**The Conch Sz1Ep6MeganDavisCOMPLETE.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 and most importantly, about the incredible women working in the seafood sector, their journeys, the challenges they face and the triumphs they've achieved. Today, we have a very special guest joining us, Dr. Megan Davis. Megan is a research professor of aquaculture and stock enhancement at the Florida Atlantic University, Harbor Branch Oceanographic Institute. Dr. Megan runs the Queen Conch Lab and is dedicated to saving the conch through aquaculture and restoration. Welcome and thank you again for joining me today on the conch. Let's get started.

**Megan Davis** [00:00:50] Thank you so much, Julie, I'm so excited and honored to chat with you today and the fact that you call your podcast the conch is even more exciting for me to be here. I have so enjoyed your other Conch podcasts with the amazing women in the seafood world.

**Julie Kuchepatov** [00:01:07] That's great, I'm so happy you were able to join us today, and I did want to tell you why I named the podcast The conch, because I mean, there's not really a huge back story behind it. But when I started SAGE back in, I guess, well, it was October of 2020 when I officially announced SAGE was going to be a program and a nonprofit. And of course, SAGE stands for Seafood and Gender Equality. I thought at the time, preparing that summer before October, what would I do and what would this whole initiative look like? Well, I had big plans. I had huge plans. Actually, I was going to develop a newspaper or rather a magazine and then a podcast, and the magazine actually was my main focus. Then I thought, What can I name the magazine? And so I was kicking around some ideas with my family and I thought, you know, I want it to be seafood related, of course. What's something that's kind of iconic, but also a seafood and not salmon? You know, because salmon salmon is something that's always been in my life, but something different. And then I thought it just kind of came to me out of the blue. I thought the conch is great because it's culturally significant. It's a seafood, it has a beautiful shell, it has gorgeous colors. And then, you know, it's also in books like Lord of the Flies, you know, and that was actually a minus in the book in my mind, because it was a really scary book. And, you know, I didn't want to be associated with actually, you know, kids killing each other or whatever they do in that book. But anyway, I thought, you know, it's a great thing again, it's iconic. It can make beautiful music. And then once I launched SAGE, I became familiar with you and the Queen conch Lab and I thought, Oh my gosh, that's so great. And I've been learning so much from you, so I'm excited to have you on the podcast, the conch, and talk more about your life's work with these amazing animals. So perhaps you could tell us a little bit about your mission and vision at the Queen conch Lab.

**Megan Davis** [00:03:00] Sure, that sounds great, and it was fun to hear about how you came up with conch for your iconic emblem for the podcast and the conch being a horn, you're sending out the news you're sending out for wisdom and all that comes with that. So I just. Thank you. Oh, you're welcome. So the Queen Conch Lab, we have a mission to grow queen conch for the sake of a species, also for the environment and the ecosystem, and for the people who depend on the fishery. And so, as you mentioned, the conch is a very significant cultural icon in the Caribbean, and Florida is part of everyday life for so many communities in this region. You see it on emblems, you see it on flags, you see the shells lined up on fences. It's just everywhere you go in the Caribbean, you find the conch and we also call it a keystone herbivore. It's a vegan. It grazes on seagrass blades. It grazes off of the little epiphytes, the microscopic algae, and it helps the seagrass blades to be able to photosynthesize better, which in turn makes the seagrass a wonderful carbon capture plant and very significant type of ecosystem for the ocean. So this is a really important role that the conch plays, but also the conch becomes a prey for many other predators in the ocean, such as turtles and rays and lobsters and crabs and fish and octopus and things like that. And then in terms of the people who depend on the fishery, we're going to be talking a little bit more about that, I'm sure, as we continue our chat and we have a very grand vision and the vision is for there to be a conch farm in every Caribbean nation, and I'm excited to talk some more about that as well.

**Julie Kuchepatov** [00:04:43] That's a really great little synopsis of the conch and the value, and I didn't realize it was a keystone species, keystone vegan right? Is that what you said?. Vegetarian?

**Megan Davis** [00:04:52] That's right.

**Julie Kuchepatov** [00:04:54] So one of my guilty pleasures during the pandemic and while still to this day, right, is watching pretty mindless television, and one of the shows I've been watching recently is called Below Deck. I don't know if you're familiar with it, but it's a reality TV show that follows a crew of people that are living and working on a yacht in the Caribbean, and in one of the episodes they have the chef try to break open a conch shell and to prepare it as a meal for the guests. And he had a really hard time. He didn't know how to do it, he couldn't figure it out, and then he ultimately ended up using some frozen conch meat that he had in his freezer. But you just mentioned that they have a lot of predators and the turtles and others, you know, eat them. But how did turtles like? How do they actually physically break the shell to get the meat out?

