

# Seafood Choices Alliance

**The U.S. Marketplace  
for Sustainable Seafood:  
ARE WE HOOKED YET?**

Advancing the market for sustainable seafood





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# Introduction

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Seafood Choices Alliance, a program of SeaWeb, presents *The U.S. Marketplace for Sustainable Seafood* as a reference for those in the seafood industry working towards sustainability. This report includes groundbreaking benchmark research on two sectors of the seafood value chain – chain restaurants and seafood wholesalers and distributors – and an update to previous research of the retail sector. With this information, stakeholders in the U.S. seafood industry will be better equipped to develop strategies that enable consumers to make informed seafood choices – choices that ensure a healthy ocean and lasting seafood supply for years to come.

## A Review of the U.S. Seafood Market

This report provides information regarding seafood production in the United States, both farmed and wild, together with seafood trade. It is intended to provide a general overview of the U.S. seafood market and should not be viewed as a comprehensive analysis. With global demand for seafood growing every year, the United States imports more seafood than it produces domestically. The increasing demand for seafood is also being met by increased aquaculture production, with almost half of seafood consumed worldwide now produced by aquaculture.

This review also examines trends for seafood sales in the retail and foodservice sectors, where retail seafood sales are at an all-time high and forecasted to keep rising. While foodservice seafood sales have also been on the rise, there is less confidence that this trend will continue into the future at the same rate of growth as in the retail sector.

The first section concludes with a brief examination of sustainability in the seafood marketplace, including a review of eco-labeling and the role of the consumer.

## Awareness to Action

This report includes highlights of market research commissioned by Seafood Choices Alliance in 2007. Whenever possible, comparisons have been made to the earlier research conducted in 2001 and presented in the report, *The Marketplace for Sustainable Seafood: Growing Appetites and Shrinking Seas* (Seafood Choices Alliance, 2003). Nationwide surveys were conducted of retailers, chain restaurant decision-makers and wholesalers to uncover the influences and concerns of those buying seafood for resale to consumers.

The results present positive evidence of a growing awareness in the seafood industry of sustainable seafood and the environmental impacts of commercial fishing and aquaculture.

- Sustainable seafood appears to be a rising trend among chain restaurants, retailers and wholesalers and each sector sees significant growth in the percentage of their seafood that will be sustainable in five years.
- All three sectors are increasingly open to dialogue and are interested in obtaining information that can help them make informed and responsible choices for themselves, their customers and the ocean.
- Majorities in each sector are concerned about the health of the ocean and its impact on their businesses.
- Overfishing is seen as a top threat to seafood sustainability by all sectors, and wholesalers are additionally concerned about the impacts of aquaculture.
- All sectors have taken action to remove seafood items from their product list due to environmental considerations, and in greater numbers than a few years ago.

## Turning the Tide

In a 2006 study published in the journal *Science*,<sup>1</sup> an international group of ecologists and economists concluded that loss of biodiversity is profoundly reducing the ocean's ability to produce seafood, resist diseases, filter pollutants, and rebound from stresses such as overfishing and climate change.<sup>2</sup> This study led to headlines around the world hailing “the end of seafood by 2048.”

However, as the lead author noted at the time, “this is not a prediction, it’s a *possible* outcome based on a projection of existing data.” The study also strikes a note of hope by recognizing the inherent ability of ocean ecosystems to self-heal and regenerate, under the right circumstances. In other words, it is not too late for the ocean and fisheries.

All seafood buyers can influence this outcome through their buying choices – and many already are. All those involved in the seafood value chain – from fishermen to retailer to consumer – have a responsibility to ensure a lasting and diverse supply of seafood for generations to come.

## The Role of Seafood Choices Alliance

Founded in 2001, Seafood Choices Alliance is an international association advancing the market for sustainable seafood. The Alliance helps the seafood industry – from fishermen and fish farmers to distributors, wholesalers, retailers and restaurants – make the seafood marketplace environmentally, economically and socially sustainable. Seafood Choices Alliance convenes and connects the world’s leading voices in support of a sustainable supply of seafood choices, highlighting the need for a global solution to threats facing the ocean. With offices in North America and Europe, and partners in more than 50 countries around the world, Seafood Choices Alliance is a partnership-based association that invites and challenges corporations to engage in more responsible behavior and leverages the collective power of key players to drive change across the seafood marketplace.

