

Dr. Anna Sulan Masing ([00:00](#)):

Hello, I'm Dr. Anna Sulan Masing and I'm host of the podcast Taste of Place, part of the Whetstone Radio collective. This podcast investigates our relationship with nostalgia, the past and our place in the world through taste. And we're starting with pepper. I speak with scientists, academics, chefs, farmers, a perfumer and many more to bring the tangible and theoretical together. So tune in and subscribe to Taste of Place on your favorite podcast app now.

Audio Clip ([00:38](#)):

During endless shrimp at Red Lobster, you can have something decadent with something spicy, then something crunchy, then something new, and after that you can do it all again. It's endless shrimp. Indulge in endless choices of your favorite shrimp dishes. While the shrimp or endless, this offer isn't. Come in now for the best value of the year at Red Lobster.

Jerusha Klemperer ([01:02](#)):

Americans love shrimp and one of the exciting developments of the past 20 years or so is that shrimp has gotten really affordable. It used to be a luxury food in the form of shrimp cocktails served at a steakhouse or a fancy wedding, something for special occasions slightly out of reach.

Andrea Reusing ([01:23](#)):

I remember my dad worked for a large company in New York and they would have these receptions that would have these enormous shrimp cocktails, and all my friends always wanted to go to the receptions because they'd be like, "Oh my god, I'm not going to miss MetLife shrimp." They called it MetLife shrimp because it was just like you could eat as many as you want and it was huge and delicious.

Jerusha Klemperer ([01:45](#)):

Today, shrimp is the number one most popular seafood in America, and as the price point has come way down, it's become a staple, not just of affordable restaurant chains offering all you can eat, but also in our homes. Every supermarket offers giant frozen bags of it with the heads and shells already removed if you want. Sometimes uncooked, sometimes already boiled or breaded and fried and it's sometimes as little as \$6 a pound. In today's episode we talk to experts to find out how and when shrimp became so cheap and why.

([02:21](#)):

I'm Jerusha Klemperer and this is What You're Eating, a project of foodprint.org. We aim to help you understand how your food gets to your plate and to see the full impact of the food system on animals, planet and people. We uncover the problems with the industrial food system and offer examples of more sustainable practices as well as practical advice for how you can help support a better system through the food that you buy and the system changes you push.

Nathan Rickard ([02:51](#)):

The vast majority of shrimp, when we talk about the shrimp market in the United States is imported and it's going to be farmed. And while there has been a lot of discussion in the press and in just media generally about supply chain shortages or other problems with getting things to market, in fact shrimp post COVID has been at record levels in the United States, so we're talking about \$7.5 billion worth of imported shrimp, predominantly farm shrimp from overseas entered in the United States in 2021 and so far this year we're at about the same levels as those record levels last year. Most of that shrimp comes

from a very small number of sources, and so the main supplier to the United States is India, which accounts for roughly 40% of the volume of shrimp that we import. Between India, Indonesia, and Ecuador that's probably around two-thirds of the shrimp that comes into the United States. And if we extend that out to five countries where you include Thailand and Vietnam, we're probably getting about 90% of the shrimp that's imported.

[\(04:04\)](#):

My name is Nathan Rickard and I am a partner at the law firm of Picard Kentz & Rowe. We specialize in international trade law and have been working with the Southern Shrimp Alliance since 2003. The reason why I work with the shrimp industry and the reason why they've had to reach out and do all of this stuff and get worse has been because of that divergence with large volumes and decreasing prices. So the expansion and development of aquaculture as a way to produce shrimp has really exploded the amount of supply that's in the global market. And you can see that just overall the numbers and that they continue to increase every year. So if you are in that sort of old model of development through export orientation, shrimp farming was a low resource, low investment way to have crop that then you could harvest out to other countries.

[\(05:01\)](#):

And if you had a lot of coastline like India does and as China does, you could have lots and lots of aquaculture farms that then could produce then with transition from what used to be the primary farm shrimp, which was black tiger shrimp to vannamei or Chinese white shrimp. That has been a shrimp that is conducive to multiple crops in tropical weather. And so that has led to, again, lots of expansion in the supply that went into the marketplace. The domestic shrimp industry saw this supply coming in huge quantities into the United States market at the turn of the century. And so then they saw what was a really significant collapse in the prices that they were being paid at the dock and that was driven largely by Chinese seafood imports that were coming into the United States.

Jerusha Klempere (05:50):

So it's pretty clear why foreign shrimp dominating the market is a concern for domestic shrimpers, but why should it also be a concern for consumers?

