Fish Stories: Success and Value in Seafood Traceability

OCEANA Protecting the World's Oceans

Introduction

It seems like a simple concept—knowing where your food comes from. But unfortunately, seafood lovers rarely know how a fish got to their dinner plate. This knowledge is important, because a complex and opaque seafood supply chain opens the door to illegal and irresponsible fishing practices, seafood fraud, public health risks, and even slave labor and organized crime. These problems threaten the oceans and consumers' wallets, and undermine honest fishermen and businesses that play by the rules.

But these are fixable problems. The first step in ensuring that seafood is safe, legally caught and honestly labeled is traceability. Traceability increases transparency and accountability in the seafood supply chain by ensuring that information such as how, when and where fish are caught or harvested follows the fish from boat to plate. The ability to share information along the seafood supply chain reduces the risk of seafood fraud or mislabeling and helps prevent illegal products from entering the market.

This report uses testimonials from within the industry to show that full-chain traceability works. Firsthand accounts from wholesalers, retailers and restaurateurs show that full-chain traceability is feasible—and even profitable—due to increasing consumer demand that seafood be caught legally and responsibly. Many businesses throughout the seafood supply chain are ahead of the game and meeting this demand. They are telling the stories of their products, growing their products' value, and establishing trust with their customers. The interviews that Oceana conducted indicate that more and more, consumers are willing to pay top-dollar for seafood products that they know are safe, legally caught and honestly labeled.

Some businesses have created their own traceability tools, while others use third-party traceability providers that help create the infrastructure and provide support for traceability. Traceability systems may incorporate unique quick response (QR) codes that can be scanned by the customers and provide them with information about the product; some physically tag the fish upon landing, while other traceability software platforms allow companies throughout the supply chain to share information, improve efficiency and manage logistics.

This report highlights businesses along the supply chain that are putting seafood traceability into practice. Oceana interviewed fishermen, processors, wholesalers, restaurateurs and grocery store managers to better understand why they chose to adopt a traceability program and how traceability has helped their businesses. The individuals interviewed for this report utilize just a few of the many traceability systems that are currently used throughout the seafood industry.

Jay Fleming

Jared Auerbach
Owner
Red's Best
Boston, MA

Jared Auerbach began his career as a fisherman working on commercial vessels in Alaska and Cape Cod. He started Red's Best, a seafood wholesale distributor, to support fishermen whose livelihoods depend on their catch. He developed his own data management software to make federal reporting easier and also to provide a traceability tool for his fish products. The data is entered electronically, packaged in a consumer-friendly format, and the shippers can produce a traceability label to put on the fish or package that reaches the end consumer. Each label has a QR code that links fish to fishermen, including information on species, vessel, gear type and port of origin.

Auerbach believes there's a romance to fishing, comparing it to hunter-gatherers making a living off the land and feeding their community. He says that being able to tell the story of his fish is important to building local demand for local fish. He points to the fact that people in the Northeast are buying tilapia imported from Ecuador by big seafood companies, while right there in New England, his fishermen are harvesting perfectly delicious and well-managed local species.

"When [we] unload a boat, [we] collect everything. We pass on the name of the boat, the gear type, the port landed, and the fisherman's name or the owner of the boat," he says. Because his fish are identified and documented immediately on the dock, and that information follows the fish to the dinner plate, the end consumers know that a skinless, boneless fillet is indeed a hake caught in local waters, instead of an imported mystery fish, says Auerbach. This

> ## Traceability Helps Red's Best Restore American Fishing Traditions

builds trust, he says, which in turn builds value, which leads to greater profitability. Traceability has not only allowed Auerbach to work towards restoring American fishing traditions, but has helped distinguish his product from others in the marketplace.

Duncan Cameron
Owner
Sustainable Seas
Vancouver, BC

Duncan Cameron is a fourth-generation Canadian fisherman who started his own commercial fishing company called Sustainable Seas. His targeted fisheries include spot prawns, salmon, halibut, rockfish and Dungeness crab. Sustainable Seas uses ThisFish seafood traceability system to reconnect the consumer with what is occurring in the ocean. ThisFish helps Cameron brand his catch by creating an online profile for his company, using unique codes to trace his product, and also allows consumers to provide feedback.

"The transparency that traceability has brought to my business has been a great help when entering new markets or approaching new clients. When you are able to have a trusted third party provide all the fish information to a potential customer, it quickly creates trust and interest."

Cameron says that sustainability has been the foundation of his business since its beginning. He believes that traceability helps promote sustainable practices and improve fisheries management by allowing consumers to make informed decisions. He began using traceability as a tool to educate customers and bring his product to new markets, but also found that traceability allows for quality data collection. Cameron believes that baseline scientific data is important for effective fisheries management and the success of his fishing fleet. Cameron points out that without proper management of fisheries, he would lose his livelihood. He says that proper care of the waters he fishes has ushered in record returns in the last five years, and Cameron is proud to be able to tell the story of this recovery—he points out that it's a great way to attract new clients looking for sustainable fishing practices.

Currently, Cameron is working on a pilot project, labeling individual portions of fish with a picture of the fishermen who caught it, as well as with the location, gear method and a traceability code. Chefs and fishmongers are able to use this data in their restaurants and fish markets to provide their customers with additional information about the catch.

Traceability Opens New Markets for Sustainable Seas

"Traceability in the long term should allow everyone to see all the information they would like to about the food they're eating . . . [and traceability] has the capacity to end illegal fishing, because if every fish that is caught is traceable, every fish landed should be accounted for."

