

The Zest Podcast - S6E18

Transcription

[00:00:00] **Deborah Keller:** We knew that to restore the bays, we had to restore the oyster. So it's a really critical critter to have in our bays.

[00:00:11] **Dalia Colón:** I'm Dalia Colón, and this is The Zest. Citrus, Seafood, Spanish Flavor, and Southern Charm. The Zest celebrates cuisine and community in the Sunshine State. Today we are diving into sustainable aquaculture and why it matters. I'm chatting with Deborah Keller, better known as Oyster Mom.

[00:00:34] For Deborah Keller of Tallahassee, the world is her oyster. After a 29 year career with the Nature Conservancy, Deborah turned her attention to sustainable shellfish. Nicknamed the Oyster Mom, she's been farming and selling fresh oysters for nearly a decade. In our conversation, the conservationist describes the impact of climate change and hurricanes on oystering.

[00:01:00] She also explains the far-reaching economic impact of Florida's oyster industry recounts the bureaucratic red tape she encountered along the way and describes the serenity and stress she experiences on oyster harvesting day. And of course, I had to ask Deborah about her favorite way to eat oysters.

[00:01:25] **Deborah Keller:** You've probably heard the term before of the canary and the coal mine and how the miners would go down into the coal mines, and when the gases became too toxic, the canaries would die first. They were more susceptible to the impact of the toxic gases. An oyster is a pretty tough animal, but it is also very susceptible to the impacts of issues such as acidification of our waters, warming of our waters, and of course hurricanes just basically blow them away. They are also an asset to us during hurricanes because they're, they mitigate the storm surge somewhat when they're in an oyster reef, or my farms, which of course would get torn apart, but still, you know, they mitigate some of the storm surge coming onto land.

[00:02:18] But we are seeing throughout the world impacts from pollution. And also from the warming of the seas and the rising of the seas, and the changing of the acidity and the salinity of the seas, all of those impact an oyster. And when it gets outside of the boundaries where that oyster is comfortable and can survive well, then it just dies. So we need to be watching climate change very careful.

[00:02:47] **Dalia Colón:** You mentioned hurricanes, and we're recording this about two weeks after Hurricane Ian. So have you noticed any affects?

[00:02:55] **Deborah Keller:** My oyster farm is in the panhandle of Florida, so it's directly south of Tallahassee in a bay called Oyster Bay, and the water left Oyster Bay.

[00:03:08] I know the same thing happened up in the Tampa area, but basically the hurricane, Hurricane Ian, pulled all the water down south into its hurricane swirl and dropped it as rain and dropped it as storm surge in the southern part of the state. And so our oysters were on the ground in the mud, just kind of laying there, waiting for the water to come back in.

[00:03:33] We could not get out to them to see it, but we could, you know, go down to the bay and see that all the water was out of the bay. So that's how it impacted us. That's how this one impacted us. I've been oystering for eight, almost nine years now. I've had numerous tropical storms. I've had numerous hurricanes come even directly over my farm.

[00:03:57] We typically do not see the mortality for about a week or 10 days after the hurricane hits. It rattles them around quite a bit in the cages that we grow them in. You know, if there's a lot of rainfall, it can change the salinity significantly, and that could stress the oysters, so it could be incredibly hot.

[00:04:17] There's all these stressors that come in with a hurricane that could cause increased mortality of our crop.

[00:04:24] **Dalia Colón:** Wow. I didn't think about it affecting, first of all, Tallahassee, because I'm down here in Tampa and I didn't think about it affecting seafood. Everyone talks about the effects of a hurricane on agriculture and and cattle, but this is your livelihood, so that really gives me pause.

[00:04:46] You mentioned that you've been oystering for eight or nine years. What were you doing before that and how did you get into this?

[00:04:51] **Deborah Keller:** So I've been in environmental protection and conservation since forever it seems. I was with the Nature Conservancy for 29 years, and that is a global conservation organization that works to protect the lands and waters that all of our species on earth need to survive.