Nathan Rickard (05:58):

Having lots of shrimp in the market is not a bad thing overall, not uniformly a bad thing and there are roles for both wild caught and farmed shrimp. What then becomes difficult is when you start to have, and what is a problem for the industry is when you start to have trade distortions and some of those trade distortions are brought about by the use of, for example, antibiotics in shrimp aquaculture. So as you move to more intensive shrimp aquaculture, the disease becomes a major issue in being able to get something to market, much of the shrimp aquaculture that occurs around the world is done by shrimp farmers who are peasants who have very low capital and they are very concerned about basically all of their resources for their household are invested in what is in the water and they will take whatever preventative measures make sense to them to make sure that they can get stuff to harvest.

[\(06:56\)](#):

And that means a preference for using antibiotics if they're available. We banned lots of antibiotics in the United States, much of those stocks ended up in developing countries and was something that was then used in shrimp farms.

[\(07:10\)](#):

The other thing that had happened along with that is that as you were using it for preventative measures in a prophylactic way, people were also learning that as you used antibiotics it could be used as a way to encourage growth so you could even speed up the cycle overall. So that was a concern because if that drops the cost and the amount that has to go into it, then it's a risk to the consumers. And for the domestic shrimp industry, they were looking at something where that's not something where consumers are going to distinguish between farmed shrimp with antibiotics in them and wild caught shrimp.

Jerusha Klemperer ([07:44](#)):

I asked Nathan to explain a little bit more about these antibiotics that have been banned in the U.S. but are being used in overseas shrimp farms.

Nathan Rickard ([07:51](#)):

There were some antibiotics that used to be used in the United States that were eventually banned, used to be for treatment purposes that were banned because of their carcinogenic impact or because of their health impact entirely for any use in the United States. And so you had huge stocks of chloramphenicol in the U.S. that then found their way into other countries. In those places it ended up being something that was used in livestock rearing and in aquaculture.

([08:22](#)):

So in the United States and both for imports and for domestic production, there are no approved antibiotics for shrimp aquaculture or for shrimp products. The issue is, even though it's banned and imported shrimp that contains antibiotics is adulterated and therefore can't be sold in the marketplace, the question is one about enforcement. And so this has been something that the industry has worked on for a long time. People tend to say only 2% of all imports are inspected for stuff by the Food and Drug Administration. In fact, it's much, much less than that. It's less than half of 1% that's inspected for antibiotics. And so you just have a market that's overwhelmed with antibiotic-contaminated shrimp and the FDA is not doing tests on the significant quantity of stuff. So it's banned, it's illegal, it shouldn't be in the marketplace, but we don't have the enforcement capacity to stop that from actually reaching consumers in the federal government.

Urvashi Rangan ([09:21](#)):

Hi, I'm Urvashi Rangan. I'm the Chief Science Advisor at the Grace Communications Foundation and have been for the last six years. Prior to that I was a scientific investigator at Consumer Reports and looked into a number of different food products including shrimp. And in 2014 we produced a very lengthy in depth report on a study that took well over a year to conduct, of shrimp in the market here in the United States and did an assessment of the sort of health safety quality of that shrimp and what folks were getting, what the market looked like. And actually to our surprise noted some pretty serious problems in the shrimp industry in what we found. And maybe before launching into the details of that study, I think it is interesting to note that there haven't been a whole lot of studies like this done either prior to or after this study.

([10:22](#)):

We ran those certainly a huge number of samples and needed to make sure working with our stats department that we sourced it from at least a few of all the different countries where we received shrimp from. And there are very widely ranging standards on how shrimp is raised around the world. And people don't think about shrimp farming a lot, but it's much like how we farm any other animal,

which is that it's very chemically intensive, drug intensive. And you can imagine if you put a cow farm in water, how much more of a problem that would be, that would be basically swimming in your waste. And that's what happens on these fish farms is that they're literally swimming in their waist. And so the potential for contamination is very high. One of the results that we found was that we found more Methicillin resistant streptococcus, which is MRSA on shrimp than we did in any of the meat studies that we ever did on chicken and turkey and pork and beef.

[\(11:32\)](#):

The other thing, as I mentioned, we found were levels of antibiotic residues including tetracycline, streptomycin, oxytetracycline, things that we use in human medicine. And those were really illegal to be on those products. And 5% of the products I believe that we tested had illegal residues and these were shrimp sold at Walmart, at Kroger's, at national chain supermarkets even under their brand names. And that's how sort of mixed up this industry is too, is that a supermarket can receive a shipment of shrimp or other fish frankly, that they repackage and if they repackage it, they can literally not put on a lot of the country of origin labeling that they're supposed to. Maybe it looks packaged in the U.S. and then you actually don't know where it came from. So there were a number of sort of egregious samples that we detected, I have to say after running food testing for more than a decade there shrimp was the most surprising of all the things we tested in terms of concern I think for the public health and in terms of an industry that we have very little control over.