**Megan Davis** [00:05:40] Right. So when the conch are younger, like when they're one year old, two year old size before they develop a flared lip, the turtle can actually use its beak and crush it. And so but as the conch gets older and thicker, it has a harder and harder time for the turtles and for that matter, the rays. That really the only predator that can eat or conch once once it's lipped is pretty much the octopus because it can go right inside and sort of use its beak and start to paralyze the conch and remove it that way, so has a lot of predators when it's young, but as it gets older, it becomes more and more protected with its shell.

**Julie Kuchepatov** [00:06:19] That's so interesting. It's just the natural fortress, essentially, and it's a beautiful fortress, actually. So I know having a conch lab or a conch farm in every nation or a Caribbean nation, I guess is your mission right and your vision? And I think that's wonderful. So why is the restoration of the conch so important and what's happening or has happened to them to need this? And I don't want to assume, but I'm going to assume that climate change probably has a big role in the future of the conch as a shell and a shellfish. So I'd love to hear your thoughts on that.

**Megan Davis** [00:06:53] OK, those are some great questions, and that opens up much dialog around this species. So it's been a very important fishery species from the early days, but in terms of trade. So back in the 1970s, when conch could be frozen and it could be put into cargo ships, that's really when the export of conch and very large numbers began. And that has caused in some places, overfishing of the conch. And then in other places, the conch has also suffered from major hurricanes like Hurricane Maria, a hurricane in Puerto Rico, Hurricane Irma in the Florida Keys. What happens with the conch and the habitat can get buried in the sand as it shifts from the storm. So that's certainly something that when we talk about climate change and the result of different weather patterns, species in shallow water especially do get quite exposed to these surges and sea water rises and also quite a bit of wind that's coming into the coastal areas. So in terms of the restoration of the species, it's really important for a number of different reasons that I mentioned earlier in our mission in terms of the ecosystem, in terms of the fisheries itself. But I thought I would mention one thing about their breeding behavior because the queen conch are actually called aggregate spawners. They have internal fertilization, so they have to come together in order to copulate. And so in order for this species to continue to survive and reproduce and make more conch for the Caribbean, they need to be a large enough aggregation where there is at least a hundred conch for every hectare and a hectare is like about just a little over two acres. So that would be like 50 conch an acre because they need to be able to find each other, they need to be able to find their trail and follow each other. So what happens if a population of conch gets fished out or gets fished really low, then the females and males have a hard time finding each other and therefore the reproduction can't follow on. So one of our purposes of restoration would be to help to bring back breeding populations of conch as one example for restoration, along with also helping in areas where there could be more conch for fishing.

**Julie Kuchepatov** [00:09:09] So that's fascinating. Is that 100 conch per hectare, what's considered the minimal threshold that you need right to ensure that they will continue to reproduce in this area?

**Megan Davis** [00:09:20] Yes, that's right. So that would be on the low end. And typically, you can see in a healthy population, it's usually somewhere around one thousand or three thousand conch per hectare. So that just gives you an idea of the minimum threshold, as you mentioned.

**Julie Kuchepatov** [00:09:38] So you grow them in your lab and then you release them ultimately back into the wild population. Is that correct?

**Megan Davis** [00:09:46] Yes, that's right. So we release them at one year old. So they're only at that stage about seven to eight centimeters, that's about three inches or so. And the best opportunity for that conch to survive is to be able to, first of all, acclimate them to their new environment because they've been so used to growing in the laboratory where we feed them every day and we take care of them. And so we end up putting them in an acclimation pen in the wild. And then when they acclimates and they've started to bury and they started to eat and understand, they're actually pretty quick learners, so it doesn't take too long. And then they can be put into a nursery where there's other conch there and so that they can have this what we call safety in numbers as they begin to acclimate and become part of the natural environment there.

**Julie Kuchepatov** [00:10:40] So this is just fascinating. I think they're like, really pampered, right? At their beginning stages.

**Megan Davis** [00:10:47] Yes, they really are. I mean, we're taking care of them from the moment they hatch until the moment that they're released back in the wild.