[00:05:12] And so I was deeply committed to protecting habitat. And a huge percentage, they claim 85% of the wild oyster population in the world has been

decimated. It's collapsed. The population has collapsed, and there's a lot of reasons for that. Some of it's overharvesting, but a lot of it's pollution, change of habitat.

[00:05:34] We knew that to restore the bays, we had to restore the oyster. It's like the keystone species for the bays. It clarifies the water. It's a filter feeder, so it purifies the water, allows more sun shine to get into the bay. It creates a nursery habitat for other species. So it's a really critical critter to have in our bays.

[00:05:58] I just thought, Wow, this is something we need to do. The Nature Conservancy was very focused on doing oyster reef restoration, so basically putting oysters back into the water on reefs to create that natural habitat. But around the world, for centuries, people have been doing oyster aquaculture and we did not have it in Florida.

[00:06:24] And so I thought, well, you know, we could wait for grants and public funding and special donors and everybody else to help us do reef restoration, or we could get permits and have people basically start their own businesses being oyster farmers. And all of the intricacies that go into the seafood, particularly the shellfish aquaculture industry, which includes not just the farmer, but the boat salesman, the boat repairman, the equipment provider, the distribution guy, the marketer, the website creator, everybody that goes into oyster aquaculture, gets a job, gets an income, hopefully, if things go well, and we are putting millions and millions of oysters back into the water with essentially other people's money. And so it seemed like a great idea to me. The Tallahassee Community College started a course on oyster aquaculture and asked me to be a part of the first class, and we got into that class and realized we needed a lot of permits to do in water column oyster aquaculture.

[00:07:36] We needed permits from state agencies, the Department of Environmental Protection, the Division of Aquaculture, Department of Agriculture, but we also needed federal permits from the National Marine Fisheries and the Army Corps of Engineers. And we needed permission from the Coast Guard and we needed to have our farms surveyed and navigational lights put up there and put the farms on the marine charts so a boater would not go into them.

[00:08:03] So all of this had to happen. And I had a little bit of experience in doing that kind of stuff because of my work with the Nature Conservancy and had some connections. So that was my major role the first year. Literally harassing people in agencies to get our permit pushed through. So we could put

it before the governor and cabinet in Florida, get it approved and be able to put oysters in the water, in oyster aquaculture systems and designated areas that had navigational lights and were on the navigational charts.

[00:08:39] So it was a very, very long, tedious, bureaucratic process. Got it done with incredible help from the Florida Division of Aquaculture, which was also new to this whole thing, but very interested in reviving the oyster industry and getting people raising and selling oysters. So that's how I got involved. It was like, I wanna put oysters back in the water.

[00:09:05] I wanna do it quickly. I wanna revive this industry. Thousands of people used to survive on the oyster industry. Out there tonging oysters in Florida and it just collapsed completely and around it collapsed all the other infrastructure that was available for it. So I wanted to see that revived and um, train new people to get into oyster aquaculture and that's been my motivator, I guess.

[00:09:34] **Dalia Colón:** Amazing. As you say this, I'm picturing you wearing a cape. You're like the oyster hero, but you are called the Oyster Mom. So how did you earn the nickname Oyster Mom?

[00:09:45] **Deborah Keller:** Well, part of it was because of all that work I did to get the permits and you know, I was the first person to put oysters on my own lease, you know, here in, in Wakulla County, in Oyster Bay, but I wanted to train other people to do it.

[00:10:01] I'm a woman. I'm old. I'm a mother and I was very excited about getting oyster aquaculture going in the state of Florida.

[00:10:13] **Dalia Colón:** And there is something maternal about protecting a species.

[00:10:18] **Deborah Keller:** I have now eight people that have come and started on my lease. And then became their own oyster farmers on their own lease, raising their own oysters with their own company, marketing on their own, being successful on their own.

[00:10:34] So part of my business plan, you might call it, was to generate competition. You know, get more people into it. And, and that's been incredibly rewarding. It's like raising a kid and seeing them be successful. And I've got some really, really successful people that started on my lease. They're, they're better at it than me.