Brad Blymier
Owner and Co-Founder
War Shore Oyster Company
Onancock, VA

Daniel Plimpton

Brad Blymier was well into a career selling software when he turned an oyster farming hobby into a thriving business. War Shore Oysters, located in northern Virginia, started selling to two stores and has now partnered with other local farmers to supply more than 150 restaurants and grocery chains, including Whole Foods. War Shore sells oysters and other shellfish, such as scallops and clams, throughout Virginia, Washington, D.C. and Maryland. For oysters, traceability is government mandated in the United States, and each bag of oysters sold must include a shellfish shipping tag that includes information on the harvest, receiving, storage and shipping of the product, according to the Food and Drug Administration's National Shellfish Sanitation Program.[1] The regulation requires restaurants and other retailers to keep the original shellfish tag on file for at least 90 days.

In addition to the federally mandated shellfish tags, Blymier uses Trace Register, an electronic traceability provider, to record and share information about his product with his buyers. The information he collects goes beyond the required shellfish shipping tag—he also closely monitors the sediment and water contents of the bay in which the oysters grow. For Blymier, "it's sales through relationships." Blymier stands behind traceability, because it has not only opened up new markets, but also allows him to build trust with his customers and sell a high-end, high-quality product.

One of the appeals of oysters, Blymier says, is that they take sustainability a step further because they help clean the Chesapeake Bay. This is a benefit consumers get excited about, to know that they are doing the oceans a favor.

"That kind of traceability is great, and it's what chefs want, especially in today's market. . . they want good, quality seafood and [to] know where it comes from and who's harvesting it. And that's what I can offer to them. I work with 14 boats out of Virginia. . . I know exactly where they fish, where it's coming out, moisture content, etc. With these traceability records, I can go to my customers and say 'Hey, today I can tell you for a fact that that scallop will test under 82 percent moisture if you tested it right now.'"

> ### Traceability Helps War Shore Oyster Company Supply Chefs with the Product They Demand

War Shore Oyster Company

Reese Antley
Vice President of Operations
Wood's Fisheries
Port St. Joe, FL

Oceana/Patrick Mustain

Oceana/Patrick Mustain

Wood's Fisheries began using traceability in its supply chain as part of a pilot project with one of its primary customers. Reese Antley says at first, he was unsure about traceability. It was expensive to enter additional information electronically, as well as on paper, and Antley was not convinced that all fishermen would enter correct information through a self-regulated system. Reluctantly, he joined the pilot program with the goal of making it easier to manage the data his customers demanded and to level the playing field for all fishermen. Shortly after joining the pilot project, the BP oil spill occurred in the Gulf of Mexico, and the Gulf Seafood Trace (GST) program was formed to combat perceptions that Gulf shrimp was contaminated. The GST program was created with the help of the Gulf States Marine Fisheries Commission and disaster funding from Congress.

The goal of the GST program was to help build a market for Gulf seafood by telling its story, separating it from its overseas competition, and establishing it as a premium, all-American brand. The GST program used Trace Register software to empower companies to trace their product and allowed for the Gulf states to work together. It was through funding provided by the GST program that Antley was able to help format the traceability tool from a shrimper's perspective.

Antley quickly realized that his new and improved traceability system allowed him access to large retailers like Whole Foods and Wegmans. These companies require their shrimp suppliers to ensure that bycatch reduction devices are being utilized in order to reduce the catch of non-target fish and sea turtles. Antley points out that through Trace Register, Whole Foods and Wegmans can verify exactly where, when and how the shrimp are harvested. After the GST program ended, Antley continued to use Trace Register, as he saw the value of being able to tell the story of Wood's shrimp and highlight its efforts to fish sustainably. For Wood's Fisheries, sustainability is a way of life, Antley says. He describes the importance of protecting shrimp habitat, reducing bycatch, and building local economies to ensure that Wood's can continue shrimping for generations to come.

Currently, Antley explains, the domestic shrimp industry comprises only 10 percent of the total market share—most of the shrimp consumed in the U.S. is imported from farms overseas, as noted in Oceana's 2014 report "Shrimp: Oceana Reveals Misrepresentation of America's Favorite Seafood." He believes there is room to increase profits in the domestic shrimp industry, and that's where traceability comes in. Shrimp is America's favorite seafood, with average national consumption levels twice as high as salmon.[2] Traceability allows domestic fishermen to tell the story of their catch and sell more shrimp, Antley says.

Antley believes traceability has positioned Wood's Fisheries as a front-runner in the industry by continuing to increase its visibility and brand awareness. For Wood's Fisheries, using a third-party tool like Trace Register is extremely important. Antley points out that anyone can claim to be sustainable, but a business actually needs outside verification to prove that it's engaging in responsible practices. Trace Register polices the information being entered at all steps of the supply chain, and through data analytics, is able to look for abnormal activity, similar to how credit card companies monitor for fraud. This helps document the actions shrimpers take to meet federal fisheries regulations.

Traceability Helps Wood's Fisheries Ensure Long-Term Viability of Gulf Shrimping for Future Generations

Trace Register software has helped level the playing field among those that use it, so Antley is confident that his domestic competitors are playing by the same rules. Traceability allows him to focus on the quality of the product and to ensure he is buying from shrimpers that use the best practices.