**Julie Kuchepatov** [00:10:55] That's amazing. And, you know, you detail, I mentioned earlier that I found you on Instagram and you have a wonderful Instagram page, by the way. It's fantastic and I love it so much and I learned so much and it's gorgeous. All the photos are incredible, but you detail the process quite extensively of hatching and growing conch there and on your website as well, which is, by the way, also really, really informative. So we'll let listeners know how to find you on social media as well as on the internet at the end of the show. But I'm interested in how conch aquaculture and farming might be similar or different from aquaculture or farming of other shellfish, for instance, like oysters. And in fact, I did have to Google and I asked you this question prior to the interview if conch are considered shellfish and of course, they're because they have a shell. But I was also reading that they're also a mollusk. So I got confused because like, I wouldn't consider an oyster a mollusk. But conch are a shellfish and a mollusk. Am I correct in my research?

**Megan Davis** [00:11:51] Yes, yes. Yes, you are definitely, Julie. And so actually oysters are mollusks as well?

**Julie Kuchepatov** [00:11:57] OK, I didn't know that.

**Megan Davis** [00:11:58] Yeah. So for oysters, they would be considered what we call a bivalves and, right, and for the conch, it would be a gastropod, but they both fall into being a mollusk and shellfish as well. So your research is right on.

**Julie Kuchepatov** [00:12:14] So how is farming conch different from farming an oyster, for instance? Or maybe they're very similar?

**Megan Davis** [00:12:20] Well, actually, yeah, they do have a lot of similarities, and there are a couple of differences as well. So fertilization, as I was discussing a little earlier for conch, they have this internal fertilization where they need to come together to copulate, whereas bivalves such as clams and oysters and mussels they produce with external fertilization. So the male and the females release their eggs and they have to mix in the water column. And as soon as fertilization takes place, they become a larvae. And so both the bivalves or the oysters and the conch have these veligers, or larvae, little zooplankton that are swimming around and they're collecting phytoplankton or the microalgae. And so they're both considered somewhat like filter feeders at that stage. And then metamorphosis takes place and the bivalves, the clams and oysters, mussels, they all settle. And of course, oysters and mussels attach. And it's very rare that they move from that point on, clams can move a little bit with their foot, and scallops can move as well. But the bivalves continue to filter feed microscopic algae their entire life, whereas conch, after metamorphosis, they settle also in the benthos and the bottom, but they become grazers. And so there's different forms of methodologies and aquaculture as to how you feed them after metamorphosis. But so much similarity, how you grow them in their larval stage and growing microalgae and growing them in these tanks as larvae.

**Julie Kuchepatov** [00:13:53] So I think I also read that conch can live to be like 40 years old. Is that correct?

**Megan Davis** [00:13:58] Yeah, it's quite phenomenal. It's just incredible how they continue to put on more shell and continue to be this majestic queen in the sea for so long.

**Julie Kuchepatov** [00:14:10] So much so majesticness for those, for those crazy animals, amazing animals. You know, I mentioned your website, which is just a real font of information around the conch and the aquaculture and your practice and learning. And you know, there's even curriculum for teachers to use in schools, which I think is great. So I was digging around on there and I saw, you know, one of the important core values that your lab has is community engagement, and I know that you are going to Puerto Rico next week. I think you're involved there kind of assisting them set up a hatchery. Is that correct or a lab as well? You could talk about that for sure. And I'm just curious, you know, how do you involve communities and why is this important? Because I mean, I know the answer for myself in my work, and I'm interested in exploring that a little bit more because I think over the pandemic, we've learned that, you know, at origin, you know, people are perfectly capable of running their own science. And a lot of the parachute science has stopped, right? Because people simply can't travel. So I'm curious, like, how do you involve the communities because it's so critical and so key, and I'd love to hear your thoughts.

