

Stephanie Otts:

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Zachary Klein:

Hi there! Welcome to episode three of the second season of the National Sea Grant Law Center's Law on the Half Shell Podcast. If you've been joining us from this season's first episode, you know by now that I'm your host, Zachary Klein. I'm one of the Law Center's Ocean and Coastal Law Fellows and this season of the Law on the Half Shell podcast is about COVID and coastal resilience. In the last episode, the Law Center's Executive Director, Stephanie Showalter Otts, took us on a fascinating voyage of COVID's impact on U.S. cruise lines and how the industry has adapted.

Zachary Klein:

On this episode, we'll explore a different aspect of how our nation, indeed, how our species interacts with marine environment. The seafood industry. In terms of both the jobs that it creates and the food that it puts on our tables, the U.S. seafood industry is one of the nation's most important in more ways than one. But as we'll soon hear more about, the industry's resilience was put to the test when COVID reached U.S. shores with significant disruptions occurring in nearly every aspect of production, labor, and sales in the nation's seafood industry.

Zachary Klein:

Interviews with Joshua Stoll, professor of marine policy at the University of Maine, as well as with Jamie Doyle and Angee Doerr of Oregon Sea Grant will shed light on COVID's consequences for the U.S. seafood industry, with a special focus on the role that the law played in the industry's reckoning with COVID. So without further ado, let's crack open the shell of the U.S. seafood industry and see how it weathered the COVID-19 monsoon.

Zachary Klein:

With us now is Professor Josh Stoll. Josh is a professor of marine studies especially marine policy at the University of Maine. He has done considerable amount of research and writing on how COVID-19 has impacted the U.S. seafood sector and we are very grateful that he is able to join us today. Josh, thanks so much.

Joshua Stoll:

Thanks for having me.

Zachary Klein:

So let's just get right into the meat of it. You have published a few papers that have delved into a couple different angles. To start, how did COVID-19 impact the seafood sector straight out the gate? Let's say March, April, May, 2020, what did the U.S. seafood sector experience?

Joshua Stoll:

The first thing that I'll say is that when we talk about seafood systems or when we talk about seafood sectors, we're talking about a lot of different sub-sectors and different sets of people, from harvesters all the way out through consumers. But that includes processing sectors, that includes distribution systems, that includes retail and distribution. So there's quite a variety of different types of people and businesses that are involved in the seafood sector.

Joshua Stoll:

So one of the things that is interesting about the COVID-19 pandemic is that all segments of the seafood system through the entire supply chain were impacted in different ways and that those impacts were quite uneven and they evolved through time. The other thing that I'll say is you mentioned the start of the pandemic in mid-March and in lots of ways in the U.S., that's when lots of people started thinking about the pandemic. But you have to remember that some of the first cases of COVID-19 happened quite a bit earlier than that. And because seafood is such a globalized commodity, the seafood sector started to feel impacts from COVID-19 earlier than that.

Joshua Stoll:

And so things like American lobster, we actually see signs of the price changing well before that middle of March in part because the seafood system is so globalized and we started seeing people in China, for example, changing their buying habits and their behavior, and that had a ripple effect into the supply chain in the U.S. So some of the first impacts were actually even before the health impacts that we saw in the United States which kind of interesting.

Zachary Klein:

That is very interesting. You mentioned that there was a degree of unevenness in terms of how these impacts were felt, but what was the general reaction and at least the initial concerns that were coming out of the industry?

Joshua Stoll:

Yeah, so some of the earliest impacts were about the loss of markets. So COVID-19 was obviously a health impact but it changed consumer behavior as well. And that was a global change in how behavior happened. And so some of the first things that we saw happening is that demand for seafood diminished really rapidly and part of that is because how consumers get seafood. Most of the consumption of seafood is in restaurants and people stopped going to restaurants. And suddenly there was a bottleneck in the supply chain.

Joshua Stoll:

So if restaurants aren't open and typically seafood moves into restaurants, then there was no place for seafood to go. And so we saw of these sudden drops in prices for seafood. On top of that, we then had these problems in the processing sector because people are in close proximity to one another, they're typically cold environments which it's a good vector for transmission of viruses. So we started having problems in the supply chain where seafood that was being processed, we had began to have outbreaks in processing facilities. So there was health impacts in processing facilities.

