

SUSTAINABILITY:

Seafood Sustainability

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OVERVIEW

Most people in the foodservice industry have heard about the importance of seafood sustainability. It became so commonplace to talk about seafood sustainability that people forgot to explain what it means. It became another buzzword that people just tossed around without really thinking about not only what it meant but its implication.

This article is, if you pardon the pun, an in-depth DIVE into the world of seafood sustainability. We will give a clear definition of what it means, explore the history of how the entire seafood sustainability movement came about, and end with what you can do as a cook, chef, manager, or owner to make more money for your business while utilizing seafood sustainability practices.

So, let's look at some questions and answers about seafood sustainability.

WHAT DOES SEAFOOD EVEN MEAN?

Before we dive into sustainability, we must briefly define "seafood." Seafood is far more than edible products that come out of the sea.

- When you say the word "sea" most people will conjure up an image of someone standing on a rocking boat wearing bright-yellow slickers as waves crash over them. However, "sea" in the word "seafood" is a very broad term. Seafood can come from farm-raised pens and tanks many miles from the ocean. It can come wild from rivers, streams, lakes, or bays. It can come from tanks and pens actually in the ocean. It can even come wild from the ocean.

- The "food" part of seafood includes fish, mollusks (like clams, oysters, mussels), crustaceans (like prawns, crabs, lobsters, crawfish), as well as non-animals, such as seaweed and kelp. These products may be used directly (such as a salmon filet) or indirectly (such as kelp which is used in everything from ice cream to toothpaste, from salad dressing to making glass.)

WHAT DOES SUSTAINABLE MEAN FOR SEAFOOD?

Seafood sustainability has two parts:

- a. The seafood is farmed, caught in the wild or comes from farms slower than it can reproduce and grow to harvesting age. If you harvest seafood faster than it can come to harvesting age, you will run out of seafood. Think of it like sliced onions. If you cook with sliced onions faster than your prep team can slice them, you will run out of onions on the line.
- b. The seafood is farmed or caught in a way that does not cause environmental damage. To be sustainable, seafood cannot be raised, caught, or harvested where it damages other species (like sea turtles being drowned in the nets), or in the environment (such as a rain forest being severely damaged to build a shrimp farm.)

HOW DID THE MOVEMENT START?

It seldom happens that we can look back on a food trend and know when and where it started. There are some exceptions, of course. We know that Paul Prudhomme created the blackened fish trend in March of 1980 at his restaurant in New Orleans. We know that Julia Child started the first big movement on television for cooking shows in 1963. We know that Iron Chef (the original) started rocking the world with chefs being hot shot rock stars on October 10, 1993. But most of the time, when, where, and who created different food trends is often a mystery. Try looking up, for example, who/when and where the hamburger was created. When and where was the first pizza? The creation of tacos?



The movement towards a global awareness of the importance of seafood sustainability is in the former category. It is fairly undisputed when, where and how it started and spread.

Although scientists, fisherman, farmers, and others had been concerned about farming and over-fishing for quite a long time, the general population—including much of the culinary industry—was not taking notice. In the early 1990's, scientists, environmentalists, and others began to get concerned that overfishing had wiped out several fishing grounds and species around the world. This is when the issue started to rise to the surface. The Marine Stewardship Council started a certification program in 1996, but it still wasn't taking hold. Then, in 1997, the Monterey Bay Aquarium created a hands-on exhibit where people could walk into what looked like a diner, sit down, and order off a menu. As they would order a selection, they were informed that they had made a red, yellow, or green choice:

- a best choice (green) item was from an abundant species and was caught in environmentally friendly ways
- a good alternative (yellow) selection meant there were some concerns with the species' status or the methods in which it was caught; or
- a seafood to be avoided (red) menu choice was something to be avoided because of its dwindling numbers and/or the way it was caught.

(Note: the two authors of this article were invited to a soft opening of the exhibit and thus were one of the first to play the game.)

This exhibit was one of the more popular ones in the Monterey Bay Aquarium. People of all ages and from all over the country were playing the game and taking their knowledge home with them. Then in 1999, the Monterey Bay Aquarium created Seafood Watch. The purpose was to educate people—whether they had been to the Monterey Bay Aquarium or not—about seafood sustainability and have them make informed decisions on what seafood to order in restaurants or to buy at stores or fish markets. The Aquarium published little cards that could be folded into a purse or wallet and distributed these cards in abundance to anyone who would ask (and even many who didn't). When the Internet started becoming more user-friendly to the general public, the guide went online and went viral. There are now many different sites, aquariums around the world, non-profits, and government agencies and services that have similar sites and apps. Many use the green, red, yellow scale, as well.

The first people in the industry to feel the effect of Seafood Watch were the restaurants on the Monterey Bay Peninsula. The authors have known many of the owners and chefs over the years. They have told us many stories about the early days of seafood



sustainability when people would come in for dinner after being at the Aquarium, look at the menu, and then pull little cards out of their pockets, wallets, and purses. These same restaurateurs told me that they were shocked that people—for the first time—were asking where their dinner was coming from (where it was caught) and was it caught in an environmentally-friendly way.

