**Pam Ferris-Olson** (00:00): Today on the Women Mind the Water Podcast, I am speaking with Cathy Sakas. Cathy is a multifaceted, talented storyteller. She's worked as a natural history interpreter, a documentary filmmaker, an author, and much more. Cathy's driven by a passion for and a commitment to exploring and sharing the wonders of the ocean. The Women Mind the Water Artivist Series engages artists in conversation about their work and explores her connection with the ocean. Through their stories, Women Mind the Water hopes to inspire and encourage action to protect the ocean and her creatures. I am pleased today to welcome **Cathy Sakas** to the Women Mind the Water Podcast series.

**Pam Ferris-Olson** (00:44): Of all the guests I have spoken with, and I have spoken to many accomplished women, Cathy's achievements shine greatly. Among them are an Emmy for her five part documentary, Coastal Naturalist and her license to navigate a one person submersible. If those weren't cool enough, she's the only person I know who spent nine days living underwater. Cathy said of the experience, "It's the closest I've ever come to being a fish." Welcome, Cathy. I am pleased you accepted my invitation to be on the Woman Mind the Water Podcast. You've done so many amazing things and I'm sure I could talk to you for days and not really scratch the surface of your adventures. Cathy, my first question is directed to your work as an interpretive naturalist. I think it would be helpful if you describe for the audience, what an interpretive naturalist does.

**Cathy Sakas** (01:43): Well, Pam, thank you, first of all, for inviting me to be a part of your podcast. You've had quite a long list of very fabulous women. So I'm proud to be a part of this august group.

**Pam Ferris-Olson** (01:58): Thank you.

**Cathy Sakas** (02:02): I am what is referred to or what is termed a professional interpretive naturalist. And so, a naturalist, just to be clear, is anybody who observes nature. That's the very simple term. A professional interpretive naturalist has the background, the experience and the degrees, some would say, to go with the professionalism. So my job and what I enjoy doing and still doing, is taking people into wilderness areas and helping them make the connection. So not only can I identify most of the beasts and the plant life, the floor, and the fauna in a specific area.

**Pam Ferris-Olson** (02:51): Well, let's explore your documentary work. How did the idea for the documentary series, Coastal Naturalists, come to you and how did you come to be the writer, host and narrator for the show?

**Cathy Sakas** (03:04): So I realized that I wanted to communicate to a broader audience. And so I had been taking people into wilderness areas, talking to smaller groups of people about the ecosystems in the Southeast and in particular, the Georgia coast. And I thought, "If I went on television, I could reach a much broader audience." So, I thought about it. And I had one connection that I knew at Georgia Public Television. So I called upon her and I said, "Can you at least get me the name of the person I need to contact?" And she said, "Yes." So I called that person, his name was Bill Marshall, I believe, it was a long time ago. And I said, "This is what I want to do." I told him, "I wanted to do a five part series on the habitats of coastal Georgia." And he goes, "Okay, what you got?"

**Cathy Sakas** (04:04): And so I briefly explained what I wanted and he goes, "Okay, come on up. Come on up to Atlanta and let's chat." So I did. And when I walked into his office, we ended up talking for about two hours. And at the end of those two hours, he said, "Okay, I'm going to give you a chance and I'm going to send a cameraman down to you on the coast. And all I want you to do is to talk on camera through any habitat of your choice. Just talk, for however many minutes you want." And he said, "And we'll cut the pilot and we'll see where you go with this."

**Cathy Sakas** (04:44): But he said, I'll never forget this. He said, "You sound like you know what you're talking about? You're not a white-haired old man. You're a relatively, you're okay looking, young lady, and you are already talking money." As in, I had already figured out how I would raise the money to do this show. Now, what I understood was that all I had to do was raise one third of what was needed to make this production and that Georgia Public Television would supply the other two thirds, and back then, television was relatively cheap.

**Pam Ferris-Olson** (05:28): So with an Emmy to demonstrate the value of your work, how is it that you didn't focus all your future endeavors on making documentaries?

**Cathy Sakas** (05:37): So, making documentaries is expensive and you have to have good funding behind you. So I worked on another, I actually had two more nature series in mind and I was able to get one more nature series done before the bottom fell out of state funding.

**Pam Ferris-Olson** (06:01): So tell me about the documentary shifting baselines. What led you to interview eight Georgian, multi-generational commercial fishing families?

**Cathy Sakas** (06:10): Yeah, so I was working with, at that time, I was still employed by Noah Grace Reef National Marine Sanctuary. I was their education coordinator. But, I had many documentaries under my belt at that point. And so I became aware of this program called Voices of the Bay or something, I can't remember what now. But anyway, it was an oral history project that was put on by Noah Fisheries. And so I got a grant. I was awarded a grant so that I could record these voices. And you can imagine, fishermen have kind of a lingo of their own, but you can imagine, a deep Southern, coastal Georgia accent is really quite interesting. Some of them were so thick that I actually had to make subtitles so that people could understand what they were saying.