[\(12:51\)](#):

And so while we, in this country, do not allow antibiotics in the farming of shrimp, we don't have that same requirement that we can always impose and enforce on other countries. And even if we have the requirement, FDA tests less than 1% of the shrimp that's coming in to the country every year for violative residues. Our test in 2014 found 5% were violative. So the government's not even looking at enough samples to be able to quantify the extent of the problem and to really hone in. I will say, of all the government briefings we did, that was the most jarring for the FDA to hear about that study. And there were some, I think follow-up actions by FDA to these companies after we had issued that study. But that said, this is really just a bandaid on the tip of a very big problem. And this particular industry is sort of riddled with these problems.

[\(13:53\)](#):

In terms of the farms internationally some countries are sort of worse than others we found in terms of residues. But what is clear across the board is that when you farm intensively, not only can you jeopardize the health of your own system, so if things get too dirty in a shrimp system, there's a virus that gets created that will literally shut down the entire farm. And so China, for example, I think in the year that we tested, was having massive shrimp collapses and we almost couldn't source very much shrimp from China that year. It's literally that volatile, it's like a whack-a-mole as to which country is having a massive failure in this industry at any given time.

[\(14:42\)](#):

So people use a lot of antibiotics, a lot of pesticides, a lot of chemicals to treat these things. And these systems leak out into their local environment. They can contaminate agriculture crops around them, they can expose people who live nearby and drink the water to harmful levels of residues. And often these are in very small rural places around the world that are not that industrialized and don't have very good controls in place, especially if they're relying on these types of things to keep cleanliness.

Jerusha Klempner [\(15:21\)](#):

Are these just sort of flags, the production was problematic and problematic for those environments or are there also implications for the eater when it comes to those kinds of residues in terms of personal health from eating that actual shrimp?

Urvashi Rangan ([15:37](#)):

I would say in 2014, I would answer it actually differently than I would answer it today, which is because we have a bit more understanding now of our own gut health being fundamental to our immune system, nervous system, all sorts of things being a very fundamental part of our health and the impact of potentially low levels of antibiotics and pesticides over time in what we eat and how that may impact the biology in our gut biomes and what that might do. I would not have known that in 2014. I think that still sort of was emerging at the time and I would've in 2014 said no, those antibiotic residues are probably not an issue for people. Certainly even today I would say it's not an acute health risk. However, in most cases, whether it's shrimp or meat or dairy or any of the systems that come from intensive industrial animal production, even U.S.DA does these measurements over time. There are multiple residues of drugs and chemicals found on multiple samples of meat. So it's not just one, it's usually multiple. We have no idea what multiple exposures do.

([16:53](#)):

I also want to mention viruses and another pathogen called Vibrio, which we found an enormous amount of on the shrimp and Vibrio is an example, there are other examples like this for other fish production systems, of a bacteria that you're going to find at relatively low levels in the natural environment. And it's a bacteria not unlike our gut. We have some bad bacteria down there that are basically out-competed most of the time by good bacteria around them and that keeps them in check. That's how the bacterial world sort of works out there.

([17:31](#)):

However, when a biological system is compromised either by getting treated with antibiotics or pesticides and it compromises the ability of that biological system to control for those pathogens like Vibrio, you will end up seeing in what we saw was quite a significant amount of Vibrio on a significant number of samples. And that suggests, again, first of all, Vibrio can cause illness. It doesn't always cause illness and I think sometimes it's not just good or bad, but how much you're exposed to at a given time, which is sort of the dose in that case that makes the poison.

([18:18](#)):

It's a very risky food commodity already and it's made riskier by how we produce it and then how we import it and don't have control over really everybody else's production system. And then we don't really enforce our own regulations or regulate it very well. So that puts the public essentially in the forefront of the risk for this particular food commodity. We import a lot of food, but it's a particularly high level of import in this particular commodity compared to a lot of others.

Jerusha Klempner ([18:57](#)):

Those chemicals and antibiotics end up in surrounding waterways where they're destructive to local ecosystems. In the early years of shrimp aquaculture, mangrove destruction was a huge problem. Mangroves are trees that grow in coastal waterways and play a critical role in protecting against storm surges and nursing wild fish stocks and absorbing carbon dioxide. In recent years, some countries have made strides in replanting mangroves and passing laws that require farms to plant additional trees for every tree lost. But there are additional problems beyond environmental ones most consumers would

probably like to know about child and forced labor in the shrimp supply chain, something that's been an issue with imported shrimp for many years now.

Nathan Rickard ([19:39](#)):

Thailand was the dominant supplier of imported shrimp in the United States. And if you thought of imported shrimp, you were thinking about Thailand and Thailand had invested quite a bit into its shrimp farming industry. And so its processing plants, its farms. They were probably ahead of every place else in terms of the technology and the work that they were doing, but they were keeping their labor costs low. And there were two components that would lead to forced or child labor in the supply chains. The first was in the production of shrimp feed so that if you had boats, vessels that were working, that were catching fish that were then processed in defeat, those vessels have gotten a lot of attention by fantastic investigative reports and by activists that were down on the ground looking at what happened with those vessels. That continues to be a concern because the Thai fishing industry has, despite lots of attention being paid on, it hasn't been able to make significant progress on way that they go.