**Megan Davis** [00:15:15] Mm-Hmm. Yeah. Thanks for that, Julie. Definitely one of our favorite parts of the Queen Conch Lab to be able to work with our communities. And you mentioned our work in Puerto Rico and I will be traveling there next week. The work in Puerto Rico just to give you a little background on that is funded through the Saltonstall Kennedy NOAA Fisheries Grant program, and this grant program is specificly to work on fishery and aquaculture related projects with community, and so we have a partnership meeting the Queen Conch Lab Harbor Branch Oceanographic Institute with Conservation ConCiencia, who is a conservation organization that works with the fishing associations in Puerto Rico, and then our other partner is the Fishing Association. So this partnership is truly an amazing engagement of a partnership, a collaboration that's right there with the fishers. I don't know if there's been any other conch hatcheries that have been located right in a fishing association, and this particular fishing association has twenty two fishers, and we work very closely with the president and the fishers, and they help us with the growing of the Queen Conch. And so one of the things that I've noticed and worked on over the many years that I worked in communities and I worked in communities in the islands for about 40 years now in the Turks and Caicos and the Bahamas, and now more recently in Puerto Rico. And one of the most important things I find is that you want to build trust. You want to build trust with your community. These places are not my native home, so I want to learn about the people that live there, about their lifestyle and about what they do and in this case, how important conch is to their livelihoods and to their culture. And I think understanding that and learning from the communities is a way to be able to build that trust and to ask the question then to share my knowledge and to learn from their knowledge. And so for the fishers, they have so much to share about their time on the water. They know a lot about the Queen Conch. They know where to find the egg masses that we need, for instance, for the hatchery. And so we need to base our collaboration and our time in the community on each other's knowledge that can be integrated together. And so I love finding ways to blend the science and the conservation and the fishery and the fishing together as this approach to aquaculture and restoration and building sustainable seafood. So once again, building this trust, this respect. And when I go to Puerto Rico, I'm happy to say that they always tell me that Puerto Rico is my second home, and that makes me feel very welcome.

**Julie Kuchepatov** [00:18:12] That's such a great story, and it sounds like such a real model experience, you know, for, like you mentioned, conservation and science and working with the fisheries and the fishermen specifically and the local communities. So that's really a great example of how, well, why it should happen like that, right? It should be that way. And we shouldn't think that we know better or, you know, whatever we think or, you know, anyone that comes into a local community thinks they know better. I think that's such a great example and really applaud you on that.

**Megan Davis** [00:18:42] Thank you very much, Julie. I think that's the way to have successful projects, right? If you need to build that engagement, then hear from the community before you even begin to build a project there. And that was one of the things I did. I came down and I talked with and spoke with the local organizations and the fishers and to say, you know, is this something that you would like? Because also, just as a side note, when it comes to aquaculture of conch, you don't want the community feel like, well, wait a minute, this is my fishery. This is my livelihood. We don't want you to compete with us. And so it was really important to establish that very early on that this was not to be a competition, but rather a joint project together, and it wouldn't take the place of fishing by any means.

**Julie Kuchepatov** [00:19:32] Yeah, I mean, that's the task at hand right is to have those conversations and make sure that everybody realizes it's a win win win situation for everyone. I think I can tell you a quick story about when I was working in Russia and you know, I was working with salmon fisheries. But the idea of a fishery improvement project or a FIP was just starting to be kind of a thing. And I was thinking about why don't we propose a FIP in the south of Russia where the sturgeon populations are, where they get the black caviar from, right, in the Caspian Sea? And I said, let's, I'd like to propose that because it's a really long term project because those fish can live up to 100 years, right? And everyone laughed me out of the room, but I was half joking. But I thought, you know, that would be a really cool project to work on. And just like you have, you know, the conch that are that can live up to 40 years, that's a good job security.

**Megan Davis** [00:20:27] Exactly.

**Julie Kuchepatov** [00:20:28] So you mentioned that back in the '70s, a conch were being harvested in really large numbers and exported out. And I'd like to hear more about the importance not only for export and in fact, I'd like to hear where they were exported to. Who eats conch? But also, you know, the importance of the conch for food kind of locally and domestically. Like, is it a significant export product still or is it mostly consumed domestically?