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<sup>1</sup> “Impacts of Biodiversity Loss on Ocean Ecosystem Services”, Worm, B. et al, *Science*, November 2006.

<sup>2</sup> [www.compassonline.org](http://www.compassonline.org)



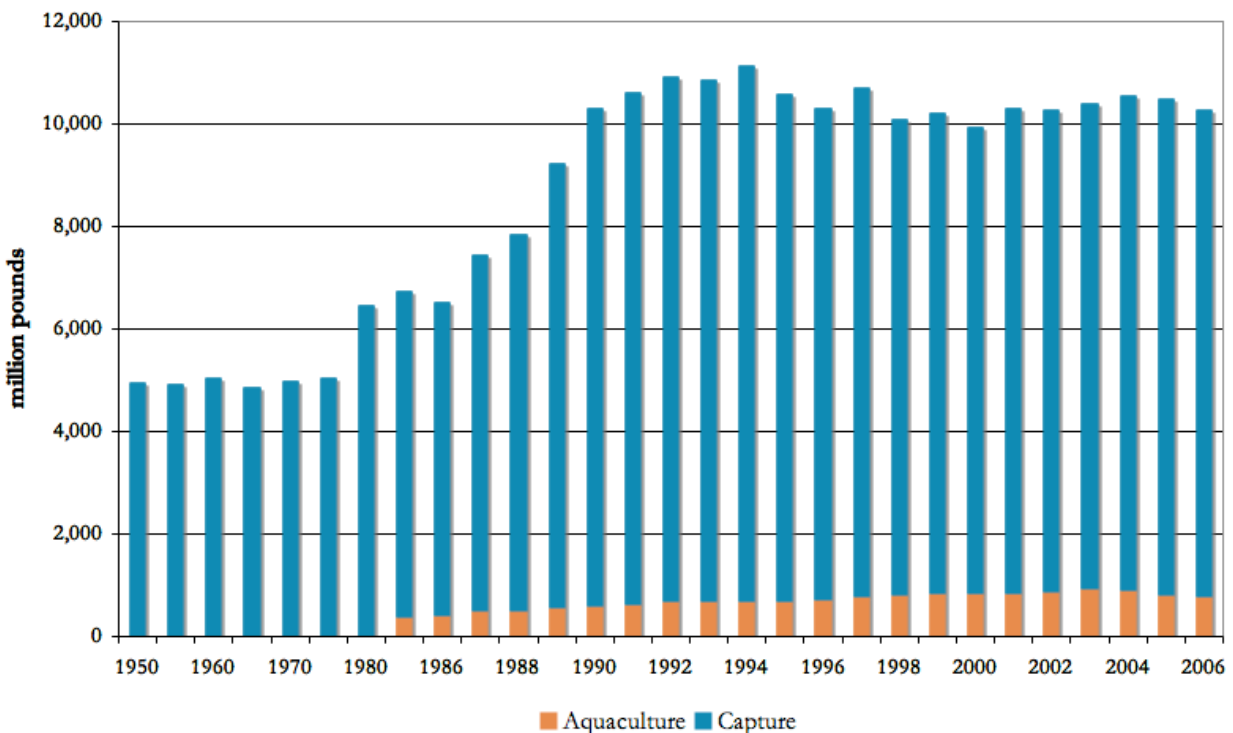
# Overview of the U.S. Seafood Supply

On a global scale, the production and value of seafood are at record levels. According to the United Nations Food and Agriculture Organization (FAO), world production in 2004 exceeded 140 million tons, valued at over \$148 billion (first-sale value). And preliminary estimates for 2005 are even higher – the highest on record at 142 million tons.

Worldwide demand for seafood is also on the rise and the FAO predicts that, by 2030, more than 40 million additional tons of seafood – almost a 30 percent increase – will be required to meet demand. While global population growth is a factor in this demand increase, per capita consumption is rising around the world, as is affluent nations’ demand for imported seafood products.<sup>3</sup>

The United States plays a significant role in both the production and consumption of world seafood resources. In terms of overall seafood production, this nation ranks sixth in the world – 9.5 billion pounds (4.3 million tons), valued at \$4 billion in 2006 – for production of fish from aquaculture and fishery landings combined. The United States is second only to Japan in imports of fish and fishery products, importing 5.4 billion pounds of edible products worth a record \$13.4 billion in 2006. The United States is also ranked fourth in the world for exports, with three billion pounds of edible fishery products worth \$4.2 billion.<sup>4</sup>

**Figure 1.1: U.S. Landings and Aquaculture Production, 1950-2006**



Source: Fisheries of the United States, 2006.