Chefs and owners across the United States were very reserved. They chalked the movement up to California being, well, California. But surprisingly quickly, people across the country were asking the fishmongers and waiters where the fish was from, was it line caught or net caught, was it farmed or wild? Chefs, owners, waiters, and fishmongers were caught off-guard, and most couldn't answer the questions at the time. What was even more amazing was that the people asking the questions were the ones who grew up on canned tuna, frozen fish

sticks, and fish sandwiches at fast food restaurants. At the time, no one ever disclosed how the fish was caught or where it was from. And the fishmongers, stores, and kitchens probably had no clue. Suddenly, people were asking questions to chefs and waiters about what was on the plate, was it farmed or wild, was it line or net caught, and was it sustainable?

The movement grew, and seafood sustainability has now become a major driving force in consumers' purchasing of seafood throughout the country. You don't have to look hard to find seafood markets, or restaurant menus, that will identify where the fish is from, if it was line or net caught, and if it was fresh or farmed.

WHY SHOULD YOU CARE?

What's the fuss?

Although aquaculture has been around for thousands of years, it really didn't take off until trout farming in the 1950's and salmon the next decade. (Yes, salmon farming has been around since the 1960's.) Even so, it wasn't until about 20 years later that farmed fish became a significant part of the market. Another way to look at this is that seafood was, until then and to very much still a considerable extent now, the only WILD food that people cooked at home or ate out. The people who were eating wild seafood were not eating wild fruits, vegetables, or meats.

Now, combine changes in diet and nutrition (and food movements like the blackened fish craze) and more and more people were eating more and more seafood. Overfishing wiped out the viability of many species, particularly of the larger fish. *Four Fish: The Future of the Last Wild Food* by Paul Greenberg is a good quick read to learn more about the rise (and fall) of the world's fisheries as represented by salmon, cod, bass and tuna. Some scientists have estimated that seafood will not have catchable quantities of seafood left in about 30 or less years.

Is farmed fish or wild fish "better"?

The problem is, what is meant by "better"? Generally speaking, farmed seafood is more sustainable. Many people think farmed seafood is better for the environment because it is not taking wild seafood out of its natural home. However, what

many people don't consider is that farmed fish may sometimes have a serious effect on the environment where they are raised. Rain forest or other precious land might have been cleared to make the farm; the farm might be polluting local water sources with substantial amounts of wastewater; or the farm may be nothing more than pens in rivers or oceans where wild fish (of various species) might get caught and the farmed fish escape to reproduce with wild fish. For years, there have also been many controversies on whether farmed seafood is less healthy (or even unhealthy) to eat compared to wild.

I have heard a lot of talk about nets being bad for seafood. Why?

There are several concerns about net fishing that include:

Bycatch. Bycatch is where the nets catch marine life other than the intended fish. Sea turtles, different fish species, dolphins, etc. often die in the nets.

Ghost nets. Ghost nets are nets that have been lost or abandoned by fisheries. They are a significant part of the pollution in the ocean. Their biggest problem is that they continue to catch fish and other marine life who then die in these untended nets.

Bottom trawling. Bottom trawling occurs when the nets damage the ocean floor as they are being used. This damages coral reefs and destroys the homes of species not being fished for. To put it in perspective, it would be the same thing as bulldozing through a forest to harvest truffles. You would get the truffles, but a lot would be damaged on the way.

Line catching is generally considered better, but most commercial line fishing is not done with single hooks on a pole, as when you think of someone fishing with a line. Fishing boats have multiple lines with many hooks on them, sometimes miles long.

Is the Seafood Watch System by the Monterey Bay Aquarium or other systems the answer?

It is likely that even those places would say “no.” But it is a start. The problem is that things change rapidly. For example, the Patagonian Toothfish was an underutilized fish which was seldom fished. One day, someone decided to change the name to Chilean Sea Bass, and it got fished nearly to extinction in the wild in just a few years due to the increased demand. Also, not all fishing in one country or one region is the same. Seafood Watch might say that farmed catfish in the United States is a best choice. That is an overall rating. However, that does not mean that each and every catfish farm is sustainable and a best choice.

Trends as mentioned above also change things. Forty years ago, sushi was incredibly rare in this country and difficult to find. Now, it is everywhere, from gas stations to elementary schools. Poke was unheard of outside Hawaii less than ten years ago. Now, it sells about 1.25 billion dollars per year in the United States! As we understand, most of the tuna used in poke is not farmed, it is wild. Consider what that means, and how fast that has changed!

What can I do as a member of the food service industry?

As with the other environmental issues there are no clear or precise right answers nor easy solutions.

The first thing is to acquaint yourself and other people you work with about this critical issue.

Get acquainted with your seafood vendors. Tell them that you and your establishment are concerned about seafood sustainability. Work with them to get the best options for sustainable seafood.

Get familiar with the National Oceanic and Atmospheric Administration web on fisheries. Visit <https://www.fisheries.noaa.gov/>.

Look at the Monterey Bay Aquarium Seafood Watch at <https://www.montereybayaquarium.org/act-for-the-ocean/sustainable-seafood/what-you-can-do>. You can download guides and other information. Your local aquariums will almost certainly have similar sections.

Use your new sustainable practices to your benefit to make more income for your establishment. It is certainly well known that many of your customers—no matter what type of establishment you are with—are concerned about this issue. Have your website, menus, specials of the day, and social media pages emphasize the sustainability of your seafood. As mentioned in previous articles, you can make the world a better place and make more profit while doing it. That’s a win-win solution.



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