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Julie Kuchepatov [00:00:03] Three generations hit the road to explore key seafood producing regions across the U.S. and hear from people working at the intersections of fisheries, aquaculture, seafood, and conservation while grappling with the effects of the global climate crisis. We may represent three generations, but we have a lot in common, namely a love of seafood and a dedication to contribute to the community driven generational effort and movement towards climate justice.

Cameron Moore [00:00:37] The results of these travels? Welcome to In Hot Water, the Climate and Seafood Podcast series. Join us.

Julie Kuchepatov [00:00:42] Julie Kuchepatov, Gen X.

Crystal Sanders-Alvarado [00:00:44] Crystal Sanders-Alvarado, Xennial.

Cameron Moore [00:00:44] And Cameron Moore, Gen Z, as we travel the country and chat with people who share the challenges facing their regions and their personal stories. Along the way, we experience the moments that make us ask "what the fish?" as we try to understand why we are in hot water and what we can do about it.

Crystal Sanders-Alvarado [00:01:01] We started the series in the Lone Star State, Texas, with a visit to the Coastal Bend along the Gulf of Mexico. One of the most important offshore petroleum production regions in the world, making up one sixth of the United States total production and a critically important source of seafood, supplying more than 40% of the U.S. domestic seafood. And the second series, we traveled to Maine, where we crisscrossed the state, starting with the bustling hub of Portland, making our way Downeast and ending with a visit to the Passamaquoddy tribal lands. Fishing in the Gulf of Maine generates nearly $4 billion annually and supports up to 100,000 jobs. And also there's a growing aquaculture sector. Maine's identity is intricately tied to the lobster fishery and with the Gulf of Maine warming faster than 99% of the ocean, this way of life is in jeopardy.

Julie Kuchepatov [00:01:46] In addition to NIMBYism, or Not in My Backyardism, there are other threats to working waterfronts. Namely, if fisheries decline, what else can be done to keep working waterfronts, well, working? Here's Susie Arnold from the Island Institute.

Susie Arnold [00:02:01] One of the major threats that is impacting working waterfronts would be the lack of diversity in fisheries. And so, as the lobster industry begins to decline going forward, what are those working waterfronts going to be used for? And so, coming up with other ways to make a living off of the water that can enable these working waterfronts to remain working waterfronts. So, there's been some policy efforts to address the loss of working waterfront that are already in the state. Land of, Land for Maine's Future in Maine enables people who own working waterfronts to essentially put a covenant on it so that it has to be preserved as working waterfront in the future. So, that's been a really effective policy mechanism to preserve working waterfronts. You mentioned, you know, people are coming into the state and buying up waterfront property and transitioning working waterfront to non-working waterfront. And once that happens, it's difficult to transition back to working waterfront. So that's not really sure what the solution to that is other than to keep fisheries profitable so that families can continue to pay the property taxes on their now really expensive waterfront property which has been handed down and

been able to have been afforded by previous generations, is now a real financial strain. yeah.

Julie Kuchepatov [00:03:27] Yeah. Another problem that we haven't talked about.

Susie Arnold [00:03:30] There's also now, you know, flooding is, is more common and so it's like flood insurance is now an added stress. If you're going to be buying a property and getting a mortgage, you might be required to have flood insurance. And so, there's definitely some financial strains. And then like, if a family's phasing out of fishing and they own a wharf and they don't have anyone to operate that wharf, it might make financial sense for that family to sell it to someone who then develops it into a second home or and then it's no longer, there's no longer access to the water.

Julie Kuchepatov [00:04:05] Here's Jaclyn from Maine Sea Grant.

Jaclyn Robidoux [00:04:08] That's definitely something that is top of mind, I think, for folks right now, especially as people are building or thinking about building new businesses and farming or the fisheries infrastructure that does exist needs protecting and updating, especially in the face of things like climate change. So, it is definitely something that's top of mind for folks. We see it a lot with seaweed because it's a heavy product that does require significant infrastructure to deal with honestly. And so, those, the places where people can even land kelp can be pretty limited. And that's a conversation that I end up having with folks a lot like, oh, you want to start a kelp farm? How are you getting it all out of the water? and with what working waterfront infrastructure.

Julie Kuchepatov [00:04:55] And so why is that an issue? Why is there limited places where they can offload?

Jaclyn Robidoux [00:05:00] I mean, I think a lot of it has to do with just general gentrification on the coast of Maine. There's, there are some specific things to fisheries like the warming temperatures and stuff like that but one of the biggest pressures in Maine right now is the gentrification and development pressure that we see along the coast. People want to live here, and they want to have summer homes on the coast of Maine. And honestly, it's tough to blame them because it's a beautiful place but in a lot of cases that does push out the other waterfront-adjacent uses, like working waterfronts.

Julie Kuchepatov [00:05:34] Because they buy up the property and then or they complain or all of the above.