<sup>3</sup> UN Food and Agriculture Organization, The State of World Fisheries and Aquaculture, 2006.

<sup>4</sup> National Marine Fisheries Service, Fisheries of the United States 2006.

## Wild Fisheries

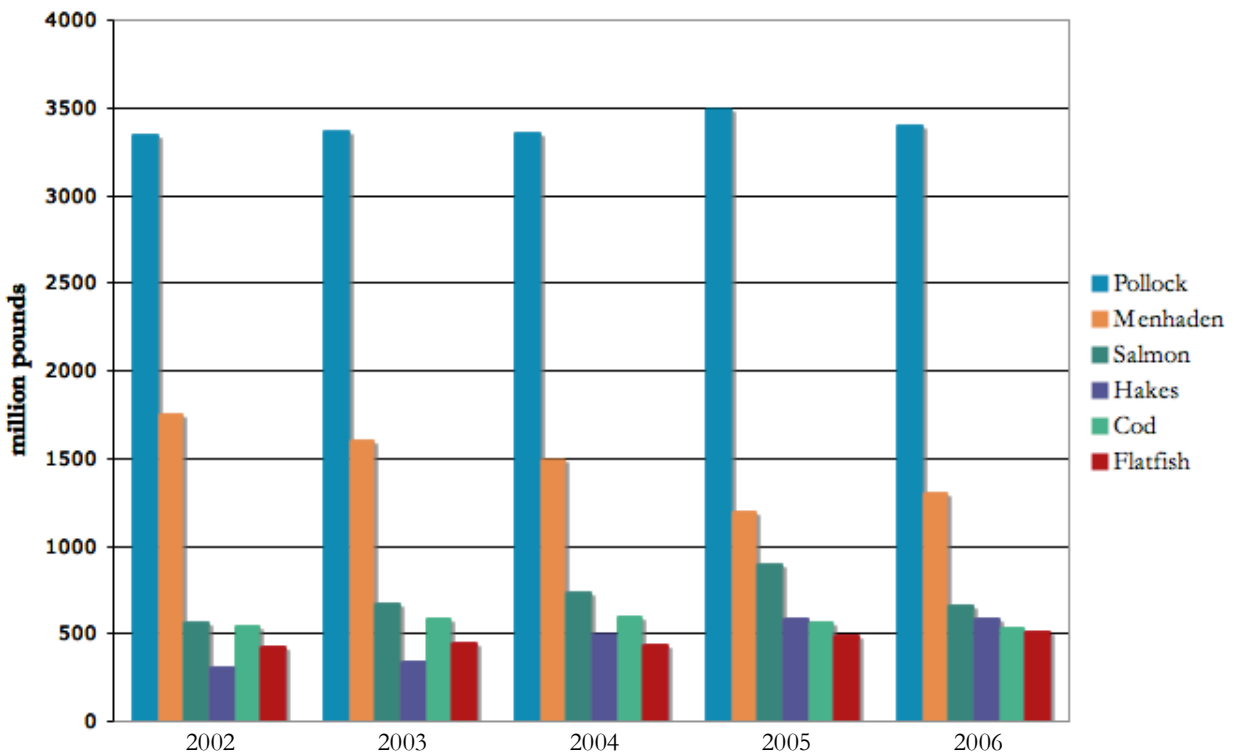
Production from capture fisheries worldwide totaled 95 million tons in 2004, with a value in excess of \$84 billion. Production from global fisheries has remained relatively stable over the past decade, yet more than 75percent of fish stocks are fully or over exploited, leaving world resources in a tenuous position.

The United States is ranked third for overall landings from wild fisheries, behind only China and Peru. In 2006, the U.S. landed 9.5 billion pounds of seafood, of which 7.8 billion was edible product and the remaining 1.7 billion pounds was used for industrial purposes, such as the production of fishmeal. While this marked a decrease of over 200 million pounds from 2005, the total value of the catch increased by \$51 million, for a total 2006 value of \$4 billion (industrial and edible combined).