**Cathy Sakas** (07:09): So the deal was is that we didn't have anybody from Georgia represented in this archive. So I found eight, multi-generational fishing families that were willing to talk to me on camera. And it was such a rich experience, that by the time we were through, my cameraman, who I had met, I had recruited him from a local television station and his name is Mehmet Shaglay and he's from Istanbul, Turkey. He went to school here in coastal Georgia, Georgia Southern.

**Cathy Sakas** (07:48): And by the time we were through with all the interviews, he said, "We have a documentary here." And I said, "I think you're right." And I said, "How much money do I need to raise?" And so he told me, and so I wrote several grants and I got them and we made the documentary and it was broadcast on Georgia Public Television in November of 2019. And now it's just free to anybody who wants to download it. That was the final grant I wrote was with Georgia Sea Grant. And that was their stipulation that it is free to anybody who wants to use it for educational purposes.

**Cathy Sakas** (08:31): What I wanted to do with this documentary was to find out what the shift in what a good day's catch was. And it was fascinating to me because when you interview grandpa, grandpa said, "Well, a good day's catch to me was four hours of shrimping. I could catch 1,000 pounds on two nets." Well, by the time son came along, it was more like, "Well, we could catch 1,000 pounds in about a week off of three nets." And by the time grandson came around and inherited the business, it was four nets, sometimes five nets, but it might take several weeks to catch 1,000 pounds. So you see the shift.

**Cathy Sakas** (09:15): But the interesting thing was, is that they didn't talk about that within the family. So it was quite a surprise to them to realize that grandpa took very little effort to get 1,000 pounds. It took more effort for Papa, but it took a lot more effort for son, grandson to pull in same amount of shrimp. And that was the point of the shift in baseline, the shift within the family, that they didn't even realize that it took a lot more effort to get to that 1,000 pound mark.

**Pam Ferris-Olson** (09:48): So much of your work is tied to Georgia, and more recently, to the Gray's Reef National Marine Sanctuary. What is a marine sanctuary?

**Cathy Sakas** (09:57): So there was a petition to then president, Jimmy Carter, who was from Georgia, and on his way out of office, one of our prominent socialites in Atlanta, Jane Hurt Yarn, God bless you Jane, decided that she would personally make it her mission to get Gray's Reef designated as a national Marine sanctuary. So she literally by phone, walked the papers from desk to desk to desk, until it landed on Jimmy's desk. He signed it, boom, we have January 16th, 1981, Sapelo Live Bottom officially becomes Noah Gray's Reef National Marine Sanctuary.

**Pam Ferris-Olson** (10:44): What's special about the Gray's Reef?

**Cathy Sakas** (10:48): So Gray's Reef was named for the researcher from the University of Georgia, who sampled, collected the samples from the Sapelo Live Bottom and created this amazing collection of the invertebrates that were collected off of that live bottom. And so Gray's Reef is one of many similar habitats off the coast of Georgia and not just Georgia, but northern Florida, South Carolina, and even North Carolina. These are what we call, locals would call it a hard ground, live bottom. Scientists will call it a calcidic sandstone reef. So, the reef is not a coral reef, building reef. There are maybe four species of hard corals, but it's on a calcidic sandstone ledges, and then that's carpeted by encrusting sponges and soft corals. And then from that, you get this whole layer, mini layering of fish invertebrates that go up the water column. So it's quite astounding to say-

**Pam Ferris-Olson** (12:07): So it's a very rich area.

**Cathy Sakas** (12:08): Very rich.

**Pam Ferris-Olson** (12:09): I really have to ask you about your adventure as an aquanaut. Is it as simple as taking an elevator into a building that's cited underwater or is it like getting into a submarine that's parked on the bottom?

**Cathy Sakas** (12:27): It's like working in and out of a submarine that's parked on the bottom of the ocean. And so our submarine was stationary. It didn't go anywhere. We went. So by staying underwater out of this habitat, I was able to dive and my colleagues, my partners, we were all able to dive up to eight hours a day and we were diving to 130 feet for eight hours a day.

**Pam Ferris-Olson** (12:57): What was it like living underwater for that long?

**Cathy Sakas** (13:01): I stayed cold most of the time. And fortunately, a colleague of mine who had done this before, knew that I freeze and that I'm a very Southern, thin blooded. And he said, "You're going to be so cold." He said, "Just take fleece. I know it's going to be September, and the water's going to be warm, but just take fleece, because you're not going to ever come out of that fleece." And he was right, I never did come out of that fleece. So what was fascinating to me was I saw so many things that I would never have been able to see just diving. Well, one night there was such a storm at the surface and you really don't know what's going on at the surface, because you can't see it. But I happened to be looking out the porthole over my feet, just as a lightning bolt, hit the water.