([20:37](#)):

The second place that's unique to the shrimp industry is the peeling of shrimp and peeled shrimp in the market, also predominantly Thai if you're talking about 2010. The way that the Thai industry kept down its labor costs is they started to contract out work to some places called peeling sheds. And these peeling sheds would be labor contractor similar to what you'd see like in textiles or any places where it was high labor work that posed risks and you wanted to keep it down, you would contract that out and then see no evil, hear no evil, speak no evil, not know what happened in those places. In Thailand, what was going on is that you would have immigrant labor, people who were guest workers from surrounding countries but then didn't have really any rights and then would be in circumstances where they were exploited. And so then you have documented forced labor in those conditions.

([21:30](#)):

One of the reasons why consumers, we think that they don't buy seafood is because of the prep work that goes into it. So with shrimp you're talking about beheading it, peeling the shells off of it. In the United States when shrimp is peeled, it's peeled through a machine and the machine presses the outside of the shrimp and it causes the meat to pop out. That leads to when you view it, shrimp that looks like it might be beat up, it doesn't look as careful and perfect as shrimp that it's hand peeled. If you were to buy shrimp with its shell on and peel it at home, it would have a nicer texture. Well, to get that for import shrimp, you've got people who are hand peeling that shrimp. And that's where a lot of the issues with forced and child labor came up with in that supply chain because you would keep those labor costs so far down. And in Thailand it was the use of migrant labor from other countries.

Lee Van der Voo ([22:31](#)):

My name is Lee Van der Voo and I'm a journalist and editor. I edit investigations at Civil Eats and I am the author of a book called The Fish Market about domestic seafood policy.

([22:44](#)):

If you think about capitalism being the pursuit of the absolute lowest cost for any product, seafood is the place where the market can push The hardest people who are doing those jobs are often recruited from places where they have very, very few options for work, not a very high expectation in terms of what they'll be paid. And then they're put in this labor market that operates almost exclusively on the water outside the view of most regulatory authorities. Anything goes, right? There's been terrible examples of folks not only just dying at sea but being underfed hours and hours and hours without rest,

not being provided lodging or even a very safe vessel to work on. So it's just a very strange, the wild west of the wild west, it's just the edge of the world, kind of an environment where there can be wonderful experiences for people out on boats. And I've had some of them, but it can also be a very dangerous place.

[\(23:57\)](#):

Thailand is particularly thorny. Over the last decade or so, Thai fishing boats have been identified as a place where labor conditions are really, really an issue. Some of the instances of slave labor that have been documented have been really severe. So I think there's been pressure on the Thai government to correct that. And I know that there have been corrective maneuvers, but there's also an awful lot of trepidation, I guess, about Thai suppliers in the seafood marketplace to the extent that these problems can be solved. I mean something to know is that international governing bodies that make what little law and regulation there is on the sea are ruled by consensus that is they're a universe where everybody at the table has to agree before something can get done.

[\(24:51\)](#):

So if you imagine you have a bad actor at the table that the other folks there are trying to reign in, if that single actor votes against that change, then it just doesn't fly. So there's this paralysis around ever making meaningful change. And it takes an awful lot of attention and effort to move anything in a direction. It's as if you had the United Nations making policy. It almost never happened. So there are these incredibly long meetings and lots of buildup and discussion and fanfare and in the end, the follow through is minuscule compared to the ticker tape around discussions at the UN. And I would say seafood policy is very much this way.

Nathan Rickard [\(25:42\)](#):

Response of the market to what had been tremendous investigative reports. And again, tremendous work from people on the ground was to condemn that production model and to move away from the Thai industry as a source of supply. So on that side, it's been really great in that it's drawn people's attention to the nature of the supply chain and that this exists within the fish fishing and seafood industry. And that's leading to lots of initiatives and campaigns by environmental and human rights organizations in the United States and in other major seafood importing market to make sure that people are taking into account the labor conditions that go into seafood supply chains. And so what you see now is that the Thai dominance on peeled shrimp supply to the world has been replaced by Indian shrimp and Indian sourcing. And the Indian shrimp industry operates in the same way that the Thai industry operates.