"It's not just about the environment or the shrimp stock, but rather about a way of life. We want Wood's son to have a business that will be around for generations, making sure the habitat is being taken care of, and making sure that we are not catching too much bycatch, and making sure we can market our shrimp at a better price, because it's a better product."

"Without traceability and without that valid data, you cannot have sustainability. You can say you're doing it, but [Trace Register] allows us to prove [that we're] really doing it."

John Rorapaugh
Director of Sustainability
ProFish
Washington, DC

Oceana/Patrick Mustain

Traceability Helps ProFish Bridge the Gap Between Fishermen and Consumers

ProFish is a wholesale distributor located in Washington, D.C. that specializes in providing restaurants with high-end seafood. About 12 years ago, a customer asked John Rorapaugh if he could color code their price list according to the Monterey Bay Aquarium's Seafood Watch program. At the time, Rorapaugh said, "Who is Monterey Bay?" But, as he dove into the project, he realized that this task was not only harder than he thought, but also incredibly important. Many types of popular fish such as snapper, grouper and tuna are rated differently based on how or where they are caught, or even which specific species they are—such as vermillion snapper versus red snapper. However, the average consumer at the grocery store is left in the dark about these differences without traceability in the supply chain. ProFish began taking a closer look at the product it sold and started tracing its seafood using an in-house system called Fish Print. Fish Print uses boat-to-plate traceability to provide the customer with information to make sustainable decisions based on where and how the fish was caught.

Fish Print provides digital QR codes that link to information about when and where the fish was caught, the gear type used, and information about the products' nutrition and sustainability. Customers can scan these QR codes directly from menus to learn more about their dinner. For Rorapaugh, traceability has helped bridge the gap between fishermen and consumers while simultaneously increasing sales.

Rorapaugh recalls: "One of our buyers in Florida [took a short video as he was] picking up the fish from the captain. . . [he] said, 'Hey these snappers are coming to ProFish, look out for them!' I put that on social media, and people loved it. We got calls for the next two days: 'When's the snapper coming in?' It's really cool, and people [are] starting to see it."

He notes the restaurant industry is hungry for this information: "[Telling] the story of seafood is really the future. What we're finding out is that the more [of a] story you have, the more you take products out of a commodity-side mindset and more into an artisanal product." Traceability allows Rorapaugh to help his restaurants participate in bringing the story to their consumers.

"When you eat a hamburger you want to be able to trace it back to a farm or cow—same with chickens. There is a level of comfort in that—when you know where your food came from. If you want to ask a question about it, you don't want to hear, 'I don't know.' With traceability, you get people away from distrusting the seafood and the seafood industry, and we get the merit we deserve, because there [are] a lot of great things [happening] in seafood. Through traceability and through storytelling, we'll be able to gain the trust of the public, and it will get people back to eating seafood."

Oceana/Patrick Mustain

Steve Vilnit
Director of Fisheries Marketing
J.J. McDonnell
Jessup, MD

Danny Spry Photography

J.J. McDonnell, founded in 1945, is a wholesaler that sells seafood through-out Virginia, Maryland and Washington, D.C. Traceability is a top priority for J.J. McDonnell. Not only does it source

Traceability Allows J.J. McDonnell to Help Consumers Make Sustainable Choices

directly from the fishermen and use its own online database for traceability, but the wholesaler also uses Trace Register to work with larger customers. Nearly all of its shipping labels have QR codes to allow easy access to product information. Steve Vilnit, director of fisheries marketing, uses

traceability to help tell the story about how a fish goes to market or to a restaurant. He says that the more you tell a product's story, the more the product value increases—and that the fishermen who are on board with traceability are getting access to markets that others are not.

Technology is making it easier than ever to incorporate traceability into the seafood supply chain, and Vilnit says that trend is going to continue. J.J. McDonnell believes in selling an authentic, sustainable product, and traceability allows it to do this. Vilnit says, "I think that traceability links to sustainability, so if [retailers] can link to vessel, to gear type and country of origin, etcetera—I think that's a great place

to start. If consumers can get that basic information, that gives them something to go off of in order to make decisions and vote with their fork."

"The restaurants want that [traceability] message. I don't have to get that message out to them—that we need traceability—they're already looking for it. . . there's a romance to it. And you can get more money for that product. It started with high-end places, but now the smaller places are doing it. . . But it's going to be these large customers, the ones that are making these demands right now—Whole Foods, Wegmans—that simply just won't buy product that isn't traceable, and this is really pushing the needle on traceability faster than it has been in years."

J.J. McDonnell

Michael Dimin
Founding Director
Sea to Table
Brooklyn, NY

David Bluvband Photography
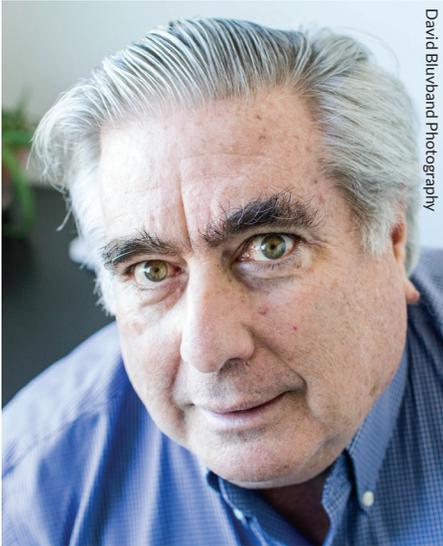
Sea to Table is a seafood wholesale distributor that represents fishermen and small scale fisheries all around the United States. Michael Dimin started Sea to Table by working with local fishermen in Tobago in the West Indies, processing and packaging the fish, then sending the product directly to local chefs in New York. As the model grew, Michael decided to focus more on sourcing domestic U.S. product, and he now ships from 38 different landing points around the United States.

