] I do. There were certainly a lot of varying news reports that came out of COP 28 as well. I think a lot of it, though, is in the individual conversations that you can have there. So yeah, if you look at it, you can get very overwhelmed at these large events like COP. But I think when you bring it back to okay, but here's what we're doing, how can we make a bigger difference? Some of the connections that you make on the ground there that, you know, might find new uses or might find new collaborations, new partnerships that is going to make a difference.

Julie Kuchepatov [00:23:31] We're going to switch gears here, and I want to learn more about you specifically because you mentioned that you were working in the aerospace field. So before Blue Ocean Gear, you were the associate director for mission operations for NASA's Sofia Airborne Observatory program and the director of engineering at Deep Ocean Engineering. And you held positions at Lockheed Martin and Space Systems Loral. So how did you go from space to the ocean? What was that leap like?

Kortney Opshaug [00:24:00] It was certainly not a direct line path. I did my undergraduate work in aerospace engineering, and when I started my doctoral work, it was in the robotics lab at Stanford University. And you most of the lab did aerospace robotics, but some of us did underwater robotics with the Monterey Bay Aquarium Research Institute. So that was the time I really got introduced to how space and underwater were similar, how they were different, and really just got a taste for what it was like to work in the marine environment. So, throughout my career, I did go between both aerospace and underwater engineering for a while. While I was at NASA. I was engaged with the Monterey Bay National Marine Sanctuary's Advisory Council, and that's where I started listening to commercial fishermen that were on the council, recreational fishers as well as conservationists, and really getting a whole new perspective on operating or working in or on the water. And so as I learned more and realized that there was often some gaps between conservation and the fishing industry, and that maybe we could use technology to bridge that gap. And that was when I founded the company back in 2015.

Julie Kuchepatov [00:25:08] And the rest is history.

Kortney Opshaug [00:25:11] Yes.

Julie Kuchepatov [00:25:11] Amazing. So, in prepping for this conversation, you know, I'm reading, right, about you. And so I also read other things. And I read that in the world of VC funding, which is venture capital funding, women owned businesses received just 1.9% of funding. So, what has been your experience in the world of VC funding? Because that's how you fund your business, right?

Kortney Opshaug [00:25:35] We have a combination of both venture capital funding as well as grants. So, it's definitely been interesting experiencing the world of VC funding. I think we get a hit because the ocean and fishing sector gets such a small percent of funding as well. So maybe it's a double hit, but I'm not sure if you're familiar with the United Nations Sustainability Development Goals and SDG 14, which is the life underwater goal on improving ocean health. And all of the work and efforts in that area is the least funded of all of the sustainability development goals. Also, I think, you know, looking on the flip side, less than 6% of VC partners are female. We are very fortunate to have a number of just really amazing female investors in our company who really add value on our board and as subject matter experts in the field. I think going after venture capitalist funding is definitely an effort for anyone going after that type of support. But I think that as Blue Ocean Gear, I mean, we've been successful in some respects, but it's definitely been a long road.

Julie Kuchepatov [00:26:40] I imagine. And I think you're right around the double, the triple whammy. So, you know, women founded businesses, working in the ocean space, also underfunded, working in the fisheries space, underfunded in general. So I think there is kind of compounded challenges there. I totally agree with you. And I also as a founder of a nonprofit initiative, but still, I have to find funding, right? So, I experience that to a different level because I'm not working on finding venture capital funds, but still a challenge. You have to hit the pavement. So, I am familiar with the SDGs, and now that you mentioned it, you know, SDG 14 is the goal that everyone in kind of my sphere has been working towards for decades, right? And interestingly, that doesn't have any gender considerations in it at all. Gender is integrated in a lot of the other goals, not all of them, but the SDG 14 does not have any sub goals that relate to gender. And that's a bummer, because that means that the onus is on us to integrate or mainstream gender considerations into all of our activities to meet these goals. And of course, SDG Five is gender equality in and of itself, and it really is integral to achieve gender equality if we're going to achieve any of the other goals. So, I just want to throw that in there because, you know, a lot of us are trying to achieve this SDG 14, but we're missing a big piece of it. Does that make sense?

Kortney Opshaug [00:28:01] So 100%. And I think that working towards the oceans and SDG 14 is so important. And again, you know, ocean health is so tied to climate and so many other things. And the communities that are, coastal communities on the water and communities that depend on the ocean for their livelihood, it involves both men and women. And so, I think being able to find the ways where there can be support for female led businesses or efforts can make such a big difference in making progress towards SDG 14.

Julie Kuchepatov [00:28:36] Yeah. Totally agree. So how can SAGE support you as a woman in this space?

Kortney Opshaug [00:28:41] I really admire and support everything that SAGE and you have been doing to highlight women in this sector. And I think connecting with other women in this space, highlighting careers in seafood that are not just on a boat, but maybe there are other supporting or technology sectors that also are involved. And I very much appreciate being here and being able to tell our story and hopefully connect with other women who are either in this space or interested in this space.