Jaclyn Robidoux [00:05:39] All of the above. You know, it's coastal property in Maine, especially in certain areas, can be really expensive to purchase and in some cases fishing cooperatives or these marine businesses don't have or might not have the ability to purchase that property where a coastal developer does, and obviously different towns operate differently. Again, Maine is very town and community-based and so it will see towns that really support working waterfronts, make efforts to keep them and then other places. It's a lot easier to lose that.

Julie Kuchepatov [00:06:18] Here's Libby from Lady Shuckers.

Libby Davis [00:06:21] The transition away from Mainers being able to purchase property in our state, real estate market, has been incredibly affected from Covid and in Maine especially, I mean, we're Vacationland here. And so much so that someone like me, who's

a 31-year-old entrepreneur that started their own business, I could never afford a house in Portland, let alone my home town or any of the adjacent towns nearby. And it's sad. So, I think with that change, we see a decrease in people, you know, understanding the importance of working waterfronts.

Cameron Moore [00:07:00] What the fish? Let's dive deeper into gentrification because it's mentioned a lot in the series. So, I think when we were in Maine, we were thinking what the fish, you know, what is gentrification and how does it sort of relate to all of these white individuals saying, oh, the housing industry, the land, the waterfront is all being gentrified? Because for me, in that context, I have only heard it tied to communities of color when like wealthier neighborhoods and other things start to come in. And so, in preparation for this call, I was looking at sort of the definitions and one of the definitions I came across that I actually liked came from the National Geographic, their encyclopedia entry, and the way that they defined it as gentrification is a clash between the power of private capital and government policy and the power of people in targeted communities to preserve their homes and heritage. Gentrification is a demographic and economic shift that displaces established working-class communities and communities of color, specifically communities of color, in favor of wealthier newcomers and real estate development companies. Heavy private investment and targeted neighborhoods causes prices to rise sharply, and amenities enjoyed by the new residents, such as more expensive shopping and dining drive out businesses that were supported by the established community. And I think, you know, this also, we're talking about access and Julie, you were talking about the Passamaquoddy people and who in Maine, who like when we're talking about access to this land and whose land is it, we need to recognize that while some of these working class waterfront people are being pushed out from the waterfront, like there was never an acknowledgment of whose land it is like to begin with. And so that's just what was on my mind in terms of like talking about this gentrification. We really need to be talking about whose land is it? And also, I think really talking about what Indigenous people are experiencing on their land.

Julie Kuchepatov [00:09:27] Like who was pushed out first.

Crystal Sanders-Alvarado [00:09:29] Yeah. And I think it's the context of colonization, right? It's native land and through colonization they were pushed out, right? They were through genocide and the land taken over. And Portland, Maine's population remains to be 85% white, right? And so, in this definition, right, it's definitely like centering of class, but we can't separate class and race, you know, and gentrification is the extend, the modern extension of colonization, right? And so so like colonizers claiming to be colonized when you know, when we look at it in that way, right, it's, it's like, yes, we have the class struggle of lower income, white fishers who are in the seafood industry. That's very real. And that's still, there's still an inherent level of privilege within that because those same people have pushed out and excluded and eliminated people of color very specifically and relegated them to lower paying jobs in the fishing industry. There's lack of access to boat ownership, right? All the things like to land, all the things that are needed in to have a fishing business or an aquaculture business. So, I think, yeah, to me, when I hear white people saying that they're being gentrified, I'm just like, No, you're not, because you can't. You are the gentrifiers.

Cameron Moore [00:10:58] Yeah. I think also the interesting thing when talking about access, it just reminds me of the conversation we were had with Plansowes and that man that we came across that was getting clams from the beach and he was talking about how difficult it is to farm and harvest the land because he doesn't have access to, you know,

his, his land, right? Because of the way that the licensing process works. I don't know if we were able to gather any of that audio, but it would be really cool to insert that. But basically, like. he is on his land and where the really good harvesting is, is he doesn't have access to it because of the price of, the price of the permit and also that land, he doesn't no longer has access to it because he doesn't live in that area so then he can't. He needs to be getting on to a lottery system to be able to get access to it.

Crystal Sanders-Alvarado [00:12:11] Well, I think they weren't, they're just excluded from any of that. They cannot get a permit, yes, through the reservation system, right? Like. that is the land that they're allotted, and they aren't allowed to fish or harvest anywhere else. Even though this, the entirety of Maine is native land, they are then relegated to only that land, and it's not the prime spot for harvesting and that they can't even get licenses to join the fishery outside of that, right? So, it's just like complete exclusion from, from the resource itself, you know, quote unquote resource from the fishery, than any economic benefits from it.