Joshua Stoll:

So then there was a impact on what people were actually dealing with seafood. They had some of the similar impacts on vessels. So there were a number of high profile outbreaks on fishing vessels. People are again in kind of close proximity. So you saw outbreaks on vessels as well. And then later in the process, we started seeing these really interesting innovations in the supply chain where people started to pivot.

Joshua Stoll:

But some of the earlier pieces were the loss of markets, the problems in supply chains. Also, one other thing that was interesting is you also started to see impacts to the fishing seasons. So in some cases, fishing seasons were delayed. For example, we saw that in Maine with the elver fishery here and in some places fisheries were temporarily closed.

Zachary Klein:

And to circle back to a point you raised earlier, what were some of these innovations, some of these actions that restaurants, that suppliers, that others along the supply chain took in order to pivot or at least in order to attempt to overcome the barriers that COVID was creating for them?

Joshua Stoll:

Yeah. So one of the areas that I've focused on quite a bit over the last year is in this transition to direct and local sales of seafood. So as I noted earlier, a lot of the seafood that people eat has conventionally been in restaurants. In places where you go and the seafood is prepared for you. People of course were at home, they were cooking more. And there was something about going to the grocery store and not seeing food on the shelves or not seeing products on the shelves that made people think about the vulnerabilities in our food system.

Joshua Stoll:

And there was this real surge and interest in local and regional sales of food. And so we saw one of the real bright spots in the seafood sector was this pivot to direct sales of seafood. And that was happening both within small scale operators but also in larger scale companies as well. Another pivot that we saw more and more of was the shift from distribution to the restaurant sector, to distribution to retail. And seafood sales in retail space was consistently seen as sort of through the roof and spiked in that space as well.

Zachary Klein:

Some of the research of yours that I've come across during COVID has been about COVID and its impact on seafood as a black swan event. So what I'm curious or what I'm hoping you can do is if you first explain to our audience what a black swan event is. And then second, if you wouldn't mind discussing how COVID either sort of exposed flaws in whether that's the supply chain or whatever it was back before COVID or alternatively, how COVID has helped the seafood sector and maybe other sectors prepare for black swan events moving forward.

Joshua Stoll:

One of the interesting things about the COVID-19 pandemic is that it really did expose vulnerabilities at our food systems. And it exposed this idea that over the last several decades, our seafood economy has become more and more globalized. And there are real benefits of a globalized food system, there are

economic benefits, there are employment benefits and those have been talked about at length, but there are flaws in that. And part of that is the exposure to shock events and the dependencies that we have on getting product and moving product around the world.

Joshua Stoll:

And what happens when you kind of have a wrench in the supply chain and how that falls apart. And I think this in many ways has created this opportunity to think about why there's value in having a diverse set of supply chains and what a non-globalized food system could look like. And one of the things that has been interesting to me is I have spent almost a decade thinking about local and regional food systems with a particular focus on seafood. And I've always thought about it as sort of separate from the globalized seafood system. And I think what has really struck me as interesting during the pandemic is how the two are really interconnected.

Joshua Stoll:

And during this moment in time, when this global system has faltered, there's been this real sort of pressure and push towards local and regional seafood systems. And it's not really necessarily an either or, but the value of having both systems in place and how important that is for the sustainability of fisheries, the sustainability of livelihoods. I think that has been something that I've learned and that has really stood out to me during this pandemic.

Zachary Klein:

Understandably. It is incredible the kind of insights that COVID has conferred while we've had the chance to observe its impacts in real time ruminating from the comfort no doubt of working from home, a home office of one kind or another. To transition just a little slightly, one of the reasons I was so excited to talk to you and that we were able to make this conversation happen is because your background is in marine policy. We have had the chance to talk to folks who mostly focus on marine sciences and of course that is incredibly important.

Zachary Klein:

There are a lot of important takeaways from the hard data that sort of came out of COVID. But one of the things that I'm really interested in for this podcast, this episode, especially, is the role that law and policy played in COVID both the initial reactions and then how policy-makers, how lawmakers and other legal institutions adjusted as the pandemic were on. So I would like to ask how exactly did law, did policy affect COVID? How did it make things worse? Did it make things better? And what did institutions learn along the way?