Dimin has used seafood traceability from the start. Sea to Table created its own internal electronic traceability system that provides the name of the vessel and point of landing for every fish it sells. The majority of the product goes directly from the first point of landing to the end user who cooks the fish. Dimin says that traceability "creates a value to the end user. . . I think if he can see through the supply chain and actually see where it came from, who caught it, how it was caught. . . he feels more comfortable and secure in it. By being able to trace it. . .[it helps] eliminate the concept of seafood fraud. . . And I think it actually ends up creating more value for the fishermen so they can actually make more money."

Dimin understands that seafood is a resource that needs to be carefully managed and appreciated. He notes: "Sea to Table has only ever dealt with sustainably managed, sustainably harvested species, and it's just the nature of what we do. We won't sell something that we don't think is being properly managed or harvested." He has also noticed a rise in traceability and customers demanding more information, stating that, "People want to do the right thing and want to support traditional American fishing communities." Traceability allows Sea to Table to provide this service and even connect fishermen with their consumers.

"Everyone wants to know who grew their tomato, and wants to know who

Sea to Table Uses Traceability to Help Fishermen Learn about Their End Consumers

caught their fish, and that's a really good thing. People like to connect to the source and the harvest of their food. Consumers get this info, but fishermen traditionally are kept in the dark and do not really know where their fish goes. The thing that always surprises us and delights us is [before using traceability] they didn't realize that the fish that they caught is being served in a fine restaurant in Chicago or New York or Denver or Houston. With this system, the fishermen are really able to appreciate the fact that people like the work they do."

Sea to Table

SEAFOOD TRACEABILITY PIONEERS

Jonathan Pearlman
Director of Operations
Congressional Seafood
Jessup, MD

Oceana/Patrick Mustain

Congressional Seafood is a custom seafood processor that services primarily restaurants, country clubs and hotels in the Washington, D.C. metro area. It started using traceability as an attempt to level the playing field with its competitors. Jon Pearlman found himself being asked why his red snapper cost more than the cheaper "snapper" at a grocery store. Pearlman says, "I had to try to explain why our product is more expensive because of the water it's coming out of, because of the quality of the catch. . . and it kind of formed an idea for me. I teamed up with MJ [Gimbar] from the Black Restaurant Group, and we started a traceability program doing these QR codes."

The QR system that Pearlman helped develop includes stories, pictures and information about how the fish was caught, who caught it, a photo of the vessel, and even "a picture of a fisherman's dog, because him and his dog go out fishing together." All of this information together helped tell the story behind the fish they sold. Congressional uses traceability to help sell its product and also educate the consumer about how the fish was caught. Pearlman found that using traceability distinguishes Congressional products from others in the industry.

"I believe in a fully transparent system," Pearlman says. "You should be able to go back if you are the end user, whether you are a retail store or a restaurant, you should be able to ask the vendor about their product, and the vendor should be able to go to the source and ask 'What types of hooks did you use, what kind of nets did you use?' If you ask questions and demand this information, then everybody will hopefully get on board. . . It wouldn't be a special traceability program, it would be just the way life goes—the standard operating procedure."

"I've seen a rise in curiosity in our customers. I see customers wanting more information. I think when you go out to eat now, it's very rare that you just see on the menu 'chicken whatever.' It now says 'New Brunswick salmon,' or 'Campano blue

> **Traceability Helps Congressional Seafood Distinguish Its Product from the Status Quo**

shrimp,' or 'cage-free eggs' for your omelet. They want that information for themselves because it feels good to sell a responsible product, but also for the end user who we are all working for here."

Oceana/Patrick Mustain

David Krebs
President
Ariel Seafoods
Destin, FL

Ariel Seafoods is a wholesaler operating out of Destin, Florida. As a fisherman himself, David Krebs was well-versed in the rules and regulations that domestic fishermen adhere to. He started his own traceability system, Fish Trax, to tell the story of the fish he sold to customers and to highlight effective U.S. fisheries management. Many U.S. fisheries have dockside enforcement and vessel monitoring systems and are generally much more "cleaned up" than many of their overseas competitors, Krebs says. With Fish Trax, Ariel Seafoods can share that story with the consumer—a story about a high-end product that supports local fishermen, domestic workers and local economies.

His tracing system allows him to pass on information about the specific species he sells and where those fish are caught. Snapper from the Florida Gulf may have different health or sustainability issues than snapper from Panama, and Fish Trax helps him distinguish between these different fish.

Traceability Allows Ariel Seafood to Tell the Story of Its Fish

"Everybody that goes to a restaurant really likes to hear that the fish came off a local boat. I was unloading the boat one day last summer, and a tourist walking down the dock stopped and said, 'Hey! I ate a fish off that boat in Gulf Shores, Alabama yesterday!' I thought that was one of the neatest things about traceability that they were able to take home with them."