Cameron Moore [00:13:00] Yeah, the whole access piece is just, it's quite terrifying and disgusting that this is what's happening of like the four Maine Indigenous tribes, the Maliseet, the Micmac, Penobscot, and Passamaquoddy and the Passamaquoddy people specifically, like, it's not even just about access to the harvesting, but we were talking to Plansowes also about access to fresh and clean water, you know, like that was a huge thing, is like imagine if those were wealthy, affluent, white people, you know, there would definitely be fresh, safe, clean water to drink, of course because. Yeah. And here, like throughout the pandemic, they had no access to clean water. There was needing to be delivery services and like it is about access to their land, but it's also about access to just a healthy, safe lifestyle, you know, life. Period.

Crystal Sanders-Alvarado [00:14:01] Access to clean water and drinking water, because this is something that is true not only for the indigenous people in that area and the Passamaquoddy tribe, it's true across the country for reservations, right. It's a very concerted exclusion of fresh water and access to these things. So, there's a project called the Navajo Water Project, and they work across New Mexico, Utah, and Arizona because 30% of Navajo families don't have access to running water, don't have a sink or a toilet in 2024, you know, and layer on top of this like access in Black communities to water. Flint, Michigan, right. Little Miss Flint has been fighting for trying to get clean water to Flint, Michigan, since Obama, right and was in office, at least for I'm forgetting the exact dates. But and Flint, still to this day in 2024, doesn't have clean water. And to your point, Cameron, like if these were more white families, not even if they were just wealthy, if they were middle class even, you know, it would be something that was solved immediately. And I think where access to clean water ties in to like marine conservation and sustainable seafood and how this all plays out is right. If you, like if we look at the health of the oceans and plastic pollution, for instance, and we've spent all this time previously and I'm guilty of previously being this evangelist in many forms and I've thankfully feel like I've reformed myself and continue to try to reform myself. But if we're saying, you know, like, don't use single use plastics, you know, make sure that you're reduce, reuse, and recycle and all of these like kind of what to me become these like tropes of environmentalism, but we're not considering all of these things, right? Like a story that really, like transformed me and another friend that I know, she was doing environmental education here in the Salinas Valley in California, which is near and around Monterey. It's a huge agricultural area and doing education in and around single use, plastics and plastic pollution and had school kids come in and say like, well, we don't have water to wash dishes, so we have to use plastic utensils. That just floored her and, you know, me and that was this. And it just like,

yeah, we are not considering these things and we're just catering and pandering our quote unquote environmental conservation and our sustainability efforts to certain classes of people based on their income, pretending that that's going to be what changes things when we know through revolutionary and efforts in time immemorial, it's not that class of people, right? It's like working class people. And so, if we're not holding this frame and this idea and this class consciousness in and around any of our efforts, we aren't actually looking to solve a problem. We're actually looking to maintain the status quo for the people who have access via their level of class privilege.

Julie Kuchepatov [00:17:26] Later in the series, we'll hear from Plansowes Dana of the Passamaquoddy tribe in northern Maine, who is referenced above. Fisheries and working waterfronts have cultural values. Kanae Tokunaga from the Gulf of Maine Research Institute, or GMRI, tells us about a project she undertook to identify these cultural values.

Kanae Tokunaga [00:17:45] Yeah, the cultural values. So just kind of taking a step back. The ecosystem services and biodiversity. The way we measured or valued the natural environment has been really informed by biology and economics historically. And when it comes to cultural value, what we capture through that kind of conventional framework was really limited. So, you might have, you know, what's the value of the coastal ecosystem in terms of cultural value. Conventionally, we were only measuring things such as recreational values, you know, the value of beach going, recreational activities, other things, maybe just the value of the homes that houses on the coastal, you know, if you have the ocean view, the house is valued higher. Therefore, the ocean view is valued at certain amount of money. And now with that way of measuring cultural value is really limited and it doesn't quite capture the value of, say, fishing, livelihood, hope, for instance.

Julie Kuchepatov [00:19:00] So, how should we measure cultural value?

Kanae Tokunaga [00:19:03] So, the cultural value that we measured through that kind of conventional frameworks really was really limited. So, we were only measuring things such as, you know, the beach going. So, the recreational value, you know, what's the value of going to the beach for recreational birdwatching or can be, you know, measuring the value of ocean view through housing prices. And that's really limited. And when it comes to the value of fisheries, we've only been capturing the fish value as the value of resource. But when you think about the value of fishing livelihood, that is more than just the revenue gain from harvesting the fish. What, how do we value the sense of identity as a fisherman and a sense of identity, not just for the fishermen, but for the fishing communities, right? What is the value of the fisheries or fishing community in the sense of identity for the community? Those things were not really well captured so recent, in the past several years, social scientists started critiquing the conventional way of measuring the ecosystem services. And it best that I mentioned earlier, the scientists who are valuing, kind of rethinking about the ways that we value the nature, they introduced the concept called relational value. So, it's more kind of a holistic way of understanding the value, the cultural value of ecosystem. It's really what we need to be kind of paying attention to is the relationship that humans have with the nature and the relationships that humans have with other people. So, people to nature relationship and people to people relationship. And you need to really start thinking more holistically about the value of ecosystem. And that also applies to things such as working waterfront. What's the cultural value of working waterfront? It's not just the revenue from the fishing activities with the revenues that the processors produced need to think about the role of working waterfront in the community. So, places such as Portland, Maine, we value the identity, right, of having worked the waterfront and then that's really important for many people. Even though you might not be from the fishing family, it's kind