Joshua Stoll:

I think one of the things that stands out to me as important, not just probably for the seafood sector, but probably more broadly is the role that government played in providing resources to different types of communities in a time of crisis. And if we look around the world, that was a general response across the board, whether it was naming seafood harvesters essential employees or providing loans or direct payments or in some cases pivoting, so fishers could use their seafood to support food insecurity.

Joshua Stoll:

And I think that sort of those resources were particularly evident in wealthy countries like the U.S. but we saw those initiatives around the world. And that to me stands out as a really critical part of the role of government and the role of policy in this work and really providing resources to ensure that supply chains remain functional, to ensure that people maintain their livelihoods, ensure that food and food systems keep on moving despite the faltering that we saw, the issues that we saw by and large, at least in the U.S. context, people remained employed.

Joshua Stoll:

We still had food in our food systems moving through the process. So to me, that stands out as a particularly important part of this. And then just to be a little bit more specific, I think about the role that the PPP loans played in the seafood sector. Took a huge advantage of that. There was direct payments, I think \$300 million to the seafood industry to help sustain the industry. People took advantage of those resources. Those ended up getting allocated from the National Marine Fisheries Service down to the state level and executed on a state by state process. I think all those resources were really important for sustaining the industry.

Zachary Klein:

And I suppose that it begs a question or at least it makes you wonder in the alternative, what constraints legal or policy wise, did seafood suppliers and harvesters face? For example, one that comes to mind is that I know that some states or some municipalities will have restrictions on shellfish growers ability to sell directly to consumers at farmers' markets. So I was curious whether it's more at a local level or closer to the federal level. Were there any constraints that as far as you heard or could tell from your research seemed to particularly frustrate harvesters and others in the supply chain and how did they deal with it? How did institutions deal with it, et cetera?

Joshua Stoll:

Since you mentioned the piece about regulations that prevent local and direct sales or piggyback off of that for a second and say that, that was a bottleneck for certain growers and producers of seafood and something that we heard about quite a bit, but there was also real regulatory innovation and advancements during the pandemic. In Rhode Island for example, there was an emergency bill passed that allowed harvesters to direct sell their seafood. My understanding is they've now taken that bill and institutionalized that. So there were some innovation that happened in the regulatory space that I think was quite interesting and worth looking at as models for change.

Joshua Stoll:

I think one of the things from a crisis management standpoint that really stands out to me, is that during the pandemic, there were a huge amount of resources made available to the seafood sector and through the USDA, through the National Marine Fisheries Service, through other federal programs that were made available to all people and all business owners. And I think one of the things that stands out to me is there wasn't a clear plan for what we were trying to accomplish with those resources except to keep people in business and that felt somewhat reactive.

Joshua Stoll:

And I can't help, but wonder, what if we had a national food system or food security plan in place for dealing crisis and shocks? And how would the response have differed? Some of the feedback that I've heard from USDA in various conversations is, wow, if we were to do this again, how different their

approach would've been. And it makes me think about, well, what kind of long-term planning is necessary at the state and federal level around shock and crisis?

Joshua Stoll:

And certainly I hope we don't ever have a pandemic again, but I think it's unrealistic to think we won't have other global shocks. We've had several of them in the last several decades and I think as our food systems become more globalized, I think it's quite realistic to think that the intensity and frequency of global shocks will only increase. And that will affect food systems

Zachary Klein:

Were almost a year and a half into the pandemic, as you said, in many ways, it is still a COVID economy. What have the successes been? What have some of the shortcomings been and case in point, are we going to be back to normal? Are we back to normal now? How does the outlook seem moving forward?

Joshua Stoll:

Well, I think where anything but back to normal. But are anything but back to normal landscape today is very different than it was in the middle of March of 2020. Right now we're in this reopening phase in our country and people are really burned out of thinking about the pandemic and we're seeing this incredible sort of surge in demand at restaurants and the seafood sector is capitalizing on that. The demand for seafood is really high and that might change with the Delta variant and sort of future evolutions of the pandemic.