[00:10:58] **Dalia Colón:** Talk me through a day of harvesting. What does that look like? How many oysters are you going out in a boat? Paint a picture for me.

[00:11:07] **Deborah Keller:** So, um, yes, I drive from Tallahassee down to my boat. I have two boats. One of them I started with quite a while ago. It's a small 19 foot Carolina Skiff that's stripped of everything I could possibly take off of it.

[00:11:22] It's basically a hull with a console and steering wheel. I have a second boat that's my workbook for when I'm managing and taking care of the oysters, and that's a another Carolina Skiff, but it has a huge rigging on it with a second story, as I call it, where I can store equipment. It's got a big tumbler on it to sort the oysters by size.

[00:11:44] It's got all the equipment I need on it. For harvesting I get into the little boat, I call her Jenny. We motor out to the lease, which is only about a mile and a half offshore, and that's the best time. That is absolutely where it's like this transition from my life to I'm going out to take care of my babies.

[00:12:07] And a lot of times it's daybreak and the sun's rising and it's just absolutely gorgeous and it's just like this therapeutic moment. And so anyway, I get out there and, um, I've already sorted all of what I call my market ready oysters into a certain area, so I know where they are. We have very strict regulations about when we can harvest, and so a, the bay has to be open for harvesting.

[00:12:37] So if there has been some sort of rain event or hurricane or something, the state might close the bay and say, You can't harvest. And then there's also a time and temperature matrix. So you have to, in the summertime, have the oysters in the refrigerator. The processor's refrigerator by 11 o'clock in the morning in Florida, so that means I have to get up pretty early to drive down there, get out in the boat, get the oysters so I know where all the oysters are.

[00:13:04] They're in bags that have been identified as market ready oysters. I pull them into the boat. And I, because I am a processor also, I'm not just a farmer. I process my own oysters and market my, and sell my own oysters. I pull as many as I need, plus a few hundred more. Or if I'm going to a farmer's market, maybe a thousand or 2000 more depending on what I need for that weekend, and, um, bring them into the bay.

[00:13:34] They get counted and bagged and cleaned and taken to my refrigerator. It's a commercial refrigerator and put in my refrigerator by 11 o'clock in the morning and the refrigerator's in Tallahassee, so I have to drive back that hour. So that means I have to leave my dock. I leave my dock at no later than quarter to 10 in the morning, so that's my day.

[00:13:56] **Dalia Colón:** Who's checking?

[00:13:58] **Deborah Keller:** The State of Florida division of aquaculture could be standing on my doorstep with their thermometer in hand, basically taking the temperature and making sure that I got there on time. Now, what they want is for those oysters which are coming out of waters that are typically in the summertime around 85 degrees, and I bring my oysters inside my vehicle that's air conditioned, and I wear a fleece jacket, so I'm already chilling them down for the ride.

[00:14:28] Then I put them in the refrigerator and those oysters have to be at the temperature, internal temperature of 55 degrees or lower two hours after they land in the refrigerator. So that is one o'clock in the summertime. Um, now in October, that time has changed. I have to have them in the refrigerator by one o'clock and cooled down to 55 degrees or lower by three.

[00:14:50] And then in the winter it changes to five o'clock. With them cooled down. So basically what we're doing is we're rapid cooling the oysters from harvest, so, no bacteria grows in them. So that's what it looks like. It's basically a rush, it's like a mad dash and pulling the oysters, getting them to the refrigerator.

[00:15:14] Now some people, you know, take their, In the old days there used to be processors right on the water, and people would drive their boats up and drop 'em off. And some people have processing operations closer to the shore than me. But since I sell my oysters, also people come to, to my Tallahassee warehouse where my refrigerator is, and that's where they buy their oysters.

[00:15:38] **Dalia Colón:** I had no idea. I'm picturing like someone fishing off of a dock and it's just very casual.