A map of user entered zip codes on the Find Your Fish page.
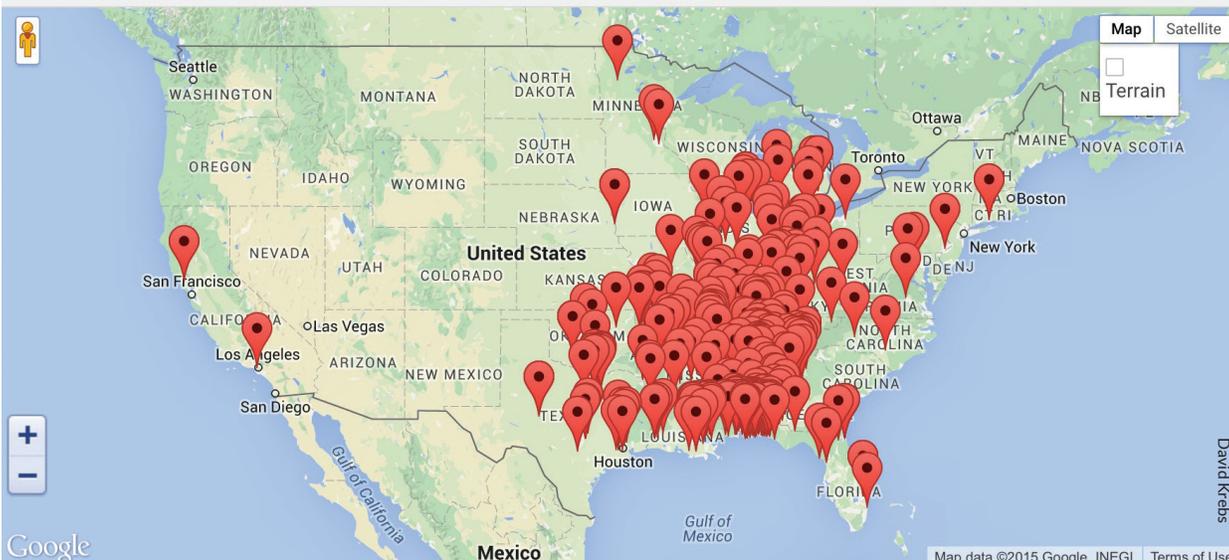
SEAFOOD TRACEABILITY PIONEERS

Charles Morgan
Owner
Harbor Docks
Destin, FL

Oceana/Patrick Mustain

Comprehensive knowledge of his supply chain has allowed Charles Morgan to sell authentic, fresh seafood at its true value, at a higher price than imported products. Morgan believes people want to know what they're eating. Harbor Docks is a restaurant that sources all of its seafood from its own dockside wholesale market in order to help support local fishermen and provide a higher quality product to its diners. Morgan says that traceability is necessary to help distinguish Florida products from overseas competitors, pointing out how hard his fishermen work.

"These guys go out and they deal with the vagaries of the weather, the fish not biting, the dangers of the job, and tremendous oversight from the government in terms of closures and all kinds of restrictions. To work on one of these boats, it wouldn't hurt you to be a lawyer and an accountant and it's complicated, it's very complicated."

For these reasons, Morgan says, U.S. seafood rightfully fetches a higher price,

Traceability Helps Harbor Docks Get More Value for Its Seafood

and traceability ensures that the added value is making it back to the people who earned it by reducing opportunities for fraud and mislabeling. "It's no different than if someone sold you a used Hyundai as a new Mercedes," he says.

"Fishing is hard, but our guys love what they do and it shows in their catch. It shows in the quality of the product and how they take care of the fish when they catch them."

Eddie Morgan

MJ Gimbar
Chief Fishmonger
Black Restaurant Group
Washington, DC

Oceana/Patrick Mustain

MJ Gimbar started working on crab boats while he was in college, and continued working with seafood in varying capacities while pursuing a graduate degree in philosophy. After graduate school, he shifted to a full-time position at Wild Edibles Seafood Market in New York City, working his way up to running retail, then wholesale. Gimbar fell in love with seafood and all aspects of the business. Today, he works as the chief fishmonger at Black Restaurant Group, a collection of six restaurants founded by D.C. chefs Jeff and Barbara Black.

Gimbar teamed up with Congressional Seafood to develop a QR code system that allows guests to scan a code and learn all of the information about the fish, including where, when and how it was caught. Gimbar says that with seafood fraud gaining such wide attention, people really want to know if their snapper is actually snapper, and if so, which kind

of snapper. Guests at his restaurants have a lot of very specific questions about seafood, Gimbar says, whether it's concerns about mercury levels in golden tilefish, to the environmental impact of farmed species. He points out that his customers have become very educated about the health and environmental differences between even the same type of fish caught in different regions. Armed with extensive and specific information through his traceability system, Gimbar is able to respond confidently to the questions he gets about his products. This has been good for business, he says.

"Our guests wanted to know they were getting the real deal. So we took the information we had from our suppliers, and we took the fish, and we linked

the information. To make everything transparent and make sure people were understanding that they were paying for what they were getting. . . [Traceability]

Traceability Helps Black Restaurant Group Build Trust and Eliminate Concerns about Seafood Fraud

creates a great level of trust, so when they come through our restaurant and come through our market, they feel secure in what they are getting, that they are not being duped. Since the QR program, we've seen sales spike."