Joshua Stoll:

But right now, seafood is really well positioned. Consumers have been connected to seafood through these direct sales. And now they're getting back out into the world. And from everything that I can tell that the demand is really, really strong in the seafood sector. That likely will change as things continue to change in the coming months in the coming year. I think we're on the cusp of a new normal and I think the result, the seafood industry has learned a lot, I think the government sector has learned a lot.

Joshua Stoll:

But one of my takeaways is that we're really re-imagining what seafood supply chains look like. When I started working on local and direct seafood marketing 10 years ago, it was very niche and I don't think it was really part of the broader conversation. That's different today there is a demonstration that this approach to distribution can scale, either at the individual business level or many businesses doing this type of distribution. I think consumers have demonstrated a willingness and ability to eat seafood at home.

Joshua Stoll:

And I don't think they're going to forget that in the near term. And with that sort of re-imagining of supply chains, I think that has all kinds of implications of who participates in the sector and how people participate and how food moves and there will be trade offs to that for sure. And winners and losers to these new ways of doing business but I don't anticipate working going to be back to January of 2020 and what the seafood system look like.

Zachary Klein:

I am joined now by Jamie Doyle and Angee Doerr from Oregon Sea Grant. Angee and Jamie, thank you so much for joining us.

Jamie Doyle:

Thanks for having us.

Angee Doerr:

Yeah. Happy to be here.

Zachary Klein:

As I mentioned earlier, you two were authors of report that synthesized surveys you had sent out over the course of COVID. So if you want to jump right in, I'm not sure if you want to start with the really interesting stuff or give a little more context.

Jamie Doyle:

We could start with saying that we did a survey to the Oregon seafood industry at the beginning of the pandemic, trying to look and learn how it was impacting them, but also how it was potentially impacting them, what they thought might happen to them. And so our findings were really informative in those beginning parts of the pandemic. And we'll talk about the results from that but we'll also be back in the future to kind of look at what actually happened, not just what they thought was going to happen and what we captured from our original survey which was again, early on.

Jamie Doyle:

So those results were really telling to us but not every fishery had gone through the pandemic at that point. So for example, our albacore tuna fishery is later in the summer and our survey went out in the early summer, late spring, early summer. So what those fishermen might be projecting were things that they thought might happen and we'll need to come back and do a more thorough analysis on what did happen with that fishery, for example. So just kind of context setting of what our survey was in that sort of moment in time. Angee, to do want to add anything to that?

Angee Doerr:

No, that's exactly right. I will say that formally, as Jamie said, the survey was done fairly early on and we do have plans to work with some potential graduate students or others to do a follow up. But just that informally, we've also been in multiple conversations, obviously with the fishing fleet. And so we can speak informally to some of what we've heard, but in terms of formal data, looking at some of the longer term impacts, that's still in process.

Zachary Klein:

Great. But that's still a great starting point to talk about the report, even though there were some fisheries or some fisheries that weren't covered or some follow up that's needed. Can you tell us a little bit about what is in the report, what fisheries are covered and what was being asked about or what some of those early points of interest were when it came to the people who were responding to it?

Jamie Doyle:

Sure. I'll start off again, Angie, and pass it over to you. We started out looking broadly at the seafood industry, talking about retailers, processors, harvesters, both wild capture and aquaculture. But then keeping it within that industry and not doing it more broadly to the whole coast, thinking that our ability to understand the impacts probably would be best understood within the kind of confines of that industry. And one of the first things that came out of this was that everybody felt like they had already been impacted and they were all anticipating being impacted.

Jamie Doyle:

So that was a pretty strong response initially, that everybody was feeling the impacts of COVID. And when we looked at data kind of across the state, so from the north end of the coast to the south end of the coast, which is it's a large state, so it's a good distance. And we looked at different gear types and we looked at different communities and basically it was all pretty consistent in the responses. So that part, there wasn't any one particular thing that stood out.

Jamie Doyle:

There's a few nuances but they were pretty consistent in their anticipating and feeling impacts and loss of markets was really the big one that stood out the sudden need to find a place for the product. And obviously both harvesters were feeling this as well as processors who were then kind of stuck holding the product at that point.