**Megan Davis** [00:20:53] Yeah, yeah. This is great to talk a little bit more about this. So for so many of the Caribbean cultures, conch really is a subsistence food source, and it was definitely so much of a subsistence food source back when it was difficult to be able to import food. One of the challenges in the Caribbean is food security and being able to not only be able to grow your food or catch your food, but there's only so much because a lot of the islands aren't really set up to be able to produce a large amount of food. So the import of food into the islands is definitely very important, but it's also very costly. By the time the food has been imported from the states or other areas. So the subsistence of seafood in general and also with conch is very big. And I know that when the pandemic started, many of the island nations were definitely turning more to the sea for their food. And this was something that I heard a lot about in regards to the Bahamas that they relied heavily on conch as their high protein food source during the pandemic, when there wasn't as much food that was being imported into the islands. So from an economic standpoint, conch has been traded for this long time. And as I mentioned earlier and you also stated it was the 1970s, really when the large export began. A lot of the export takes place in terms of moving conch into the United States. And because of that, it was in 1992 that conch became a CITES species, the Convention of International Trade of Endangered Species, Appendix Two, which means that conch can be traded, but it needs to be traded when there's a good fisheries management plan in place so that the conch is not overfished. And so as you look at every country in the Caribbean, there's a set of regulations and guidelines that each country uses, depending on the fishery in their country. So, for instance, in the United States, there hasn't been any fishing of conch since 1985. There's been a moratorium, the conch got so low in numbers that they haven't been able to open back up the fishery. So that's the worst case scenario is when you've gone beyond the sustainability of the fisheries to a tipping point where the conch aren't coming back as quickly as they've been fished and so different countries might have quotas, they might have closed seasons. Definitely the size of the comp is important in terms of when it's harvested and there have been closures on and off. So these are what helps the conch to be able to continue to be fished and also exported in very large numbers from different places in the Caribbean on a continual basis. It happens to be the second most important fishery species in the Caribbean.

**Julie Kuchepatov** [00:23:52] Yeah, the whole food security piece is, to me, just so interesting, and I really hope that, you know, these efforts continue to support the kind of responsible management of them, and so they can be a source of food security, not only in, you know, a high source of protein, but also in terms of trade.

**Megan Davis** [00:24:12] Yes, exactly.

**Julie Kuchepatov** [00:24:14] OK. So I mentioned when, you know, I was in preparation of this discussion, I was enamored with your website and looking around, and we also discussed oysters, which as a shellfish grow pearls, right? And so in your website, I also learned a fact which I didn't know. Well, I learned a lot of facts, but one that I didn't know is that conch actually can grow pearls in nature, and they happen very rarely. They rarely occur in nature, but you happen to have developed a method to grow them. And so I really want to hear about how this came about and how do you do that? How do you come up with something like this? So random? So I'd love to hear more.

**Megan Davis** [00:24:52] Yeah. Well, it's a best kept secret. I think so.

**Julie Kuchepatov** [00:24:56] Not any more.

**Megan Davis** [00:24:58] But I will share for sure. You did mention that they are rare and really in the wild, that one in every ten thousand conch might have a pearl. And out of those, maybe one in a million are really like top quality. They are an incredibly beautiful gem and they are getting harder to find, especially, you know, in a fishery that does struggle with in some places with some overfishing. So I was fortunate to meet my co-inventor Hector Acosta-Salmon in the mid 2000s. He came. He was a post-doc with me here at Harbor Branch Oceanographic, and we worked together. He had knowledge of seeding oysters for pearls. And I had knowledge of the animal itself. And so we put our two talents together and we came up with a very reliable method to grow Queen Conch, which is now patented. And we're really excited about the opportunity to be able to take this to the next step. We were able to during our investigation on how to grow conch pearls, we were able to grow two hundred pearls, figure out how long it takes to grow a pearl. It looks like it takes about a year. And one of the other really fascinating parts about this is that you don't need to sacrifice the animal in order to produce a pearl so the conch, you can harvest the pearl and it will grow another pearl in its pearl sack, which is really incredible. One of the ways that we can remove the pearl without sacrificing the animal is we relax the conch. They have a very strong muscle, which is hard to obviously work on when it's not relaxed, so we put them in a magnesium chloride relaxation. It's kind of like an epsom salt bath for the conch, and they relax and then we can work with them.

**Julie Kuchepatov** [00:26:50] So this is so fascinating, and I saw a picture of the pearl and it's like this beautiful pink lustery, right? It's almost like a galaxy, but a pink one. It's beautiful.

**Megan Davis** [00:27:04] Oh, I love that. I love that term, Julie, galaxy. Yes, they have this flame in them that you can look very deep inside of them. So I think your description is beautiful.

**Julie Kuchepatov** [00:27:15] So how do you? This could be a whole other podcast talking about jewelry, the jewelry trade and jewelry like pearls and stuff. But when you were thinking about doing this and just, you know, creating this method, and by the way, it's great that you don't have to, you know, harm the animal to take the pearl out and you can give it up, you know, an epsom salt bath, which sounds very relaxing. But was there a concern that the conch might become more valuable for pearl production, leading to a decrease in conch farming for food? And you know, as we mentioned, food security is tied to the conch very strongly.