Julie Kuchepatov [00:29:10] We'll definitely keep doing that for sure. As long as I'm around, I think we're going to keep doing this. That's a good segue way to my next question, which was, you kind of span the tech sector and then the ocean space. What career advice would you give to someone in tech, for instance, that maybe doesn't understand what's happening on the ocean tech front? What advice would you give them about? Absolutely join this sector because it's really great. Or what would you say to someone like that?

Kortney Opshaug [00:29:38] I love this more than anything. I mean, working in ocean tech as well, and particularly fishing tech. It is a true collaboration of many different perspectives. You get this combination of something that's a really, really good and hard technical challenge, but also can make a difference in ocean health and work towards something that's important. The advice that I often give to folks who are entering into this space is to get out on the water. Work with whoever your customer is, whether it's the fishers or some other ocean industry, but really understand where fishers are coming from, what's happening out on the water, what's going to work, what do they need? What challenges are they facing? You can't be afraid to do that. And one day out on the water is ten times more valuable than a day in the lab. You always learn so much. I just have so much respect for the people who make their living out on the ocean. It's always really, really important. And it makes us better. It makes what we make better. And I think that's really been something that we've tried to do as a company is something I truly believe as an individual, and I think we'll continue to do that as we move forward.

Julie Kuchepatov [00:30:46] So how often do you get out on the water?

Kortney Opshaug [00:30:49] Not nearly often enough. It's as often as we can, but it depends kind of on what phase we're at and where things are and who needs help. But even if it's just at the dock, sometimes it's helpful to go on someone's boat and ask a lot of questions. The worst mistake I ever made was early on, was kind of coming at this. I was like, hey, we have this great new solution, and we're going to change everything. And flipping that around into just asking questions. Tell me how you fish. Tell me what you need. Tell me what's hard about this and tell me what would work. Tell me what wouldn't work. And that changes the dialog a lot. It makes you a lot better at what you do.

Julie Kuchepatov [00:31:24] That's super advice. I totally agree with that. And I really like that you emphasized that here in our conversation. So SAGE is about uplifting and amplifying diverse voices in the seafood sector and this podcast is one of the main ways we do this. So, I'd love to give you the opportunity to uplift someone. And so who would you like to uplift and why?

Kortney Opshaug [00:31:45] I would love to uplift the incredible women that I get to work with. At Blue Ocean Gear. We have women in different aspects of our company. We have our project manager, Ariana Low, we have our data scientist, Emily Shallow, and our operations engineer, Aida Pourshirazi. It's been incredible having their input and their perspectives helping us move forward. I also do want to uplift Lori Caron. We are working

with on a new National Fish and Wildlife Foundation grant. She is with the International Fund for Animal Welfare and is also from a fishing family, knows everything about fishing and comes at it from a very practical perspective. She's always got very valuable inputs and insights.

Julie Kuchepatov [00:32:26] That's great. So, are you working on animal welfare too, with these buoys? How does that work?

Kortney Opshaug [00:32:31] That whale entanglement piece of it.

Julie Kuchepatov [00:32:33] Oh, the whale entanglements. Yeah.

Kortney Opshaug [00:32:35] Yes. IFAW has done a lot of work supporting whale entanglement mitigation in various fisheries.

Julie Kuchepatov [00:32:40] Yes. Okay, that makes sense.

Kortney Opshaug [00:32:42] That's great. Very grateful for their support.

Julie Kuchepatov [00:32:44] Well, those are great shout outs. So how can our listeners find you online?

Kortney Opshaug [00:32:49] Well our website Blueoceangear.com. We are also on LinkedIn. We've got a Facebook page that a lot of our fishers follow and also Instagram. So, we try to be as active on social media as we can.

Julie Kuchepatov [00:33:01] That's great. I think we'll make sure and tag you in the post about this podcast. And we'll also try to include some links in the show notes to your website, of course. I just want to thank you, Kortney, so much for joining me and really sharing your life's work, I guess. Would you call this your life's work?

Kortney Opshaug [00:33:19] I guess it's all been leading to this. That's how I'll say it.

Julie Kuchepatov [00:33:23] Everything that's leading up to this moment. Thank you so much for sharing with us, and I really look forward to the innovations that are going to, I'm sure, continue to come out of your work, because it sounds like the opportunities are endless. And I'm actually also really interested in following along in terms of the whale entanglements, because to me, that's a really critical issue. It's still happening, right? So how can we find a solution that works for the fishermen as well as for the whales and the people and the fishery, everything. So really excited. And I just want to say thank you so much for coming on and chatting with me.

Kortney Opshaug [00:33:54] Julie, thanks so much for having me.

Julie Kuchepatov [00:33:56] Thank you for tuning in to 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.

Crystal Sanders-Alvarado [00:34:09] The Conch 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

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