of cool to have worked on the waterfront and those things certainly has value and then those things without kind of paying attention to those things, you know, policies might direct us to only kind of account for economic monetary gain, by missing important, and then that can lead to a loss of important cultural values.

Julie Kuchepatov [00:22:24] Access to working waterfronts is critical even to the very health of harvesters.

Tora Johnson [00:22:29] There are some other things too, with especially with gentrification, access to the shoreline, is affecting harvesters' health, so they're having to carry their catch further. They're having to access flats using boats. And we heard about people who we did have a fatality in the last couple of years here Down East of a harvester, whose boat got swamped when they were trying to get around to access a mudflat and we have some of the lobster harvesters and the clam harvesters have to drive a long way to sell their catch. So there, there's sort of policy and land use, like there's a whole bunch of other factors that, you know, somebody who moves to Maine from away like, it's beautiful. And I now have this wonderful little coastal property, but I'm not going to let those skeezy clammers come across my property and, all of a sudden, one of them's dead. I study health and wellbeing among shellfish harvesters just lately. So, we've been over the years, you know, we take we take issues that the harvesters are facing and find money to address them. And so just lately we've been looking at how folks in both the clam and the lobster fishery are getting injured and how that leads then to a whole bunch of challenges, including substance use disorder and often, way too often, opioid deaths, overdose deaths, but only lobster and not clams because, you know, and also not Down East, right? So, some of the occupational health folks that we talked to were like, well, come down here and study this. And they're like, Well, literally it's too far. So, I guess I'm a public health researcher now, right? Like, that's how we have to roll. Like there's just no attention and no one was looking at shellfish. We're, and in our study we discovered that shellfish harvesters have a greatly increased risk of not only of injury, but it looks like and this is, you know, we have more work to do on this, but it looks like some of the other consequences of injury are more common among the shellfish harvesters than they are among the lobster fishermen and there may be lots of different reasons for that.

Julie Kuchepatov [00:24:48] What do you mean, consequences of it?

Tora Johnson [00:24:50] So, yeah, so, you know, we've been hearing from harvesters a lot that it was widely known that harvesters who get injured very often don't get the care that they need and end up self-medicating, you know, at first with prescription drugs and then later with illicit drugs. And many of them become addicted, many of them, end out in jail or, you know, destroyed lives, right. So, losing spouses and homes and all that. And then far, far too many are dying of overdose. In our study, we discovered that the folks who end out in substance use disorder and overdose situations are actually the tip of an iceberg, that almost everyone is self-medicating in some way and almost everyone gets injured every year in some way. And so, we have a much bigger problem in the fishery and people defer care like they just aren't seeking the care or getting the care that they need. And even when they're getting insurance, often they're not even getting health insurance until they're already in the criminal justice system or they're already, their income is so low that they qualify for Medicaid or they're, they can't work at all anymore and they're on disability, right? That's when they get insurance. You know, nobody's intervening upstream and helping them deal with it. So we were able to use our methods of and sort of leverage the trust and sort of regarded as honest brokers in the fishery because of all the work that we've done here and discover a lot more about the realities. So, for instance, just

harvester after harvester said, Boy, I was a dumb ass when I was a kid, right? I fished all those years. I had no health insurance, and I didn't. I spent all my money, and all my money was gone. And, you know, it's hilarious. So, I'm married to a fisherman. I was a commercial fisherman myself. And, you know, we were the same way when I met my husband, he grew up in Maine fishing in Maine. But he, for the last, I guess, 35 or so years, has been fishing in Alaska and Bristol Bay mostly these days and that's where he is currently. And he, you know, when I met him, he'd come home with his crew share. He was just a deckhand at the time. We own our own operation now. But he would come home with his crew share and he'd just, like write checks on it. And when one bounced, he knew he'd better figure something out.

Julie Kuchepatov [00:27:26] Where's the next fishery?

Tora Johnson [00:27:27] Yeah. So, it really rang true. And we didn't have any insurance, you know, until we had a kid. And then it was, you know, he didn't even have insurance when that, they only insured me and our kid, right. And so, you know, eventually I was able to get insurance for us. And that sort of meant that he could get the health care we needed. But all those years, nothing. And that's a super common story.