**Megan Davis** [00:27:47] Yes, exactly. I really don't think that there would be a concern about that. I think that the conch as a food source is so important, but what's very interesting is that the two can be done hand-in-hand since the conch isn't sacrificed. So if you're farming a conch for a sustainable seafood, you could increase the value of that species by being able to also produce a pearl that gets harvested at the same time you're harvesting for meat.

**Julie Kuchepatov** [00:28:22] Mm-Hmm. Yeah, that makes sense. So we're going to switch gears here a second and talk about, you know, what has brought us together, which is seafood and gender equality. So there was an article I read last year. In fact, I wrote a little piece about it and my thoughts about it. But it was an article, actually. It was released in 2020 in the Scientific American called "The Dark Side of Being a Female Shark Researcher." And in this article, the author discusses the misogynistic culture in shark science, where the majority of senior scientists are white men and this culture that encourages rampant sexual harassment in field work. So the article's author is Dr. Catherine Macdonald, and in the article, she quotes a global survey from 2013. So, quote, "Across scientific disciplines, 64 percent of respondents reported being subjected to sexual harassment during fieldwork and 20 percent to sexual assault." So the accounts in this article aren't unique. There are numerous accounts of sexual harassment in the field, and to this day, I think there was a real recent article. In fact, I was trying to find it and I couldn't find it. And I want to say I could even remember where it was from. But there's a lot of high profile cases coming out against, particularly about fieldwork specifically. And so you've been working as a conch farmer for many years and you've been in the field and you have a lot of field experience, of course, in terms of operating in misogynistic cultures, not only in the field of science and STEM in general, but in some of the countries where you work. So, you know, I'm assuming you've had situations in your life and in your career. And so I'm curious how you've handled these situations and you can share as much as little as you want.

**Megan Davis** [00:29:59] Yeah, Julie, this is such an important topic, and I'm glad you bring it up, and I'm glad that you work in the field that you do in terms of bringing more attention to this important topic. And since I'll start a little bit by talking about how I became involved and some of the lessons and things that happened along the way. I went to a university where it was a small satellite, part of the university where it was very technically oriented in terms of that's where I learned my aquaculture skills and there was environmental science and oceanography and like deep sea ocean welding and things like that. So it was very technical. So that ended up being that. I was the ratio of females. The males was one female to seven males, so I had already started off my career in a place where it was a little off balance. But I actually did find that that was a problem with in my university. It was a very collegial university, and I found that my male colleagues and friends were very supportive of us in the field and in learning. And so when I decided I wanted to be a conch farmer, which was actually when I was 16, when I first met my first conch and I just was laughing when you were telling me about the person on the yacht, they couldn't open a conch. Well, that was kind of like where we were back when I was sailing in the Bahamas with my family and we're like, Oh, what is this conch? How did you get it out of the shell? And that's when I met the fishermen and they showed us how to get the conch out of the shell. And that's when I really fell in love with this species and wanted to make sure that I committed my career to this species back when I was a teenager. And so I went on to getting my bachelor's degree, as I just mentioned at this technical campus and we were very casual. I mean, we would wear flip flops and shorts and T-shirts and very casual. And then I got an opportunity to have an interview to be a conch farmer. And this was through a connection with a dear friend of mine who knew somebody in the islands because that's all I had. That's all I wanted to do. So I'm like, Oh my gosh, my first interview, I'm going to make sure I'm dressed right and have my briefcase. And so I like became this other person I dressed. I put nylons on, I wore my mom's skirt and the got I all dressed up for this interview and I knocked on the door. And the two gentlemen that were interviewing me looked at me and they were like, What are you here for? I'm like, Well, I'm here for the interview. And I could tell that just the way I dressed right then was enough to already put me on alert for what was going to happen next. And so I sat down and had the interview and I brought all the things with me, my resume, and I told them everything I was doing and how I really wanted to work in the field. And then I finally said, This isn't the way I dress. I can do this work. Believe it or not, I could get out there in the field and please give me an opportunity. And so it was my now husband, Gary Hodgkins, who actually said, yes, let's give her a try. And so I was able to get the position and start my conch farming career in the Turks and Caicos. So that taught me a few things, but it also taught me to make sure to stay bold and to be on mission and to not let situations like that hold you back. And when we were talking a little earlier about the communities and learning about how to work in different communities, so that's something that I've also had to pay close attention to. So when I come into a new community and it's typical that in the community that the fishers are mostly males, although I have met some amazing female fishers recently, both in the Bahamas and also in Puerto Rico, but I want to make sure that I learn their culture. I want to make sure that I know how to respect their culture and to be part of the community there. And one of the things that I also make sure that I do is to dress appropriately and to not stand out, but just to be part of the community in a respectful way. And so that's just a couple of things that I wanted to mention. But I also have to let you know that just recently, just a few days ago, I buy a lot of plumbing because I do a lot of system building and I love to plumb. So I walked into a plumbing store just a couple of days ago, and the guy looked at me like, Oh, what do you want? And I'm like, Oh, I'm here. I have a list of plumbing parts, wil you please help me. And he's like, you can just tell, like, I rarely see a woman in a plumbing shop. And so I really had to make sure to show them like, you know, just to go extra overboard, to say, like, I really do know my plumbing parts. And this is the design I came up with and you know, and start a dialog even in a situation like that. So that was just something that happened a few days ago. So there you go.