[\(26:40\)](#):

And in fact, Thai companies invested in India to move their production there. So what you have again is peeling houses that have popped up throughout India and that have contracted labor. They are not using immigrant labor from other countries. They don't have that same model in Thailand. In India, they have very large populations of poor people who are available to do that work. The Southern Shrimp Alliance, working along with human rights organizations has tried to do investigations on the ground and to get a better sense about what is happening within those peeling sheds and whether or not we are again talking about something we've reverted to reliance on forced labor. The industry hasn't documented and we haven't been able to prove that's what's happening, but it is a concern and it is something that we are surprised by that isn't a concern within the market, that people themselves aren't asking, well geez, if it just went from Thailand to India and they're using the exact same type of

production methods, what's our guarantee that the same thing that we were concerned about in Thailand isn't happening with India?

Lee Van der Voo ([27:52](#)):

Eating seafood in America is really, it's kind of a murky business. We have some of the largest ocean, what we call the EEC. We have some of the largest ocean territories in the world and some of the best fishery policies in the world of governing our domestic seafood. I always tell folks when in doubt eat domestic because our domestic products here in the U.S. are fantastic. They guard against environmental degradation, against harms to species, against harms to workers. But there's not a lot of traceability around these products. It could be very unclear not only what you're eating, how it was raised, how it was caught, and whether the labor conditions aboard those vessels are in line with what a lot of consumers these days expect.

Nathan Rickard ([28:49](#)):

There are a lot of countries that produce shrimp through shrimp farming that don't use antibiotics. There are countries that, like in Ecuador, you wouldn't have concerns like this where you're not moving towards peeling sheds. There are sources of supply that you can go to that don't present these risks. And that's I think what the focus now is from the industry is making sure that people understand that these are not the only options. That is not something where we're just racing to the bottom.

Jerusha Klemperer ([29:16](#)):

So what are those other options or sources of supply that Rickard mentions? There's some farmed international shrimp that isn't quite as bad on the antibiotics or labor front and there is some wild caught international shrimp. But what about the wild shrimpers here in the U.S., including the ones Nathan Rickard represents? As Thailand and India and Vietnam farm more and more shrimp in problematic ways and saturate our markets the shrimpers of the Southeast and Southern Gulf states continue on catching a wild product and following us regulations and doing their best to stay alive as an industry hoping to demonstrate their value to consumers in a market that does not always seem to recognize it.

John Williams ([29:56](#)):

Hello young lady.

Jerusha Klemperer ([29:57](#)):

How you doing?

John Williams ([29:57](#)):

How you doing today?

Jerusha Klemperer ([30:01](#)):

I'm good. I'm so happy that you could still make it because I know you've had quite a week.

John Williams ([30:08](#)):

It's been busy. I'll tell you.

Jerusha Klemperer ([30:09](#)):

I spoke to John Williams of the Southern Shrimp Alliance right after Hurricane Ian slammed the Gulf Coast in September of 2022.

John Williams ([30:16](#)):

Trying to get some help down in Fort Myers to the shrimp industry. There's probably 30 boats or more, just smashed right up. When we had Katrina that washed a lot of the big boats up in the marsh and they had big cranes come down there and pick them up and put them back in the water. And we're checking now to see if that's possible in Fort Myers. The tidal surge took all those boats and just stacked them in a pile.

([30:50](#)):

My name is John Williams. I am Executive Director of the Southern Shrimp Alliance. We've been here 20 years now. I was a former shrimper. I shrimped for about 40 years. I tell you start getting old, how old I am, but at some point I had four boats. I had an unloading facility, I had done a lot of stuff. But when we were hit with the Chinese shrimp coming in and it just drove our prices down to almost nothing, I wound up having to sell everything because I couldn't pay for it any longer. And I thought, well, working on these kinds of issues would certainly be a much bigger help to the industry than me being out there shrimping. So that I made that decision to be a part of this Southern Shrimp Alliance.

([31:43](#)):

We represent the shrimpers from Brownsville, Texas right on the border all the way back to the Virginia/North Carolina border there. The entire southeast eight states that have shrimp producers in them. So we represent the entire domestic shrimp industry.

Jerusha Klemperer ([32:05](#)):

Shrimp fishing gets a bad rap for bycatch, the accidental capture of species that the fishermen weren't trying to catch. So with shrimp trawling nets, you're also likely to catch a bunch of other fish and sometimes endangered marine animals like turtles. The Gulf of Mexico has the most stringent rules and regulations around this. And it means that shrimpers there do the best on bycatch, meaning they have the least of it. Part of John Williams' job is to act as a liaison between the government agencies who regulate this issue and the shrimp fisherman he represents.

John Williams ([32:36](#)):

We've been very fortunate to have a very good group of people in NOAA, National Marine Fishery Service, all of all our regulators we work with now. And we do the best to make sure that we are always involved in any kind of new regulation, any kind of issues or things that we have to have in our nets to help sea turtles help bycatch. We do it all, but we do work together to make sure it works for the industry and for the regulators. And we've done a very good job of that.