Zachary Klein:

What did your report find in terms of new increased costs? Was it just loss of business that the seafood industry was just struggling with or were there other pressures that rose up along the way too?

Angee Doerr:

Obviously early on, the initial pressures were, I mean, in concerns, there wasn't a lot of understanding about COVID-19, about how it was spread, about how it could be contained. And so several of our respondents shut down entirely. They weren't going out fishing because they weren't sure if it was safe to go with their crews. Some of the processors weren't sure how to respond. Even some of the early guidance is very difficult to maintain six feet social distancing and a processing facility is very difficult.

Angee Doerr:

On some of our vessels, it's not physically possible to do. And so given that there was so much uncertainty, a lot of the restaurants were shut down entirely. A lot of the markets were shut down. A lot of the fishing vessels were simply not going out. And so those are, I mean, but you still have costs. So they had a lot of costs in terms of maintaining vessels, maintaining restaurants, markets, paying rent, but no money coming in. So that was a very large concern. And once people did start realizing that there could be some activity, there are costs associated with cleaning surfaces regularly, providing masks, providing gloves, providing hand sanitizer.

Angee Doerr:

I know our state and I'm sure many others did what we could to help with those costs, providing PPE personal protective equipment and things like that to our local industry. But even so, they're just operating costs that you have to deal with. A lot of the restaurants had to come up with new business models because they couldn't do indoor dining. And so suddenly you're trying to figure out how to do

seafood, which typically is an indoor dining experience. And you're trying to figure out how to deal it with curbside pickup or delivery. And so they were costs and challenges associated with all of those changes.

Jamie Doyle:

And the processors had all this extra product and cold storage that they were holding. So there's kind of that added cost of buying product when you're not necessarily selling it while you're still storing it. Also not in our survey per se, but there's a lot of question about how many restaurants will be there after COVID. And so I live of in a small town. It has been fairly resilient from what I can just see anecdotally, but a lot of seafood goes to fairly high end restaurants as far as our trajectory.

Jamie Doyle:

And some of the chefs that I've been hearing from recently in Portland, which is our largest metro area in Oregon have shut down, whole series of restaurants. So they've maybe had several different sites and now they have one. And it will be a really interesting view to see where things are standing. Obviously, if we were using the example of Portland, I should say there were a lot of other things going on last summer that led to downtown restaurants not being open. There was a lot of protesting happening, even in a little bit later, there was a whole problem with wildfires and smoke.

Jamie Doyle:

And so there was a lot going on, on top of COVID and restrictions, but I will be curious to see where the sort of traditional high end seafood markets are. And that was one of the pieces where initially the products that end up in restaurants tend to be the higher end products. And so that market went away whereas the more common products that you might buy at home and be comfortable cooking, we weren't seeing, which probably leads into what our response was, now that I think about it, to the survey with our colleagues at Oregon Department of Agriculture.

Jamie Doyle:

They had started "An Eat Oregon Seafood" initiative to get education and awareness and motivation out for people to try to cook it at home and to try to move some of this product that was not moving because of the restaurant closures. And that effort really, again, is sort of trying to get people more comfortable with and aware of seafood products. So the online social media campaign had different high end chefs that were cooking and posting recipes. And then there's a website that accompanies this that has locations where you can buy seafood, information about seafood, recipes. And this is an ongoing effort to try to help people learn about and understand local seafood, so that they're both comfortable cooking it and aware of the industry, all those sort of Sea Grant types of goals around seafood and education.

Zachary Klein:

I'm curious there was some earlier mention about pivoting to direct to consumer sales. And just based on the survey results and the report more generally, did you find that? What were the key takeaways, I guess, in terms of how these companies manage to weather the storm of COVID?

Jamie Doyle:

It's probably really dependent business by business, but we did see many smaller companies switching and trying to do more direct sales.

Angee Doerr:

And we did see this kind of gradual and accelerated switch to curbside where everyone would just kind of... They shut off half the parking lot and turned it into tables. And that was special, I think possible during the summer months into the fall. And so we did see this transition into adapting to new styles, whether it was creating the to go cook at home box, which I love that business model. Or whether it was you can just pick it up yourself and take it home after we've cooked it for you or you can come and have this fine dining experience. It'll just be outdoors instead of indoors. I think a lot of creative solutions, in terms of how to address this, that people learned from each other and kind of built off what other people were doing at think to come up with solution.