**Julie Kuchepatov** [00:34:57] Oh, wow. Wow, wow, wow. OK, so there's a couple things I need to break apart here, so. Well, first of all, this is 2022, plumbers, and you should recognize that there are women plumbers out there. I think there's probably quite a few and plumbing is something that I think, I don't know anything about plumbing, honestly, but I think those times where you should feel comfortable going into a plumbing store to get equipment and materials should be over, you should be able to freely go in there and not have to tell your life story and your credentials every time you go in there. I mean, that's ridiculous. But another thing I learned is that, yeah, pantyhose and nylons, I mean, come on, let's get let's get out of those now. I think it's time also to move on. But also, did you say that you ultimately ended up marrying one of the guys that was in the interview?

**Megan Davis** [00:35:47] Yeah, that's how I met my husband. I mean, we were colleagues for quite some time and he was the operations manager. And so, you know, over time, yeah, we got to know each other.

**Julie Kuchepatov** [00:35:56] That's awesome. Well, congratulations.

**Megan Davis** [00:35:58] Thanks for that. And I had to tell you that the pantyhose, I mean, that was in the early 1980s.

**Julie Kuchepatov** [00:36:04] So, yeah, I know I'm just giving you a hard time because I think there is this idea about, you know, dressing up to get whatever.

**Megan Davis** [00:36:14] Exactly.

**Julie Kuchepatov** [00:36:15] So that's kind of the metaphor there, I think also.

**Megan Davis** [00:36:17] I think so. I think so.

**Julie Kuchepatov** [00:36:19] So but you know, jokes aside, I think being a woman in seafood or in STEM or doing field research, I'm sure has influenced your work in ways that you might or might not, I don't know, we'll see, recognize. And so I'm curious, have you noticed? Is it difficult? Is it easier or just different in your experience, like in the field specifically? And I can give you an example for me. I found when I would go into the field specifically, I mentioned before working in Russia, in the salmon fisheries there, I found it a lot easier. It was easier for me to go into a community and talk to people, and people were more willing to listen to me because I was listening to them. Whereas, you know, and I was a lot more empathetic and I could actually identify with a lot of their issues, a lot more. At least I could say I said that I did because I usually did right. And I think that was different from a lot of my men colleagues that were there, that they were like more trying to just push things on top of people. Right? So how do you find that? Do you find that being a woman is easier in your work?

**Megan Davis** [00:37:20] Well, that's a good question, actually. And just thinking about that, as you are talking about your example, I think there could be in some ways there are some different characteristics that women in general have in their approach. I was also thinking that the approach to be inclusive needs to be there and whether it's a woman or a man in the field. It's just so important. I'm also thinking that because I'm in academia and I have my Ph.D. that sometimes that can be quite daunting for people. So I really tried to not be the, and I hate to say this, but kind of like the stereotype academia person. So I think it's kind of a combination. It could be that being a woman, but also just the way I like to approach things, make it easy for me to be able to work in the field and stay focused and to be able to achieve what we want to achieve. So, yeah, I was just thinking about another example. Back to our earlier question, but also maybe coming into this question as well. I was working with one of the fishers in Puerto Rico and we were doing fiberglass work. And the fishers are so talented as fiberglassers and working with boats and having to do repairs. And so I had to spend some time getting to know the fisher and them getting to know me so we would talk about their families and what they were doing. And then I would give a little background on how to do fiberglass. And then we had this amazing partnership that came together where we could both use our talents and we could get the job done. And that was putting together a big reservoir tank that needed to be fiberglass. So with the seam and everything, so just a little bit all over the place on this question, but I hope I answered it, Julie.