In the United States, government statistics and information on landings is divided into two categories: finfish and shellfish.

## Finfish

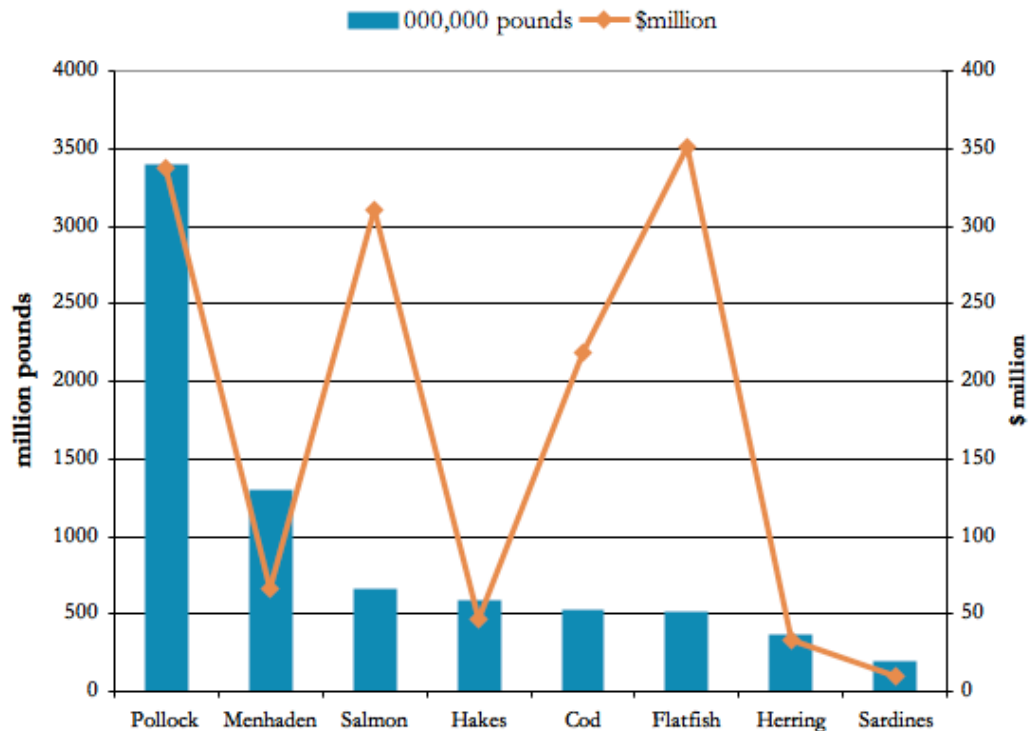
**Figure 1.2: U.S. Top Landings by Species Group, 2002-2006**



Source: Fisheries of the United States, 2006.

Finfish accounted for 88 percent of U.S. landings in 2006. More than 90 percent of those landings were comprised of only eight species groups: pollock, menhaden, salmon, hakes, cod, flatfish, herring and sardines.

**Figure 1.3: U.S. Finfish Landings by Weight and Value, 2006**



Source: Fisheries of the United States, 2006.

### Pollock

The pollock fishery is the largest fishery in the United States, and second only to Peruvian anchovy in total world landings. Pollock – a whitefish – is used in the production of surimi (“imitation crab meat”), as well as for breaded fish products, and is one of the primary sources of fish for the fast food industry. While U.S. landings have been relatively stable for more than a decade, the 2008 quota for Bering Sea pollock was cut by 28 percent to just over two billion pounds. The cut was based on scientific recommendations and is seen as a response to the cyclical decline of the species. Populations and catch quotas are both expected to rise again in the next year or two. World landings have been in steady decline from a high in 1985 of more than 13.5 billion pounds, to landings hovering around the six billion pound mark for the years 2000-2005;<sup>5</sup> U.S. landings now make up half the world’s catch, with the majority of the remaining landings by Russia.