[00:15:44] Okay. Just a couple more questions. This is fascinating. All right. On your website it says, Oysters are a social food and belong at your next event, Oyster Mom can be there to shuck and share the tales of oyster farming. So what are some of your favorite tails?

[00:15:59] **Deborah Keller:** Oh my God, I have so many . I have so many. Um, the most recent one is there was a rattlesnake on top of one of our cages after the hurricane, apparently he got swept out to sea or something. Anyway, there was a rattlesnake, a mile offshore on one of our cages. Okay. So that was pretty wild.

[00:16:19] One of the first people that helped me oystering was blind. I had just met him and he was kind of had just gone blind and he was like, Do you think I could do it? And I said, I don't know, maybe. I don't know. I've never worked with a blind person. I'm new to Oystering. I don't even know. But anyway, we get out there and we're Oystering and Michael did great.

[00:16:39] I mean, he was just amazing cuz he was a mechanically inclined person before he lost his sight so he could do things I couldn't. It was strong. Anyway, we're out there one day. The boat fails to start, and then we're out on the bay and I'm like, Oh, great. Here we are. An idiot and a blind person out here trying to fix this boat and get it going.

[00:17:04] And he fixed it, not me. He fixed it. And so, you know, that's always exciting when you have mechanical issues. Um, we find all kinds of things in the oyster bags and on the oyster cages, and that's always exciting. So the rattlesnake was the biggest surprise, but there's always a number of crabs. I've seen now four different species of crabs out on my, in my bags, on my bags.

[00:17:35] We see shrimp. I've seen two different kinds of shrimp. We see tons of fish. Um, sheep head, catfish, trout, oh my gosh, the most, the biggest red fish you ever wanna see in your whole life. Sharks, of course, dolphins, regularly, manatee I've seen out there. And then a ton of birds. And so it's just really, really wonderful.

[00:18:00] It's pretty much always active with other life out on the bay, and that's always just some of the beauty of it.

[00:18:08] **Dalia Colón:** It does sound beautiful and like you never know what's gonna happen on a given day. I just noticed your earrings, which are oysters with little pearls inside. Love that. Do you find many pearls, by the way?

[00:18:19] **Deborah Keller:** No, not the species of oysters. So these are actually freshwater pearls that are in here, but these are my oyster baby shells, which I give to Quincy Hamby of Quincy Hamby Art Jewelry in Tallahassee, and she makes these wonderful pieces of jewelry for me.

[00:18:37] **Dalia Colón:** Love that. So you eat, sleep and wear oysters. Before I let you go, speaking of eating oysters, I'm assuming you eat them?

[00:18:46] **Deborah Keller:** I do. I do.

[00:18:47] **Dalia Colón:** What is your favorite way to prepare them and what do you serve alongside?

[00:18:53] **Deborah Keller:** I always recommend to everyone when you get an oyster, eat one absolutely raw and naked first. Don't put anything on it. Taste the oyster. So many people put so many different things on it that you don't really taste the flavor of the oyster. And your oyster, every bay has a different flavored oyster. It's just because it's assuming, I call it the narrower of the oyster. So it's assuming the flavors of the minerals of the water that it's been raised in. So first, eat it raw. Eat it naked. Then you can start thinking about what to put on it. And I have a, um, a green sauce that I make myself.

[00:19:33] It's a Tomatillo, jalapeno cilantro sauce that I really love on my oyster, and it's just a really nice mix to put with the protein of the oyster. That's probably one of my favorite toppings if I'm eating it raw. If I'm cooking it, then I love to put it on the grill and then chuck it into a bowl of garlic butter, melted garlic butter, and just ate it drenched in butter and garlic.

[00:20:01] **Dalia Colón:** Mm. That sounds amazing. The tomatillo sounds so Florida and probably like you could put it on a lot of things. What do you like to eat alongside? Or do you just go for the oysters and that's plenty?

[00:20:12] **Deborah Keller:** Well, I mean, you know, just, they're usually served with beer. I love them with beer. The craft beer community here in Tallahassee.