Julie Kuchepatov [00:27:52] So why is that so common? I mean, I know there's a lot of problems with the health insurance system, right? Yeah, but why specifically this cohort of professionals?

Tora Johnson [00:28:03] Yeah, well, there's a lot of, there's a lot of factors. One is that, so there are the generational factors. When you're young, you think you're immortal, right? And you can bounce back like you hurt your back. And like, two days later, you're fine. Must be nice, right? I can barely remember that. But I know that I lived that. And so that's part of it. And so, you can't really justify spending the money on health insurance. Also, the vast majority of harvesters are self-employed. And, you know, a fishing operation, especially for lobster, you know, a fishing operation is really expensive. One of the things that we discovered in our study, actually, was that the owners, we don't have numbers, so we don't have like epidemiological, you know, this wasn't that kind of study. But many of the owners we said, we talked to said their crew have insurance and they don't because they make more money than allows them to qualify for assistance or for the breaks, you know, on Obamacare, whereas their crew make little enough but they don't quite make enough and their operations have huge overhead and they have mortgages and kids in college and all of those expenses and so it's just a cost benefit analysis for every harvester, just like it is for everyone.

Julie Kuchepatov [00:29:29] I think it's so interesting, too, because the, you know, fishing is, I think, one of the most I think it's one of the most dangerous civilian professions, right?

Tora Johnson [00:29:37] Absolutely. So, yeah.

Julie Kuchepatov [00:29:39] There's a lot of danger of going into this profession, as you know yourself and, yeah, I mean, it's scary.

Tora Johnson [00:29:45] Well, like I said, you know, the harvesters in our study, the vast majority of them, and I think in the case of the I think in the case of the lobstermen, it was something like 60% of the shellfish harvesters, it was more like 70% had experienced some kind of injury in the last year. Yeah. And something like a third had hurt their backs

and we have discovered that it's the back that is often the beginning of that sort of avalanche that they get caught in that leads to addiction and overdose.

Julie Kuchepatov [00:30:20] So they get prescribed like oxy or some sort of prescription painkiller. Yes. And then that kind of runs out and then they go to the illicit.

Tora Johnson [00:30:30] Yeah.

Julie Kuchepatov [00:30:31] Opioids.

Tora Johnson [00:30:32] Yeah, exactly. Yeah. We heard story after story after story from harvesters. You know, I hurt my back. I was a dumb ass when I was a kid, and I didn't put away any money, so I didn't have insurance, but I had to go to the hospital because I couldn't walk. So, I go in there, it already, cost me 2,000 bucks and I got this prescription and I try to work through it, but it just gets worse. So, I go to the doctor. We also even interviewed doctors and we heard these like stories where, you know, you're standing outside of, and you can sort of see what's happening. The harvester is saying, I just need something to get me back to work. Please give me a prescription and the doctor sees that as drug seeking and they are seeking drugs but from the doctors perspective, they just see an addict and this person is very often not addicted yet and so instead of saying. Okay, we have a problem, we need to work through this, and we need a plan, what they say is to stop working. And they don't hear what the harvester hears, right? That is ridiculous, right? Stop working like you don't have paid leave, right? When you say stop working, they're saying stop feeding your family. Stop eating, stop heating your home.

Julie Kuchepatov [00:31:50] Stop living.

Tora Johnson [00:31:50] Stop paying your mortgage. Like, and so instead of solving the problem, they just don't meet in the middle and find a solution. And next thing you know, the harvesters are just self-medicating, and it escalates from there. And like I said, you know, opiates are only one of the substances that they're using to self-medicate. They're using a wide array. And, you know, pot is legal in Maine. And, you know, we use it in our own family, and it is really helpful. But there's all sorts of, all sorts of different things that we heard about our stuff we'd never even heard of. There's something called Kratom. We never heard of it until we did these interviews.

Julie Kuchepatov [00:32:32] Can we back up just for a second. And I want to understand why did you decide to what was the motivation to do this research? Like, did something happen or you've been noticing it in your own family?

Tora Johnson [00:32:43] Yeah. So, we do a lot of research on fisheries and a lot of different ways. And you know, I am not a public health researcher, but some colleagues of mine and I, so Bridie McGreavy at University of Maine, Josh Stoll. Bridie studies the clam fishery and Josh studies the lobster fishery and I who study both, we have been hearing from harvesters many for many years, but increasingly over the last probably ten, that this is really, really a significant issue. And that's usually the trigger for us to initiate. The prior study was this also had health implications, which was on how the Department of Marine Resources in Maine communicate shellfish closures when there's a danger to human health. And they were doing a really bad job of it. And so, the harvesters told us that and we undertook the study and now have helped DMR to fix their maps and their closure notices so that harvesters can understand them. And so, it was those kinds of studies that where we're talking to harvesters all the time and a lot of my work, less so the other