In 2005, U.S. pollock fisheries (both the Bering Sea and Aleutian Islands (BSAI) and the Gulf of Alaska) were certified to the Marine Stewardship Council (MSC) standard as sustainable and responsibly managed fisheries. There is debate among the scientific and conservation communities of the effect of the fishery on the western, endangered population of Steller sea lions. Groundfish fisheries operate in a large portion of the Steller sea lion’s habitat and target the same species that make up a large part of the sea lion’s diet, namely pollock. Populations of sea lions have been declining and some experts argue that the fishery may be to blame; however, many other factors likely play a role, including: climate change, pollution, disease, and predation.<sup>6</sup> Overall, U.S. pollock fisheries are regarded as sustainable and conservation groups recommend pollock as a good choice for consumers.

<sup>5</sup> UN Food and Agriculture Organization, Fisheries and Aquaculture Department, Global Production Statistics 1950-2005.

<sup>6</sup> NOAA, National Marine Mammal Laboratory, Alaska Fisheries Science Center, Steller Sea Lion Research, 2006. <http://nmml.afsc.noaa.gov/AlaskaEcosystems/sslhome/stellerhome.html>

## Menhaden

The nation's second largest fishery is for a fish little known by the American public, the menhaden. Menhaden form the largest industrial fishery in the United States, and are primarily used for fishmeal, oil, and bait for other fisheries. Landings have been on the decline since the early 1980s, with a record high in 1983 of more than three billion pounds to the 1.2 billion pounds landed in 2005, which is the lowest catch since 1967.<sup>7</sup> Landings in 2006 were up slightly, to 1.3 billion pounds. Declines are leading to widespread concern among conservation organizations due to the potential ripple effects on the many other species that rely on menhaden as a food source, such as cod, striped bass, and most other predatory fish found in the Atlantic. Recent population assessments from both the Atlantic and Gulf States Marine Fisheries Commissions conclude that neither Atlantic nor Gulf of Mexico menhaden are overfished and overfishing is not occurring in either fishery. With this prognosis, it is unlikely quotas will be sharply reduced in the near future.

## Salmon

Salmon is both the third largest fishery in the United States and the third most consumed species by Americans, although the high level of consumption is due to the large quantity of farmed product on the market. Over the past 10 years, the U.S. fishery has seen significant fluctuations in catch with peak catches occurring in 2005. Landings in 2006 were 26 percent lower than in 2005 – 663 million pounds – more than 95 percent of which was landed in Alaska. In most years pink salmon represents the majority of the catch, but with landings 55 percent lower than in 2005, sockeye became the new leader by volume and maintained its position of top value. Over one-third of the total salmon catch was exported as fresh and frozen product in 2006, with the majority going to China (32 percent) and Japan (16 percent).<sup>8</sup>

The entire Alaska salmon fishery has been certified to the Marine Stewardship Council (MSC) standard as a sustainable and responsibly managed fishery. Overall, conservation groups recommend Alaska salmon as a good choice for consumers. The picture is a little less clear for salmon originating in California, Oregon and Washington State as several runs in those regions have experienced dramatic population declines due to habitat loss and destruction, as well as overfishing.

## Cod

In terms of overall landings and consumer preferences, cod is often treated as a single species although two very distinct species are landed and consumed in the United States – Atlantic cod and Pacific cod. Landings of Atlantic cod have been steadily declining over the past 25 years from highs of more than 100 million pounds in the early 1980s to a record low in 2006 of 12 million pounds. On the other hand, landings of Pacific cod have been on the rise over the past 20 years, with only minor fluctuations in catches. In 2006, Pacific cod landings totaled more than 518 million pounds.<sup>9</sup>

Nearly 80 percent of Alaska's Pacific cod is caught in the Bering Sea and Aleutian Islands (BSAI), with the remaining caught in the Gulf of Alaska. In 2006, the U.S. longline freezer sector of the BSAI Pacific cod fishery was certified as sustainable to the Marine Stewardship Council (MSC) standard. The longline freezer sector, along with longline and pot catcher vessels, represents more than 50 percent of the total allowable catch for the BSAI fishery. The majority of certified product is destined for European and Japanese markets, with approximately 20 percent sold to U.S. and Chinese markets.<sup>10</sup>

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<sup>7</sup> Personal communication from the National Marine Fisheries Service, Fisheries Statistics Division, Silver Spring, MD.

<sup>8</sup> National Marine Fisheries Service, Fisheries of the United States 2006.