Nathan Rickard ([33:12](#)):

You have these requirements for turtle excluder devices, they call them T-E-Ds or TEDs, that went in place. And the shrimp industry went to war with the federal government over it. And there were these big part of the stories about the development of the shrimp industry is that there were blockades at ports in Texas and Louisiana by shrimpers who were so angry about having this requirement put in place. They had figured out though, if they worked with NOAA and they developed their own TEDs, they could meet the requirements of knocking the turtles out, sorry, not knocking, but getting so that they

didn't go through into the net while still maintaining the vast majority, I mean, almost 100% of their catch, 95% or above. That's not the only bycatch in terms of turtles. There's also fish bycatch. So fishermen, shrimp trawlers are also required to carry something called bycatch reduction devices or BRDs. So you have TEDs and you have BRDs. And those are now also a regular part of what's in the trawl nets as they work.

John Williams ([34:13](#)):

Since that huge oil spill, I think 2010, they've been a lot of smaller turtles being called and killed. So we're redesigning the TEDs, if you will, to prevent them from being drowned in the nets. And same way with bycatch, we're trying to redesign bycatch reduction devices. So those are being redesigned and luckily the industry is working with the regulators to help design where it works for both of us. And I think that's a good example of how the industry has grown in the last 20 years. I'm not saying that we've done all this by no means, but what we've put in place back then is worked together instead of working against each other. And it's worked out very well.

Nathan Rickard ([35:13](#)):

What is not lost on them is that when a sea turtle swims out of the EEC of the United States, these are migratory animals, they then go into waters where there are none of those protections. And one of the things that the industry asks then is if we are being held to these standards, why is it that we compete in a marketplace where the goods that are being imported don't have those in place? If their labor standards are high, they can't get everybody up to us labor standards. But what they can do is make sure that forced child slave labor is not something that is part of the supply chains.

John Williams ([35:45](#)):

We're not against imported shrimp. We're against illegal imported shrimp. And that's what we work on all the time in DC. We try to make them shrimp legal, take the chemicals out, take the forced labor out and do like we do.

Nathan Rickard ([36:03](#)):

There are provisions in the law that prohibit the importation of shrimp, wild caught shrimp if the country doesn't have measures in place that protect sea turtles to the same level that the United States does. And Section 609 program run by the Department of State, the industry has been focused on making that program work. And so now our imports and our tariff code beginning in July of 2021, distinguished between wild caught and farm raised imports. So we can tell where wild caught shrimp is coming into the U.S. and whether or not the countries that are exporting wild caught shrimp to the U.S. are in fact certified the way that they're supposed to be by the State Department. What we found is there's a lot of stuff that's coming in that's not from countries that is certified. And so that's something else that they're working on.

([36:46](#)):

And the big issue that's coming up, not just with the shrimp industry but with all seafood that's being imported in the United States, is the Marine Mammal Protection Act has had import provisions that were in the original law in 1972, but have never been enforced. And so NOAA Fisheries is now doing a fishery by fishery analysis of every foreign fishery in the world to determine whether or not they have protections in place for marine mammals that are similar to what the United States is.

Jerusha Klemperer (37:16):

This lack of transparency and traceability is one of the main issues with international shrimp and with all international seafood, really. So I thought it could be good to have John Williams tell us about domestic wild caught shrimp production and what that process looks like from start to finish in the southern states along the coast.

John Williams (37:34):

Offshore shrimp boats fish out deeper water and they're anywhere from probably 70-75 feet to 100 feet long. And normally you have the bigger boats, like 100 feet long, you may have three crew members and a captain. So four people total and on the smaller ones like 70 to 75 feet, 80 feet, there'll be two crew members and a captain. So you don't need that many crewmen for that.

(38:10):

What they do, we catch the shrimp and as soon as we catch them crewmen, well say cull the shrimp, they will take the shrimp out of whatever else you've caught and you put them in freezer bags and you put them in a freezer. Most boats now have freezers on them. They're frozen within 10 minutes when they're put on the deck and they're frozen to like 20 below zero and they keep them there.

(38:37):

Then when they come in, they'll stay probably... Fortunately when I quit shrimping, most I was staying was about 12, 14 days. Because I just didn't want to do that anymore. Not staying, being away from the family and all this. Now some of the boats are staying 40 and 50 days because they're freezer boats. They freeze everything they catch and they'll go to the dock, they'll unload them. Then the processor will buy them from an unloading facility. And what he'll do, he will drain them, peel them de-vein them, refreeze them in their cartons and stuff for sale.

(39:22):

But what the boat has to do also, we have to fill out what you call it, a trip ticket. Every time we unload, we fill out a trip ticket and that goes to the National Marine Fishers Service. You have to see where you caught those shrimp, all different areas have numbers, what number it was, what depth of water it was, how many shrimp you caught, what size they were, and just everything goes on that trip ticket that would tell National Marine Fishery, how many shrimp you caught, the fleet is catching by seeing those trip tickets.