researchers, but my work I work with municipalities and in Maine they run the shellfish harvest. They are on the ground managers. And so, I have interactions with these folks, and they kept saying another harvester died. You know, one of the harvesters in our study, he goes, Yeah, I've lost, let's see, and he counted on his fingers. This is a this is a very small town in the region that has maybe, 30 harvesters, clam harvesters, four people had died of overdose in the past and the prior year before that interview. So, we were hearing it and Bridie and I had, I think we had written two grants and had them declined. So we weren't, you know, we kept looking for money to do it. And finally, we landed on a, we pieced together three different sources of funding to get this work done. And it's gained so much attention. And we found, you know, new insights that no one else had because of the methods that we use. So now we're ramping up and we're looking to do a really more in-depth study. We've recruited public health researchers to help us with it. So, our partners are really broad and we have clinicians and community health folks and medical sociology folks.

Julie Kuchepatov [00:35:13] So, how are you going to are you going to recreate it or are you going to add to it? Or how does that look?

Tora Johnson [00:35:17] Yeah, So both. We're going to add, we're going to look at the entire fishing industry in Maine. Yeah. So, all fisheries, including aquaculture and fish processing in the state as well as we want to get some epidemiological so we can actually quantify how many harvesters. We just have percent of the Down East harvesters that we worked with here. So, we don't really have a sense in the way that, say, CDC would pay attention to, what the risk really is. We have a pretty good general sense, and we know it's pretty dire. And the harvesters that we've spoken to since finishing the study say, yep, sounds, rings true. But, you know, this isn't something that like an ergonomics study is likely to just put a Band-Aid on and fix. This is way more systemic, which we knew. We had some insights into before we started the study so we designed it so that we could make sure we caught that, and we did.

Julie Kuchepatov [00:36:20] And in terms of ergonomics, when you say that the suggestion could be like collect something sitting down or, you know, it was simplified.

[00:36:27] Right. So, more like switch the sides of the boat that you're hauling, which would be a pretty, pretty weird thing to do. But yeah. Or, you know, change how your hauler is configured or change how you what kind of hoe or rake you use or.

Julie Kuchepatov [00:36:44] More about the equipment and placement of your body.

Tora Johnson [00:36:47] And boat configuration. So, one thing that's really well known is that it's really bad for backs to have a closed stern. So, a lot of the lobster boats now have an open stance, so you just allow the traps to fly off the back of the boat. And, you know, like my mother, who's never been on a lobster boat, as far as I know, would be horrified by that because it looks like the oceans right there, right, but it's actually way less dangerous because for one thing, you don't have rope going up and over the rail but also you don't have to lift the trap up on to the rail for it to get off the boat.

Julie Kuchepatov [00:37:22] What are some of the solutions that are actually happening or being discussed coming out of this first round of the paper?

Tora Johnson [00:37:28] Yeah. So yeah, some of those sorts of changing changes in fishery practice are part of it. Others are, there's some really interesting takes on it. So,

one thing that we discovered is that it's pretty likely that if we bring down some barriers to care, harvesters will stop doing quite so much deferral of care. So we're looking into, for instance, having a mobile health unit that we would drive around and just make the rounds in a cycle through docks and mudflats and wherever harvesters, especially buyers, we talk to the buyers and they're like, yeah, bring your, bring your mobile unit down and, you know, meet harvesters where they are and go, hey, did you sew that up yourself because they literally do.

Julie Kuchepatov [00:38:18] Sew up a cut?

Tora Johnson [00:38:20] Yes. Yeah. Yeah. For real. More than one harvester reported having done it to themselves and to others. So, like.

[00:38:30] Like in the field. Yes. Probably not very clean.

Tora Johnson [00:38:33] Yes. Yeah. And so, like, having somebody on the dock going, what's under that bandage? Why are you limping? Signing people up for insurance. Somebody with a, with some cultural literacy who can work with harvesters. Another part of our research collaboratives working on community health workers and so getting somebody who's been affiliated with the fishery in one way or another to train up to navigate the health system and, you know, capture people earlier on in this process before they get injured or right after they get injured. Another really important thing is training health care providers to be more culturally literate or to give them staff folks that they can reach out to that help them navigate and to just say, hey, when you see somebody with an injury, a back injury, in the E.R., ask them what they do for a living and if they are a fisherman, you need to swoop in. You need to, that needs to become a priority for intervention because we know that a back injury that shows up in the E.R. is a very significant risk factor for somebody to be dead in the next year or two.

Julie Kuchepatov [00:39:47] Because it leads to certain things that whole cascade. Yeah. So, when you say cultural literacy, are you talking about culture in terms of culture of a fisherman?