Oceana/Patrick Mustain
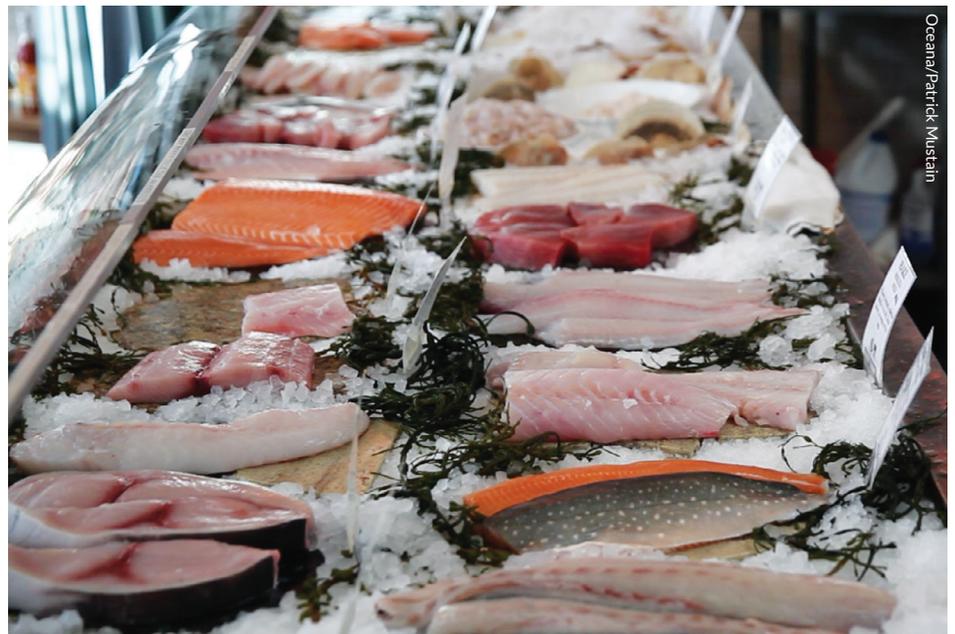
Carrie Brownstein
Seafood Quality Standards Coordinator
Whole Foods Market
New York, NY

Whole Foods says it is committed to purchasing seafood from the best-managed fisheries and farms. All seafood products sold at Whole Foods must be traced using Trace Register's electronic traceability software. Trace Register allows Whole Foods to keep track of harvest dates, location, lot numbers, production method, country of origin, the Monterey Bay Aquarium's Seafood Watch sustainability ranking and more, for all seafood in its stores. Carrie Brownstein, the seafood quality standards coordinator, says, "At Whole Foods Market, we don't source just anything that's out there… We have very specific requirements for what seafood we will sell. And we of course want to make sure that our customers are getting what they pay for… so by tracking our seafood it allows us to be sure that the seafood is indeed what we think we're selling."

Traceability is especially important for Whole Foods as it doesn't allow seafood that is treated with preservatives, like sulfites, or treated with carbon monoxide,

antibiotics or synthetic chemicals. "Some people may have allergies, and they might be shopping with us because they want seafood that is actually fresh, not just looks fresh, but it is," Brownstein says. Health and safety hazards are only two of the many reasons that Whole Foods embraces seafood traceability. "Customers have a right to know where their food is coming from and how it was produced [so that]

Traceability Helps Whole Foods Push the Seafood Industry Forward

people can make the choices that they want to make and vote with their dollar," says Brownstein. She notes that Whole Foods believes using traceability adds value to its products and reinforces its high standards. Telling the story of the fish and giving credit to the hard-working fishermen is also important to Whole

Foods Market. In addition to extensive visual media in the stores that connects consumers to fishermen, Whole Foods also employs well-educated fishmongers who are able to talk knowledgably about the product and its value.

Brownstein says that Whole Foods thinks globally about issues such as seafood fraud and illegal fishing. Brownstein says, "You

Oceana/Patrick Mustain

can think you're sourcing sustainably, but then if you can't track your product, you wouldn't be able to verify it."

Brownstein believes that traceability has a positive impact on the fight against illegal fishing by verifying that the product is coming from well-managed fisheries and having the data to prove that none of the fish were illegally harvested. Whole Foods also uses its own seafood facilities to distribute the product, managed by in-house experts, which Brownstein describes as another safeguard preventing seafood fraud in its stores.

Dave Wagner
Vice President of Seafood Merchandising
Wegmans Food Markets
Rochester, NY

Oceana/Patrick Mustain

D ave Wagner has worked for Wegmans Food Markets for over 27 years. He started out as a store manager and quickly moved up to corporate merchandising. As a lover of seafood himself, Wagner holds Wegmans' signature seafood department to high standards. Wegmans will only buy from seafood providers that subscribe to Trace Register in order to validate both where the fish is coming from and how

helps Wegmans collect in-depth information on the sustainability of its products and helps ensure Wegmans is sourcing from the best fisheries and aquaculture farms.

Wagner believes traceability is important because it takes twice as much work to repair an image than to damage one. Selling tainted or illegal fish would harm Wegmans' reputation, and that's why Wagner pays close attention to customer demands for both transparency and sustainability. Wagner explains how interested and attentive his customers are—he gets hundreds of inquiries each week related to where and how the fish he sells are caught. For Wegmans, traceability is the standard operating procedure, so Wagner's team is able to respond swiftly to all questions that are received.

Wagner says that customers don't just "want to know [where their seafood is coming from]—they demand to know."

Using a traceability tool like Trace Register is especially important for Wegmans, as it purchases most of its seafood from buyers two or three steps down the seafood supply chain. Wagner relies on Trace Register to ensure all buyers are following the rules and sourcing safe, legal and sustainable seafood products.

To Wegmans, traceability is simply a cost of doing business.

