

Ocean Gazing: Episode 32

A Cook at sea

Teacher at Sea

<begin music>

Ari: This is Ocean Gazing, the podcast where we transform the ocean into an underwater theater, and pull up front-row seats. I'm Ari Daniel Shapiro. Okay, guess which of the 50 states this is.

Cook: *We have lots of rice fields. It's also the world headquarters for duck hunting, international headquarters for Walmart, we're number one in chicken production. I think we're the only state in the union that has a diamond mine.*

Ari: Answer? Arkansas. Mary Cook teaches seventh and eighth grade science at Ahlf Junior High School in Searcy, Arkansas, about an hour, hour-and-a-half outside Little Rock.

Cook: *Arkansas used to be called the land of opportunity because of all these opportunities: the chickens, the rice, the diamonds. But I think it's still the land of opportunity.*

Ari: Her students think so too. Listen to Mary Cook's story, and you'll see why. Stay tuned.

<fade up music to full>

Ari: *Most of the people that are interviewed come from the coasts. So I'm wondering: how did someone like you, from Arkansas, get engaged in ocean science?*

Cook: *Okay, I've been teaching Earth Science for about 25 years. I've always found it difficult to teach my students - who most of them are around 13 years old - about the ocean because most of them have not been to the ocean. And so I've always been looking for ways to make it more personable.*

Ari: Mary Cook came across a program called Teacher at Sea. It's run by NOAA - the National Oceanic and Atmospheric Administration. And it gives teachers - from kindergarten teachers to college-level teachers - the chance to board a NOAA research cruise and work side-by-side with scientists and crew to learn about and help do the science. Cook read through the different cruises that were available.

Cook: *There was one particular voyage that was going to be looking at climate and climate change and gathering data and deploying buoys on tsunamis. And those were things that I teach. And so I just thought, "Okay, I'll apply for it. Maybe they'll pick me, maybe they won't."*

Ari: They did pick her and just like that - Cook's dream gave way to the reality of getting ready to go to sea for 3 weeks far off the coast of Chile. The chief scientist for the cruise was going to be Bob Weller, a physical oceanographer from the Woods Hole

Oceanographic Institution. Cook got her principal's approval to participate. She found a substitute teacher. But all this turned out to be the easy part.

Cook: Before I left, I was really, really worried. I knew I would love the science. I mean I didn't worry about that. I was worried that I would be on that ship, and want to get off. I began to view it kind of like a prison. But I'm kind of a person that if I'm afraid of something, then I'm just gonna go ahead and make myself go through with it because I want to conquer that. But it didn't take long after I was on the ship and we were out to sea to realize that I never, ever felt like it was a prison at all. When you can't see any land for three weeks, it's kind of liberating to just look at sky and water.

Ari: And every day, Cook wrote a blog with stories and pictures for her students. She told them about how the science team was studying the Earth's climate by using buoys and drifters and probes to measure the ocean and the atmosphere. Her students emailed her back. And Cook was sure to let them know when the buoy they'd adopted as a class was released into the ocean to track the temperature and pressure of a particular current. It was this buoy more than anything else that caused her students' interest to skyrocket.

Cook: They signed these stickers, and then I took the stickers with me. And when I got to the ship and to the little buoy, I put all their stickers on. Then I took pictures, and I posted them on the Internet. The interest in ocean currents quadrupled among my students because of that. And so they knew: that was their adopted buoy.

Ari: I was reading your reflections on your Teacher at Sea experience, and at one point you say that even though the Teacher at Sea cruise took place a few years ago, it continues to be THE potent force in my approach to teaching my students about oceanic and atmospheric sciences today. I'm just wondering, why?

Cook: Because it's so personal. And I think if you can make it more personal for the teacher and the students, they're going to remember it. I've talked to those students that I had five years ago. And one of them, I saw him a couple of weeks ago. And he was talking about his graduation night. He wore his NOAA pin on his graduation gown. So to me, it made a great impact on them. It's so personal to me, and I learned so much. I mean, I had read about research but now I know about it. And I've participated in it.

Ari: <hallway sounds; bell ringing> At Ahlf Junior High, Cook's current students agree. Brett Blasco is one. He's in the eighth grade. Before moving to Arkansas, he grew up on the ocean in Washington state.

Blasco: I enjoy the ocean. In the summer, cause my dad lives in California so we go to the ocean, swim.

Ari: So does the fact that Miss Cook went on this trip, and was one of the first teachers ever to go out to sea, does that make her kind of extra cool?

Blasco: Yeah, I think it helps because it shows that she's been there. She knows what it's like. It's more interesting to look at and get more into.

Ari: Emily Rollins is also in the eighth grade. She's from Searcy, Arkansas, but Rollins has gotten to see the ocean on vacation in Mexico. Studying the ocean is her favorite part of science class.

Rollins: Yeah.

Ari: Why do you say it's your favorite subject?

Rollins: Because I've always liked, you know, being near water and around the ocean. I think it's very interesting how, you know, the ocean affects our climate.

Ari: Do you actually see that in Arkansas?

Rollins: Yes, because when Louisiana has its hurricane season, we kind of get sort of the aftermath: what was leftover from that up here. But mostly it comes in real heavy rains or tornadoes. Even though Arkansas isn't touching the ocean anywhere, it still affects us.

Ari: You think you wanna do something with the oceans in the future?

Rollins: Well, the thing I would like to learn to do with the ocean is to learn about the marine life that lives there. And I thought that would be a good option for the future.

Ari: So if you could have one wish about the ocean, what would that be?

Rollins: If I could constantly live there forever cause I love being there. It's kinda like being surrounded by a whole different world.

Ari: The beauty of the Teacher at Sea program is it lets the students in a classroom touch that different world. Help them feel connected to the ocean in a way that's lasting and meaningful. The program's been around since 1990, and more than 500 teachers from across the country have participated. If Mary Cook's experience is any indication, it can really lead to a...sea change in how teachers and students alike relate to the ocean.

Cook: Right, cause it opened a lot of doors in that respect for me. So now when I'm looking for lessons, it means something to me when I see it. And I can also turn around and explain that to my students.

Ari: Now that you've been on the sea and have actually gotten to know the ocean in a very intimate way, I'm wondering if you can describe what your relationship is with the ocean, you know, personally?

Cook: Some of my impressions of the ocean was how big it was. I was just overwhelmed at its depth. Something I do remember is thinking that the ocean felt like it was breathing cause it has this constant swaying or moving. It was kind of a comforting feeling. Instead of being afraid, I felt comforted by it

Ari: <fade up "Oh, Arkansas"> This was last week's sonic stumper. It's Arkansas' state song, called "Oh, Arkansas." <hear a few lyrics: "It's the spirit of the river and the spirit of the lakes. It's the spirit that's in each and every home..."> Maybe they should add just one more line. It's the spirit of the ocean. <fade back up lyrics: "It's the spirit of tomorrow and today. Oh, Arkansas. Oh, Arkansas. Arkansas, USA. fade down>

Here's our new sonic stumper. <fade up sonic stumper> Okay, what we're listening to is a type of recreational activity. Can you name what it is?

Sail over to our website, oceangazing.org, to see photos of Mary Cook at sea and of her students. You can also find a link to a beautiful children's book that Cook co-authored about her voyage on the high seas. Let her know what you think of her Teacher at Sea trip by posting a message on our blog! Oceangazing.org.

Special thanks to Patricia White, and to Jacki Romey, Matt Price, and Blake Gladden at Searcy High School who recorded the Arkansas audio. Ocean Gazing gets financial support from the National Science Foundation. This podcast is a product of COSEE.

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