Tora Johnson [00:39:56] Yes. Yeah. So, the ability to understand. It's not only cultural, you know, we sort of use it as a shorthand cultural competency in our work but the idea is, so we interviewed a bunch of health care providers and about their interactions with harvesters and the differences between some providers and others was really stark. So, I already talked about some of those providers. We're like perceiving drug seeking when they really could have gone deeper and had more productive conversations. But it went even deeper than that, where they were belittling and really had hostile attitudes towards some of the harvesters that they worked with. They were infuriated that the harvesters wouldn't stop working instead of saying, Why are you not working? And you know, what can we do about this? They just let them go and got angry and belligerent towards them in their practice. That is not a culturally competent approach, and other health care providers approached it really differently. So, they do things like have their practices, have hours open when there's the tide is high and the harvesters can't be digging for clams and or just really sitting down with them and saying, okay, I know that you're a harvester. You know, you're digging clams and I'm looking at a back injury here and you're asking me for drugs, but I'm really worried about this. Let's really take this apart and think about what we can do about it. And there are solutions, but a lot of them probably have to be individual. So, there are social service organizations that have little sort of loans or grants they can give to harvesters who are affected by injury or a death in the family or something like that. So,

expanding programs like that and making them more accessible and more widely known. The ones that exist are, you know, they're not funded enough to cover the breadth of the need at all, like not even close and really are only dealing with really catastrophic situations. And so, making that, having some kind of backstop would be better and getting, you know, having insurance programs. So, the Maine Lobstermen's Association, for instance, has a group insurance program for harvesters, but the shellfish, which has a greater need, way higher social vulnerability, so lots more poverty and housing insecurity and lack of literacy and all of that in the shellfish industry, but they have no help with regard to insurance.

Julie Kuchepatov [00:42:41] So there isn't that type of, I guess, association.

Tora Johnson [00:42:44] Exactly. Yeah. And so, there's nothing, nothing to make that more accessible. So, making insurance more accessible, giving them especially because, you know, not everyone, but many people in the fishery, they don't have access to technology. They all they have for the internet is their phone. If that you know, there are some, especially older people in the fisheries that don't, some don't read at all. Some read very, very little. I've had folks call me up because they know me, and I'm trusted. They'll call me up and say, I really want to answer your survey, but I don't read or write, and I want you to interview me instead. And I do that. They wouldn't do that for someone from away, right? But that, you know, shows that kind of vulnerability. And we, in our study revealed lots of instances. Some harvesters were telling us about their folks in their bay or folks they knew or people in their family that they don't have insurance, not because they don't qualify, because they probably do, they just don't know how to navigate the system at all. And they need help. And we're doing it right now by hook or by crook. Some of the town clerks help with that sort of thing, help them with licensing even. Some of the licenses, if you look at the list of licenses that the state provides, the addresses are the town office or the dealer, because the dealer is helping non, you know, people who have low literacy fill out forms and that sort of thing. And that's often how they navigate health care and how they are reading the closure notices. Yeah. So, it's these realities that if you're just like going and looking and see how somebody uses a rake, you're not going to figure out at all.

Cameron Moore [00:44:34] What the fish? Everyone deserves access to health care, especially mental health care. Julie, Crystal, let's dive deeper.

Crystal Sanders-Alvarado [00:44:41] Mental health, you know, with fishers as well as the entanglements, with, the entanglements with right whales and lobster fishery, I think is just really revealing and I think it ties back into these access issues that we're talking about. Access to health care, period, like our physical bodies in the ways that we also can't separate our physical health and our mental health because of the connection she was making in that there was high rates of suicide in the local fishing community that were connected to opioid addictions from prescriptions, right. But then to back that up further in her research was like, well, where is this all starting? And really what she was finding is fishing is literally backbreaking work. And so, their research identified like, these fishers are going into the doctor or the emergency room because they have back pain because they hurt their back on the boat or while digging clams or, you know, whatever. And the doctors would initially prescribe an opioid for the pain in their first visit. Then they'd run out of that prescription and then the doctors wouldn't fill it because they were saying that they were drug, it's like drug seeking behavior or something like that. But the pain, those opioids didn't address the problem, right? It's just like masking it. But then they've also now developed this addiction from the opioid prescription. And so, then once the doctor refused to fill it, then that led them into like, well, I still need to work, I'm still in pain. I need to, you

know, have money for my family and feed myself and take care of my needs. And so, then they would get opioids from the black market. And then that addiction cycle just continued to where they're just like still not getting treated for what they need in their physical body. Now they have an addiction that is affecting their mental health and taking street drugs, right. And so, then that just ends up in a loop that then many of them chose to take their own life. And then really it came from a back injury while fishing, many of them. The stories all kind of correlated so that then the interjection to this was like, if a fisher comes into an emergency room or a doctor with a back injury, we need to be alerted because this is the point of intervention, not later down the road when the doctors and our medical system has, you know, created this this addiction and now refuses to treat it and then stigmatizes them for, you know, now being an addict, which they created without any acknowledgment of that. So, to me, that whole thing was just so enlightening in around again, who has access to care, who, who's deemed worthy of taking care of because most fishers are lower to middle class. So you know, unless you have a family wealth that has, you know, fishing operation or multiple generations and, you know, but very many fishers are lower middle class, working class people for sure, but tend to be just disposable in our society versus if, say, I was like super wealthy and I just decided as a hobby, I wanted to have a fleet of boats and, you know, like and then I hurt my back out one day I would have access to different modes of health care. Different options.