**Cathy Sakas** (13:57): And I was like, "What the heck is that?" I thought it was an electrical short in the system somewhere. But then I realized what I was watching was a lightning bolt coming through the water column. So it went just slow enough that I was able to look out the porthole and down to the sand. And as it hit the sand, it spread out like tentacles. But the blue was almost as blue as your turtleneck. It was just that electric blue. It was the most beautiful thing I'd ever seen. Now, had I been in the water, I might not have survived to tell the tale. But I was there to observe it. That was the most fascinating thing I'd ever seen.

**Pam Ferris-Olson** (14:36): I think it's so fascinating that we see astronauts and their view from space, but we don't see anybody who spent time underwater and what it's like to be underwater. So this is fascinating. You need to make a documentary about this.

**Cathy Sakas** (14:53): Well, it'll probably come out as a book at some point. But the other fascinating thing to me was the change in one day it would be crystal clear and then another day it would be just like pea soup. And when it was pea soup, all of the fish would just, big fish, big Atlantic spade fish would use me, use us divers, as kind of barriers and then the Barracuda would come in and you're going, "No, don't use me as your hidey hole to hide behind."

**Pam Ferris-Olson** (15:31): So most recently, you've taken on some writing projects. So tell me about your book with the intriguing title, the Adventures of Leslie Binnacle, the Barnacle.

**Cathy Sakas** (15:42): Yeah. So I am a sailor too or have been in the past. So I wanted to convey the adventure of sailing, but I didn't want to do it as a first person narrative. I wanted to do it from a different perspective. So I decided that, what better way to do it than through the voice of an acorn barnacle and the prescient aspect of it was acorn barnacles are hermaphroditic. So, now we've got a lot of gender...

**Pam Ferris-Olson** (16:21): Fluidity.

**Cathy Sakas** (16:22): Yeah, there you go. That's a great word, fluidity. And so here we have in nature, this has been all along. We have hermaphroditic animals. So I used all the names that I used to give the barnacle's names, non-gender specific, there like Taylor, Leslie, I know men and women named both of those names.

**Cathy Sakas** (16:48): So this little barnacle goes through all the stages of life, nauplius, the different larval stages of her species. And then she finally attaches and it's like, "Where am I going to attach? Am I going to attach to a big ship? Am I going to attach to a whale? Am I going to attach to a turtle?" Well, she decides to attach to a small sailboat. And that sailboat goes from Savannah, Georgia all the way down through the Caribbean, through the Panama Canal, and then up Baja finally to San Francisco. But all along the way, she has adventures because she's talking to other barnacles on the back of a humpback whale, on the back of a loggerhead sea turtle, attached to another ship. So she's getting all this information about everybody's adventures and all through-

**Pam Ferris-Olson** (17:48): I love it.

**Cathy Sakas** (17:49): All through the book is ocean stewardship.

**Pam Ferris-Olson** (17:53): Very nice. I'm going to have to find that one too. So I've been asking guests at the end of every podcast to offer some ideas to suggest ways that people can make a positive difference when it comes to the ocean. What are your thought?

**Cathy Sakas** (18:08): My thoughts are reduce the use of plastic. One of the biggest things that we see out in the ocean is plastic. And if you can stop using... And most of what I've collected, has not really been the big pieces. What was frightening to me, was I was asked to sample for the globules of oil that were coming up from the Deep Water Horizon in 2010. I never found any oil globules and the water column looked crystal clear, but when I pulled up those really fine mesh nets was they were packed, very solid, I'm using my fingers to illustrate about a three inch by three inch cylinder that was packed with the teeniest, tiniest little particles of plastic. And those would be the sheet plastic and the sheet plastic is what one used plastic bags come from. So plastic never goes away.

**Cathy Sakas** (19:14): It just keeps getting smaller and smaller and smaller. So you don't see it. That's a real issue. So, one of the things, reuse reusable totes to go get your groceries, eliminate plastic from your life, if you can, or at least reduce it. And some people say, "Well, if you refuse a straw, does that really make a difference?" Well, yeah it does. A, it reminds you that you don't want to use plastic and B, when you say that, "I don't want to straw," you're actually teaching whether you believe it or not, because people will hear you say that, you say that to the wait person, wait staff. So you're teaching as you do that.

**Pam Ferris-Olson** (20:00): Thank you, Cathy. Well, I'm sincerely grateful to you for taking the time to talk with me, for the Women Mind the Water Podcast. It is inspiring to talk with someone who has worked so tirelessly on behalf of the ocean. I'd like to remind listeners that I have been speaking with **Cathy Sakas** for the Women Mind the Waters Podcast Series. This series can be viewed on womenmindthewater.com. An audio only version of this podcast is available on the Women Mind the Water website on iTunes and also on Spotify, Stitcher, and Google Podcasts. Women Mind the Water is grateful to Jane Rice for this song, Women of Water. All rights for the Women Mind the Water name and logo belong to Pam Ferris Olson. This is Pam Ferris Olson.