(39:56):

And that's sort of a management tool for them. They use that data to determine if they need to do something further with the shrimp industry or is it okay? Fortunately the shrimp are an annual species. If you catch them, I mean you can catch whatever you possibly can. You don't harm the species because they're going to all die by the end of the year anyway. So your whole thing for next year will depend on what was there this year. And it doesn't matter how many you catch, you can't never catch all of them by no means. But what is left, they die. So you have your next year's crop already be being groomed in the shallow waters and stuff. But it's a heck of a job, I'll put it that way. I mean, I believe me, I loved it. I did it 40 years. But it can still be a pain sometimes.

Jerusha Klemperer (41:08):

So let's say you wanted to avoid the problematic farmed international shrimp and buy wild cut domestic shrimp, what should you look for?

John Williams ([41:15](#)):

Everything has to be labeled. Where was caught, how was caught, just everything. And it was called COOL, COOL law, country of origin labeling. And we were pushing for that for a long time and we got it. And they need to have that label. You can actually go in the grocery store. If they don't have it, you can tell them either get it or I'm going to report you to the U.S.DA. And normally they will do it, but most grocery stores have that labeling. They have grown accustomed to it. And that's all we want. Just be honest, don't try to sell something that is not, and it's been working out very well.

Jerusha Klemperer ([42:01](#)):

And if I'm seeing it, if I go to the fish monger and I'm seeing domestic wild caught shrimp like out on ice served fresh, has it previously been frozen and now defrosted? If it's all this ways away from?

John Williams ([42:16](#)):

Most of the time, yes, it's been frozen. Matter of fact, the story goes that you can freeze and defrost shrimp seven times before it starts to impact, starts taken away from the flavor or the quality. Seven times. So soon as we catch it, we freeze them and soon we unload them they're thawed out and they're headed, graded and all that. They're processed and then they're frozen again. And then they might make it to the grocery store. We don't know. But yeah, supposedly you can do it seven times.

Jerusha Klemperer ([42:54](#)):

Can you talk a little bit about the taste and maybe your own experience as a lifelong eater of fresh, wild caught shrimp?

John Williams ([43:03](#)):

Certainly. First thing, we don't use chemicals. Chemicals will change the flavor of shrimp. And to what degree, I don't know. Because I don't eat them things. But I have tried imported product and they honestly to me, just to me, they don't have any flavor. Zero flavor, the only flavor they have is the breading or the spices they put on them. The wild caught shrimp. They only have chemicals. They don't have anything out. They're naturally grown and they have a lot of flavor. And fortunately, different species of our shrimp have different flavors. For example, the white shrimp is very, very mild. Very mild, but is good, very mild. Brown shrimp has a lot more flavor. The pink shrimp in Tortuga area, Key West area has a tremendous amount of flavor. And sometimes the shrimp closer to shore has more flavor than the ones further offshore it. I guess it really depends on who you are and what you really looking for in a flavor flavorful shrimp.

Jerusha Klemperer ([44:25](#)):

It's so interesting because I think the average U.S. consumer would have no concept that there is anything other than just shrimp, right?

John Williams ([44:35](#)):

Yep.

Jerusha Klemperer ([44:35](#)):

And here you are describing all of these different varieties and flavors and nuances and that's I think, such a missed opportunity for so many people.

John Williams ([44:43](#)):

You're right. You're exactly right. Now I agree and I say I've eat shrimp all my life and I grew up eating shrimp in South Carolina, and it don't get any better than having fresh shrimp.

Jerusha Klemperer ([44:59](#)):

That all-you-can-eat shrimp you're seeing at a restaurant chain is not the shrimp he's talking about. I talked with Andrea Reusing of Chapel Hill, North Carolina's Lantern Restaurant, which focuses on local food, about customer expectations around seafood, especially things like salmon and shrimp, which people have come to believe should always be available to them on a menu.

Andrea Reusing ([45:19](#)):

I've had a restaurant in Chapel Hill, North Carolina for 21 years this January, and we have focused largely on local sourcing and kind of developing our menu from the point of view of using the things that our friends who are farming and who are ranching and who are fishing using what they have available as much as possible. And yes, so I think seafood is a very fraught subject for most people that I talk to that do not work in restaurants or do not think about food for a living. It is the most complicated, difficult subject that people don't feel qualified to make decisions about because it's just, there's so dense and there's so much subtlety to it. So we make decisions based a lot honestly, on economics of the restaurant and on consumer taste because consumer taste is very specific about seafood. So we do have some no-nos, just like we do with everything else.