[00:20:19] The Tallahassee Beer Society has been a wonderful supporter of me. But actually one of my favorite things, it's so, it's, you know, most people would not do this, but when you have a ton of oysters all the time, I love to shuck them. Saute them in butter and garlic, and serve them with my eggs and toast in the morning instead of bacon.

[00:20:40] I have oysters and eggs and my green sauce. And that is absolutely like, to me, the best thing about oysters, the best way to eat them.

[00:20:52] **Dalia Colón:** Well, you are the Oyster Mom, so we would expect nothing less. Last question, why are you so passionate about this? Because in

addition to your own business and training other oyster farmers, you are the founding co-chair of the Florida Shellfish Aquaculture Association and a board member representing Florida on the East Coast Shellfish Aquaculture Association. So you go above and beyond. Why?

[00:21:18] **Deborah Keller:** Well, first of all, I've stepped off of both of those boards to let younger and more ambitious people be on those boards. But I did help found, um, the Shellfish Association in Florida with a man who had been doing clams and oysters down in Cedar Key. And part of that was because, it's new to Florida and when you have, you had the traditional harvesting of oysters, of wild oysters that was going on for centuries in Florida, and now all of a sudden this group of upstarts doing oyster aquaculture farming come along and it's very different. You know, they can go out and harvest a bunch of oysters and never think about oysters for the next month if they don't want to. We have to think about our oysters pretty much every day, and it's cuz we're farmers. We're not just harvesters, we're farmers. We're taking care of them, we're tumbling them, we're managing our oyster farm.

[00:22:20] There were a lot of regulations and still are, that are great for people that are just harvesting wild oysters, but they were cumbersome for us, the oyster farmers, and we're producing most of the oysters now. There's very, very little oyster tonging and harvesting of wild oysters going on in the state of Florida or anywhere in the world actually.

[00:22:44] The whole Shellfish association is to basically get representation. For aquaculture farmers, and that was a big deal. And the East Coast Shellfish Association has been around much, much longer because they've been doing oyster aquaculture up in Canada and all the way down from Maine, all the way down the coast of the United States for a long time.

[00:23:07] So they had a lot more experience in what works well and what doesn't. And every state has different set of regulations, but there's also some federal regulations. The East Coast Shellfish Association really helps us make sure that we have the right policies and protections for the consumer in place.

[00:23:27] **Dalia Colón:** Well, we appreciate everything you do. Thank you for thinking about oysters all the time when the rest of us just think about it when we have a craving. Is there anything else you want us to know about oysters?

[00:23:38] **Deborah Keller:** I want you to think about this animal as something that is really essential to our ecosystems. So not only is it a fabulous social food to eat and enjoy, but it's really important that we have these animals in our

waters, in our bays, and to continue to support the industry, the oyster, the farmed oyster. We don't feed them anything, you know, they're just eating what's out there. It's basically benefiting the habitat.

[00:24:08] They're ecosystem engineers helping the environment be cleaned up and improved. And so think about them as a product that you can eat sustainably and that a lot of people are pointing a lot of thought and hard work and money into making that oyster come back into our bays and our environment. And then also providing them for you on your table or your next.

[00:24:34] **Dalia Colón:** Well thanks mom. Isn't that what moms do? If you really think about it, they think about everything all the time. The field trip permission slip, and the laundry and the groceries, and then it looks like it was so easy. You make it look easy, but I know it isn't. So thank you so much and I appreciate your time today.

[00:24:50] **Deborah Keller:** Well, thank you and take care. Have an always tonight.

[00:24:56] **Dalia Colón:** Oyster Mom, Deborah Keller is a conservationist based in Tallahassee. She shared her recipe for green tomatillo sauce, which she says goes great with oysters. You can find it on our website, thezestpodcast.com. I'm Dalia Colon. I produce The Zest with Andrew Lucas.

[00:25:14] We get help from Chandler Balkcom, Hana Abdel Magid , John Vargas and Marc Haze. The Zest is a production of WUSF Public Media. Copyright 2022.