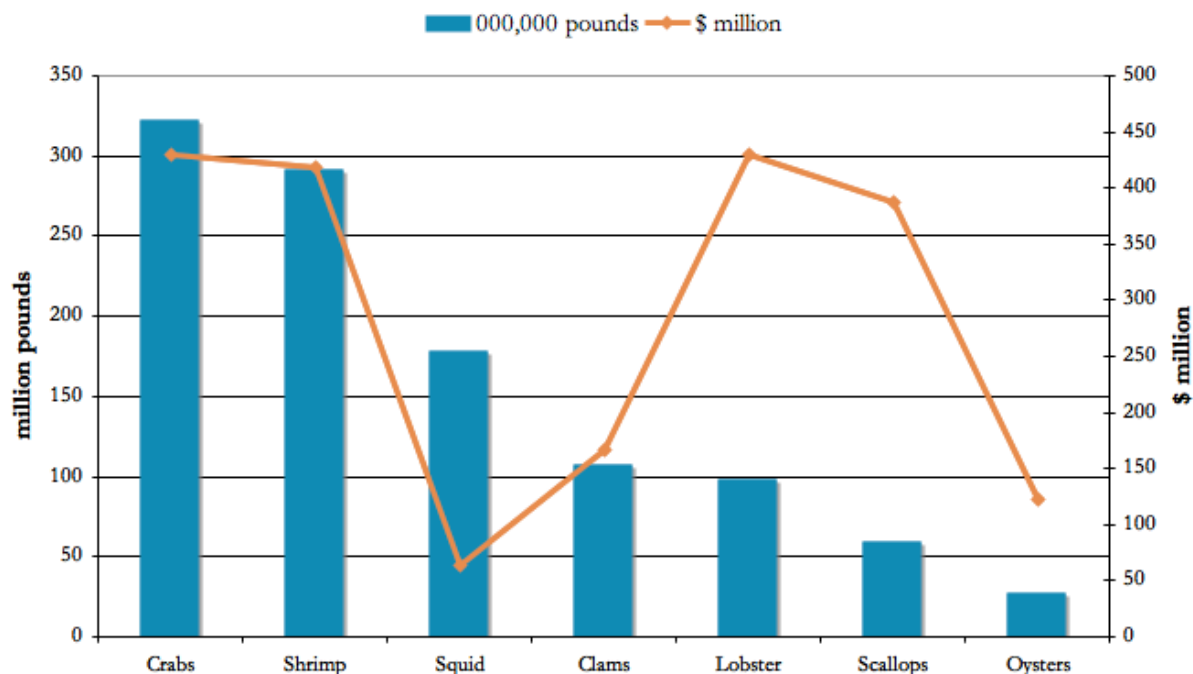
<sup>9</sup> Personal communication from the National Marine Fisheries Service, Fisheries Statistics Division, Silver Spring, MD.

<sup>10</sup> Seafood Choices Alliance, Sourcing Seafood: A Professional's Guide to Procuring Ocean-friendly Fish and Shellfish, 2007.

## Shellfish

The U.S. government classification of “shellfish” includes most things caught by fishermen other than finfish, such as crustaceans, cephalopods, aquatic plants, sponges, worms and other assorted marine life. While accounting for less than 12 percent of total landings, shellfish represent more than 50 percent of the value of commercial fisheries. In 2006, top shellfish landings by weight were crabs (all species), shrimp, squid and clams, yet lobsters topped the value chart among all capture fisheries, finfish or shellfish, valued at \$430 million.

**Figure 1.4: Top U.S. Shellfish Landings by Weight and Value, 2006**



Source: Fisheries of the United States, 2006.

### Lobster

Lobster is the highest value seafood product landed by U.S. fishermen, and more than 90 percent of that value is derived from the American lobster fishery. More than 98 million pounds of American lobster were landed in 2006, with over 78 percent landed in Maine. The spiny lobster fishery totaled a mere 5.6 million pounds and was landed primarily in Florida. Part of the reason for the extremely high value of lobster is its value as an export product. More than 60 percent of the total catch is exported, with the vast majority going to Canada, followed in lesser amounts by Italy and Spain.

### Crabs

Among shellfish products, crabs are both high value and high volume. U.S. crab landings in 2006 totaled 322.5 million pounds and were valued at \$429 million. The primary species groups landed by U.S. fishermen are blue (hard shell), Dungeness, king and snow. More than half the total crab landings are hard shell blue crabs, with more than 144 million pounds landed in 2006, valued in excess of \$106 million. Louisiana is the largest producer with about 25 percent of the total, followed by Maryland at 20 percent. Dungeness crabs, primarily caught in Washington State, were less than 28 percent of crab landings. King crab, although only six percent of crab landings, brought in \$67 million in 2006.