**Julie Kuchepatov** [00:39:19] No, I think you did. And I think again, it is a bit of, you know, about someone's personality. But I think women in general, you know, not to stereotype or anything, but I think we do listen and I think that really serves us well when we are trying to work in these communities that are, I think, we just, we learn better. I don't know if that's scientifically proven. And it's so funny when you say, you know about being a Ph.D. and an academic, you know, I do not have a Ph.D., and I always think and laugh to myself because I have seriously considered going and getting my doctorate. But I always laugh when I think about that because if I had a Ph.D. and were able to put doctor in front of my name, it would be in front of my name in every single place that I actually could because I earned that. So I think it should be very proud of that. I think you should absolutely say, you know, I'm a doctor, etc. So you did a good job. Yeah, yeah, yeah. So this podcast, you know, is really to inspire women working in or thinking about starting a career in the seafood sector. And so we're still just starting out here, but we've been fortunate to have a lot of different expertise come into these conversations. And so, you know, you're the first academic that we've had on, and I'm really excited to have you here, and I really hope to actually have more of people like you and working on research and in the field. And I think it's just great. So but what advice would you give to women who are already in the business or thinking about starting a career in this exciting sector?

**Megan Davis** [00:40:46] Thanks for that, Julie. Yeah, that's a good question, and I have been very fortunate having the number of years that I had in my field to work with a lot of amazing early career women and be mentors and work with them and also, for that matter, early career men as well. And I think that being able to be a mentor to other women has been one of my favorite parts of seeing women develop into their career. And I often talk about, first of all, having the passion for the work as number one and then to be able to make sure that you stay focused on your path because sometimes along the way, we may run into people that tell us that you shouldn't do it. You shouldn't be a marine scientist or you shouldn't do this, or that's really not your field. And that's something that you might need to overcome. Because I have met people that said, Oh, I wish I had gone into that path. That's what I really wanted to do. But my parents are this or that person told me that this or that. So don't listen to the outside, really listen to your inner passion and your inner directions of where you want to go. It is really important to find a good mentor. And if you can find a woman mentor, I think that's really great to help you. I've had a number of different women mentors and also male mentors, and they both have played really important roles in my career. I also think that networking and building a network and attending conferences early on and making sure that you get out there and you find other people that are in your field and you listen to their work and you start to build this incredible network, which is fortunately what I was able to do early on when I first started. My career is just building this incredible collegial group that I could always go to. And I think also just stay bold, you know, sometimes we get held back because we want to stay in a comfort zone. And I think some of my best work and breakthroughs have been to stay bold and to work outside of that comfort zone and to keep exploring and to keep growing in your areas of work and areas of passion.

**Julie Kuchepatov** [00:43:11] So that's all really great advice, and I think we've found the call to action or several calls to action for this episode, which would be to stay focused and stay bold. Listen to your inner passion and find a mentor. And hopefully, you know, SAGE as we grow older and develop our programs more, we really want to be able to provide that service of kind of a networking/ mentorship programs for women in seafood. So hopefully we'll be able to offer that to women in seafood that you so beautifully suggested, you know, made these suggestions for what they should do about starting a career in this great field. And so how can people find you on the internet?

**Megan Davis** [00:43:51] Yeah. So we have a website called conchaquaculture.org, and as you mentioned earlier, we have a Instagram site that's really quite easy to find just @Queenconchlab. And then you can always go to the university to Harbor Branch Oceanographic Institute, and I'm listed there along with many of our colleagues in many, many different fields of ocean science. So welcome you to explore that as well.

**Julie Kuchepatov** [00:44:22] Well, thank you so much. This has been a really great conversation and a real joy to meet you. Not in person, obviously, but online. And I really hope that we can continue these conversations. And I just applaud you for your passion and your long term devotion to one of the most iconic, obviously, animals on the planet. I just I have no words like, I'm so excited.

**Megan Davis** [00:44:47] Well, thank you so much for this opportunity, Julie. It's really been such a pleasure and such an honor and really quite a joy to talk with you today. Thank you.

**Julie Kuchepatov** [00:44:55] Thank you.

**Speaker 3** [00:44:58] 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 and performed by Satan's Pilgrims. Funding for the Conch Podcast is generously provided by the David and Lucile Packard Foundation.