Cameron Moore [00:48:26] And rest.

Crystal Sanders-Alvarado [00:48:26] And rest. That's that part right there, right. To be able to recover, to be able to take care of my needs, my body to have access, like should I have been prescribed opioids and developed an addiction, I would have more access also for treatment and rehab programs and alternatives in that place, as well as therapy to take care of, you know, my mental health along that way. And then there's just a very clear-cut class line that those resources don't exist, and she just illustrated very well, I think, what that look like and then you layer on the economic situation and fisheries across the globe and in Maine related to climate change and the stressors of climate change are making fishing way more difficult in certain areas. Like we've talked of many people, it's like, well, things are moving, you know, out of the Gulf of Maine. Fishing is becoming harder, and people are having to put more effort in to get less of a return. And so, you layer all that in and then that mental health aspect, just like you could see how easy somebody's mental health can deteriorate when you're also in physical pain.

Julie Kuchepatov [00:49:39] And I think there's also, you mentioned stigma and I think there's also this stigma around, you know, fishers are like these macho dudes out on the water and then, you know, macho dudes, how often are they going to come to you asking for help? Specifically, around a mental health issue. So, we know that groups in Maine, like the Maine Coast Fishermen's Association, they do put an emphasis on mental health support but it also, you know, it really takes someone to actually go and ask for this help and I think that's where a lot of the families come into play, potentially. I know that there's other groups in New England that support the spouses of fishers to help them get the support and the help that they need. But it's really, it takes a lot to get someone to help. And especially, like you said, Crystal, if you don't even have access or insurance. You know, who has insurance? It's really hard. And again, echoing if you layer on the effects of climate change and the climate crisis on top of all of that. In and of itself, that job is super hard but then if you layer on these additional challenges, it makes it that much harder. And I think we talked to, you mentioned Susie from the Island Institute, and she was telling us about the regulatory frameworks that also are causing extreme stress in these fishers and in the fishing families and in the fishing communities. So, there's again, it's not only the

physicality of the job that can cause mental health issues, but also the regulatory frameworks and the uncertainty of what's happening in these fisheries. And lobsters again, are moving. Soft shell clams are getting eaten by green crabs, invasive green crabs. They're getting soft shell disease from ocean acidification. There's a lot of problems. And so I think mental health should absolutely be elevated to a level of everyone should be availing themselves of it, and they shouldn't hesitate to ask for it. And they realize those are challenges, generational, ingrained challenges in people because we tend to not ask for help. I mean, it's part of our culture.

Crystal Sanders-Alvarado [00:51:43] Yeah, I agree with all of that. And I think that that when we layer on and then think about like gender equity, right, then that's, that is what has like contributed to a lot in the disparities of gender equity in the seafood industry where it's essentially nonexistent. Our ideas of masculinity, right, and like who's that for? And, you know, there's just like really, there's an author, amazing woman named Liz Plank, and she has this book called For the Love of Men and I love this book. And I'm not somebody who dates men any longer, but it was such a good read in and around just this topic of masculinity and like, who's it for? And in that book, she's like saying, men perform masculinity for other men only. And then will turn around and say, But I'm not gay because most people who date cis men like are asked what they think about this performance of masculinity, they all hate it and all of the things that come with it, and it's so not attractive. And so, it's just an interesting that part in that book. I was just like, This is totally true because like men are performing this masculinity for men and then this is a disservice to them in themselves and their own health and wellbeing in the long run, right, is, is that they adopted these ideas of patriarchy and better continued and perpetuated it through toxic masculinity that ultimately end up harming them, right. You know, like white supremacy also harms white people. Toxic masculinity also harms many men. I think that that's. Yeah, Again, how do we address that and how do we, you know, like, a whole other podcast.

Julie Kuchepatov [00:53:32] In the next episode of the special edition of In Hot Water, a Climate and Seafood podcast featuring the state of Maine, we learn about the growth of the seaweed sector in Maine.

Crystal Sanders-Alvarado [00:53:40] Thank you for joining us for In Hot Water, a Climate and Seafood podcast by Seaworthy and SAGE. Let us know what you think by leaving us a review on your favorite podcast platforms. And don't forget to share with your seafaring friends. In Hot Water is a production of Seaworthy and Seafood and Gender Equality, or SAGE. Soundtrack generously provided by Mia Pixley. Audio production, editing, and sound design by Crystal Sanders-Alvarado and the team at Seaworthy.