Zachary Klein:

One of the topics that I'm really interested in, because it was mentioned in some of the comments that were highlighted in your report, is concerns about seafood products being kept in storage and then causing a shift in supply and demand that would lower prices long-term. But I'm curious just sort of knee jerk reaction from what you've seen, where a lot of those fears realized when it came to the long-term impact on seafood prices.

Jamie Doyle:

Initially the raw data on landings versus value, it does look like they landed around the same amount of some fish species last year and that the value was less. And so how much of an impact that is really, probably depends on the scale of your boat or your operation and how big you are and all those things. And I don't know the specifics, but it does look like volume-wise for most of the fisheries looked like it was pretty comparable to previous years but the value was less. And I don't know. It'll be interesting to see you're asking sort of long term, whether this is something that only happens for a year or two or whether that has some kicking off long-term trajectory.

Jamie Doyle:

Also, as far as what are the long-term impacts of COVID and these shifting to new models, there's been a lot of discussion around how these new models have been coming along for a while. And so this COVID was almost maybe kind of, not a catalyst, but kind of kick starting more businesses continuing to think about that. And that type of thinking is not going to go away. Also, the interest in direct marketing comes and goes depending on the market. And so over the years on the West Coast, they've seen interests in selling off the dock more when the price is not as good at the processor. And so that cycle will probably continue. And COVID is one example of something where people had to switch. It's a very unique example but over time, that has come up more than once.

Angee Doerr:

So I'll just add a couple things. One is that, and Jamie, I'm surprised you didn't talk about this. One is that, one of the things we're trying to do with "Eat Oregon Seafood" and seafood literacy more general, is make people aware of a lot of the benefits of frozen seafood. Oftentimes when people are going out for seafood or buying it, they have this idea that they want fresh right off the boat seafood which has been a really, really good marketing ploy by whoever's marketing that way, but isn't necessarily

reflected of quality or taste or texture or anything else we associate with seafood. In fact, a lot of seafood is flash frozen on the vessel itself.

Angee Doerr:

And so I think this idea that if we are freezing product, then somehow we're not having as good of quality of product. And that's just not true. Jamie has been involved in some projects that have done taste testing and found that in fact be the opposite of true. There are a lot of benefits to immediately freezing something and then reducing handling and things like that until you're actually ready to prepare and serve it. So that's been kind of one of the things we've looked at is this idea that maybe we have more frozen product but that's not necessarily a bad thing and it still is excellent seafood.

Angee Doerr:

On the flip side of that, part of what we're seeing, I think with some of these longer term impacts, and again, I'm going to say anecdotal, this is what I've been hearing from the fleet, is that it's put them in a harder bargaining position with some of the processors when they're trying to come up in a negotiate price because they are going out now and catching product for this year and some of the processors still have product from last year. And that's not necessarily just because it was frozen, that's because the traditional markets weren't there. And so, like I said, that live export wasn't there last year. And so product that typically would've been exported live was frozen.

Angee Doerr:

And so there's just more product on hand than you would see traditionally. We are trying to get information out and making sure people are aware of things. That we need to think about local habits and traditions and restrictions. Where I live, when I moved up here to Oregon, I was surprised to learn I can't even get like say SiriusXM or satellite radio on the coast. It's too rural, too winding, too mountainous. And so you really do have to think about how communities are operating and how people are able to access information to make sure we're doing it. And we do try our best to make sure we're putting things out through a variety of means.

Zachary Klein:

A huge thanks to Josh Stoll, Angee Doerr and Jamie Doyle for their time and for illuminating the effects of COVID on the U.S. seafood industry in today's episode. The next episode of Law on the Half Shell features the Law Center's Law Fellow, Olivia Deans, explaining COVID's impact on U.S fisheries. You'll be able to find episode four on Apple Podcasts, Spotify, or wherever you listen to podcasts. Follow us or like us on Facebook, Twitter, and LinkedIn, to keep up with all the latest at the National Sea Grant Law Center. As always, thanks for listening.