"Traceability is extremely important to gain the trust and confidence of your customers. It's almost worse saying 'I don't know' than to give them a bad answer. They demand to know because there are a lot of press and a lot of stories out there about food sickness, food supply and unsustainable fisheries. We take that very seriously and work very hard to give them the answers that they are asking for and that they expect," Wagner says.

Wagner believes Wegmans takes its commitment to sustainability even further; through fishery improvement projects, Wegmans is working with fisheries that currently do not meet the chain's standards to enact practices that will allow Wegmans to source from those fisheries in the future.

Traceability Helps Wegmans Respond to Customer Concerns in Real Time

sustainable the product is. Wegmans also works with the Sustainable Fisheries Partnership (SFP), a non-governmental organization aimed at improving corporate responsibility in the seafood industry. SFP

Oceana/Patrick Mustain

Eric Enno Tamm
Team Leader
ThisFish
Vancouver, BC

ThisFish is a consumer-focused traceability system designed to allow consumers to connect directly with the fishermen who caught their fish. Eric Enno Tamm explains, "We know from working very closely with fishers that many of them have very little or no idea about where their product actually goes, and consumers don't know where their fish comes from. Our system bridges that gap. . . There's a lot of potential for increasing the marketing value of seafood, and traceability can be a tool to help back up those claims around authenticity and quality. We see a lot of businesses wanting to engage in traceability because of that."

There are three primary components to the ThisFish traceability system: an online data management tool, unique codes for each seafood product, and the development of standards to which all products must adhere. Customers are able to enter the codes on ThisFish's website to learn more about when, where and how their fish was caught. In most cases, this will also link to photographs and a short biography about the fisherman who caught the product, acting as a portal of information on each seafood distributor and fisherman that uses its system.

Tamm believes that the trend towards sustainability in seafood, and in the food sector more generally, is only going to increase. He notes, "Our experience is that

Traceability Helps ThisFish Increase Market Value for Fishermen

there's a lot of potential for increased value around the market and storytelling around seafood. There are a lot of food products that have shown that there is a successful business model there. When you add [information], storytelling, and especially rich artisanal traditions around food, consumers are willing to pay more. Seafood is a perfect commodity for that because most of the wild-capture fisheries have very long traditions and deep roots in coastal communities, and there is a great story to be told there."

ThisFish helps harvesters create unique brands and market themselves through stories of their catch, photos and traceable information. Fishermen are able to respond to questions from their customers and are able to log in to the system to see where their catch reaches the end consumer.
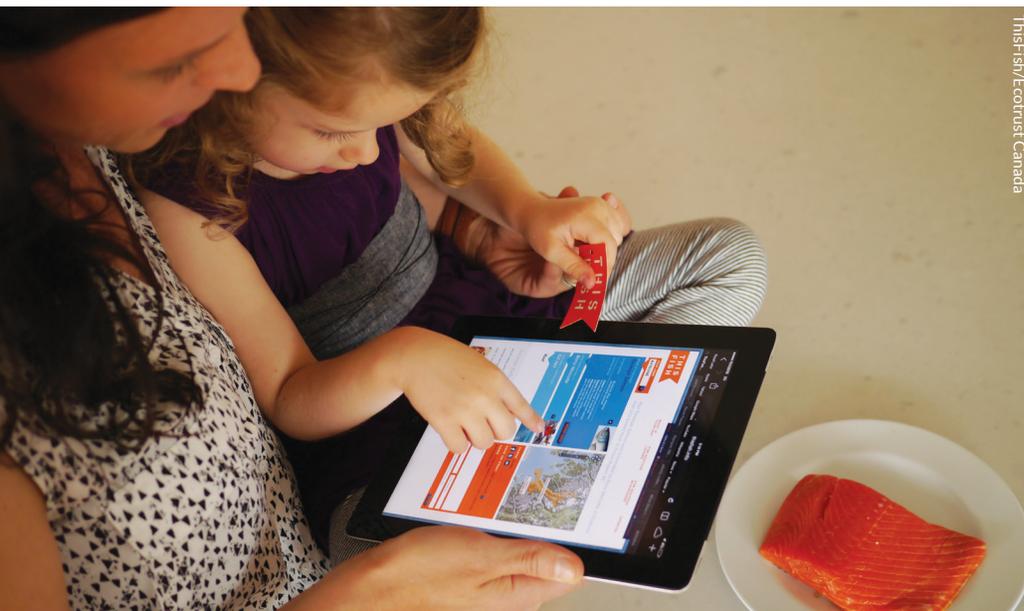
ThisFish/Ecotrust Canada

Alex Miller
Vice President of Business Development
Trace Register
Seattle, WA

Trace Register is an electronic traceability software platform and analytical tool that allows companies throughout the supply chain to share information for a variety of reasons: managing risk, increasing market value, telling the story of fish, and improving logistics and efficiency. Trace Register manages clients in 56 countries and has customer service teams in North and South America and throughout Asia. Each client of Trace Register is able to design a customized traceability template with information such as country of origin, harvest date, ship date, species name, common name, scientific name and catch area. One of the benefits of Trace Register is that it is flexible—clients can populate as much information as they want about their fish, based on what those clients' supply chain partners want to see.

Alex Miller says, "The beauty of Trace Register is that the supply chain partners can share the information electronically through our web-based system and analytics tool, drive improvement and

reduce costs." The information can be manually populated per shipment order, or it can be automatically integrated, with each seafood company owning their own data and adhering to designated requirements. "[Traceability from Trace Register] really empowers the supply chain to make business improvements and to manage risk. Without having the data, without being able to put the data to work, your ability to document or observe variations in the data is very limited," Miller says.