([46:21](#)):

We will not serve pork from animals that were not raised outside. We do not serve any farm raised salmon and haven't for about, I don't know, 15 or 17 years, I try to explain shrimp and why we serve shrimp to guests and to staff when we're talking about it because wild shrimp, it's a historic industry. In North Carolina, there used to be so many families that were shrimpers, and now I think we're down to something like under shrimp 30 boats in North Carolina. The shrimp themselves are short-lived. So it's not a species decimation problem. It can be a catch method problem when the trawlers actually hit the bottom of the ocean or reefs or things that they shouldn't be in contact with.

([47:12](#)):

The big problem with shrimp is bycatch. And the bycatch historically could be as much as 15 to one, bycatch to shrimp, 10 to one, eight to one you hear now a lot. The people that we deal with for our shrimp, they only go where the shrimp are and they only go at the time of year where they're going to get a very, very high percentage of shrimp. So that's one reason.

([47:40](#)):

But I also try to use shrimp as a condiment. So I think the soup that we do, that we cook the shrimp for a really long time, which is totally counterintuitive, and I never would've tried doing that except for my husband bought me a kind of used paperback Vietnamese cookbook from the seventies, and he made the most delicious soup and it was raw shrimp marinated with shallots and a ton of black pepper and a lot of fish sauce and marinated for, I don't know, half an hour, and then sautéed very slowly and then kind of cracked rice, broken rice added to it, this very porridgy, homey kind of congy texture, but with a lot of brightness and scallions at the end and cilantro and so yummy.

([48:29](#)):

That's this thing that's one of our most popular shrimp dishes at the restaurant. And you're eating, shh, don't tell anyone, but you're eating two shrimp. But it's this shrimpy yummy like iodine tasting, shellfish

tasting, really comforting dish that you can also throw a ton of vegetables in and get the nutritional value of it up with pea greens or spinach or all kinds of herbs. So that was a revelation to me of using shrimp as a condiment.

Jerusha Klempere (49:01):

In terms of other things to look for as you shop for shrimp, there are some labels available that are meant to indicate better environmental practices. For farmed shrimp. You might see the best aquaculture practices, BAP label. And for wild shrimp, you might see the MSC label on various wild caught shrimp from around the world. But some critics warned that these certifications are pay to play, meaning the companies asking to be certified, pay the certifying body to review and approve them, and as a result are not totally reliable. All of the experts we talked to for an article we wrote on shrimp a few years back told us they would choose wild caught gulf shrimp above any others, but that in general we should be eating less shrimp.

(49:45):

I asked Nathan Rickard if there's any hopeful possibility for the domestic wild caught shrimp industry to remain and sustain itself.

Nathan Rickard (49:53):

If the market for shrimp is growing and the prices are remaining stable, the shrimp industry in the United States has an ability to compete and to stay in business and then to, honestly, to develop a niche market where they could sell wild caught shrimp as a premium product over imported shrimp and be able to grow the market that way. That had been the case up until the last few years. What is a problem for the industry going forward is when you have people who then, or industries that are artificially oversupplying the marketplace and India has had such heavy subsidies into what they're exporting that we got ham and that we started to see prices going down in the market while those imports went up. At that point, that's something where there needs to be interventions.

(50:46):

For 10 years, the shrimp industry had seen what they think is a manageable market for the long term of the industry, which is something where imports are growing, but they're growing at stable prices in a way that grows the market and that everybody can participate in those circumstances then the industry gets to focus on what's the next generation of fishermen? How do we rebuild infrastructure so that you can get more fishing communities around the country? How do we get the next generation of fishermen working because there's a future for them there.

(51:18):

There are thousands of family run businesses that produce food for Americans and have been doing it for generations that were really in peril. And I think that the shrimp industry is a good example on one hand about what could be done if there is federal government intervention to try and create a marketplace for everybody. I mean, the thing about people who promote free trade is that any kind of intervention in the market will cause harm to everybody. But what we've seen is, in fact, you can have something where with government involvement, everybody makes that, well, shrimp market grew, it grew expansively and the shrimp industry did well and it continued to invest into itself. So there's a thing I think, where people look at it and say, that's a shame, but it's the way things happen. It's just the way it's going to be. All of this is going to be eliminated when the shrimp industry can stand and say, no, that's not actually the case. It doesn't have to be this way.

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John Williams ([52:24](#)):

I'll tell you, I've been through it all. I've been owner operator for 40 years on different boats. My biggest boat, I think it was like 105 feet, I believe, and the smallest one was 73 feet. And I've done it all, you might say, but this right here is so much better to me because I feel like I'm helping the industry more by doing this. And the industry needs help. It needs help.

Jerusha Klemperer ([53:04](#)):

What You're Eating is produced by Nathan Dalton and [foodprint.org](#), which is a project of the Grace Communications Foundation. Special thanks to Nathan Rickard, Dr. Urvashi Rangan, John Williams, Lee Van der Voo, and Andrea Reusing. You can find us at [www.foodprint.org](#) where we have this podcast as well as articles, reports of food label guide and more.