Being able to trace seafood also helps Trace Register tackle the issues of seafood fraud and illegal fishing. Miller states, "The software is able to look at trends in the data, inconsistencies in the data, and should be able to drive improvements and allow the supply chain to trust the data." This helps empower actors throughout the seafood supply chain to make business improvements and to manage risk. Trace Register analyzes these trends and is able to notify its customers of any inconsistencies that may suggest seafood fraud or illegal activity. Miller explains

Trace Register Helps Businesses Innovate and Improve Margins Through Analytics

how Trace Register worked with the Gulf Seafood Trace Program, funded by Congress after the BP oil spill, to help market seafood from the Gulf of Mexico.

"What we saw was that because the incentives were right and people wanted to buy seafood that was traceable, fishermen working the docks started reporting electronically. That not only provided better transparency to the supply chain. . . but it also improved the timeliness of getting data to the fishery managers, because it's electronic and didn't have to go through the whole paper-based system. It drove adoption and innovation. . . And there are other business benefits; we saw some companies increase sales by 30 percent. You can go to the Gulf Seafood Trace website[3] and read the case studies."

Trace Register

Eric Brazer
Deputy Director
Gulf of Mexico Reef Fish Shareholders' Alliance
Chatham, MA

David Hills Photography

E ric Brazer, now the deputy director of the Gulf of Mexico Reef Fish Shareholders Alliance, was a founding member of Gulf Wild. Gulf Wild is a non-profit, conservation-based organization supporting U.S. fishermen operating in the Gulf of Mexico. The organization developed a system to trace commercial reef fish species in the Gulf, such as grouper and American red snapper. Gulf

Wild uses a physical tag, usually located on the gill or mouth, on each landed fish. Each tag contains a traceable identification number and a scannable QR code that provides information such as who caught the fish, where it was caught in the Gulf, and which vessel landed it.

The Gulf Wild program was developed to ensure that chefs, restaurants and other consumers are getting a sustainably caught, domestically sourced fish. Brazer explains, "In the world of fish, cheap imports are a huge issue. We have pretty stringent scientific and management requirements here in the U.S. that don't exist in other places. For instance, with red snapper, we have a management plan, and we are rebuilding this fishery. . . As a result, this fishery has come back and is

closer to being healthy than it has been in a number of years. Quotas are high, markets stable, fishermen are getting paid for the fish, and the American consumer can buy red snapper 365 days a year."

Gulf Wild Helps Promote Effective Fisheries Management in the United States

Traceability is especially important as red snapper is one of the mostly commonly mislabeled fish species worldwide.[4] Brazer explains, "Without systems like Gulf Wild, without conservation-based traceability, there's always going to be that threat where you have inferior product that was caught under less sustainable management plans coming in and undermining all of the work we are doing here in the [United] States."

Oceana/Patrick Mustain

Conclusion

As these stories illustrate, traceability is feasible and beneficial for both the seafood industry and consumers. These fishermen and wholesalers are able to earn more for their catch when they can tell the story of their fish, empowering consumers to make more informed decisions. Giving consumers accurate information builds trust between diners and chefs, shoppers and grocers, restaurants and wholesalers, and fishermen and distributors.

Traceability will strengthen demand and value for fish caught legally and sustainably. As demonstrated in this report, fishermen, distributors, retailers and restaurants are reaping substantial economic benefits by adopting traceability and being able to ensure they are providing the highest-quality seafood—products produced sustainably, safely, legally and responsibly. The move towards traceable seafood will also reduce the amount of illegal product

that is currently sold into the system. Traceability shifts the market toward more sustainable practices by making it easier to identify bad actors and hold them accountable, which is good for the oceans as well as the long-term viability of the seafood industry.

Traceability is the future of seafood. The Presidential Task Force on Combating Illegal, Unreported and Unregulated Fishing and Seafood Fraud, established in 2014, is developing rules for seafood aimed at tackling these problems. It has the opportunity to level the playing field for fishermen and seafood businesses that play by the rules. As the process moves forward, the United States should require catch documentation for all seafood and full-chain traceability, with more information provided to consumers at the final point of sale. Our traceability pioneers show that this is not only doable, but beneficial to a variety of businesses' bottom lines.

1 U.S. Food and Drug Administration. 2013. National Shellfish Sanitation Program – Guide for the Control of Molluscan Shellfish. Washington, DC. Available at www.fda.gov/downloads/Food/GuidanceRegulation/FederalStateFoodPrograms/UCM415522.pdf

2 Warner et al. 2015. Oceana reveals mislabeling of America's favorite fish: salmon. Available at www.oceana.org/salmonfraud

3 Gulf Seafood Trace. Accessed February 2, 2016. Available at www.gulfseafoodtrace.org
   Note: The Gulf Seafood Trace program ended as of December 31, 2014

4 Golden and Warner. 2014. The global reach of seafood fraud. Oceana. Available at www.oceana.org/seafoodfraudmap

Jay Fleming

Oceana/Patrick Mustain

March 2016

BELIZE   **BRAZIL**   **CANADA**   **CHILE**   **EUROPEAN UNION**   **PERU**   **PHILIPPINES**   **UNITED STATES**   │   **Save the oceans.**   **Feed the world.**

Oceana/Patrick Mustain