## Shrimp

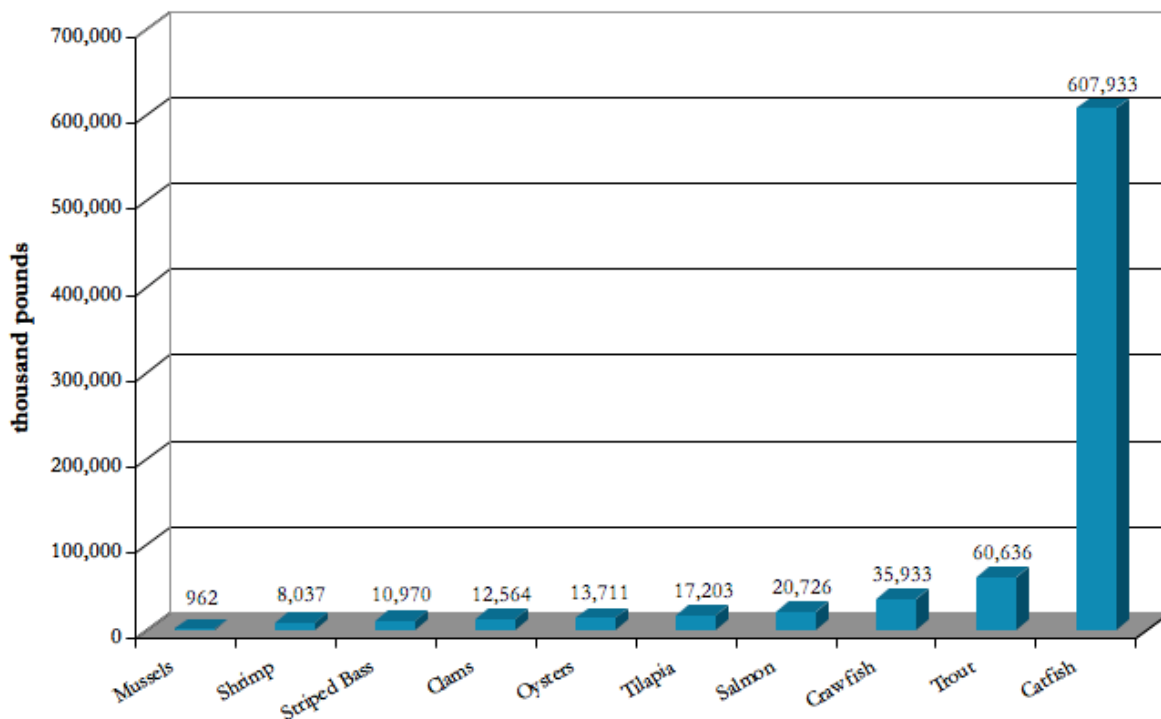
Although shrimp has topped the charts for the last six years as America’s favorite seafood – 4.4 pounds per person per year – the majority of the U.S. shrimp supply is imported product. U.S. fishermen in New England, the South Atlantic, the Pacific and the Gulf of Mexico landed more than 292 million pounds of shrimp in 2006, with the Gulf region responsible for 84 percent of the total. The United States imported more than 1.3 billion pounds of shrimp in 2006, an increase of 135.5 million pounds compared to 2005 – more than 950 million of which was from Asia alone.

## Aquaculture

Aquaculture is on the rise on a global level, with average growth of 8.8 percent per year since 1970; although recent reports indicate that growth rates may have reached their peak.<sup>11</sup> Total world production in 2004 was 45.5 million tons, worth more than \$63 billion, with China accounting for approximately 70 percent of the total production by weight. The FAO now estimates that close to half of the world’s edible seafood was produced through aquaculture. With production of wild fisheries remaining relatively stable, and forecasts of a 30 percent increase in demand for seafood by 2030, it is expected that the gap between supply and demand will need to be filled by aquaculture.

The United States is ranked 10<sup>th</sup> for world aquaculture production and has seen more than a 250 percent increase in the past 20 years. In 2004, the U.S. produced 789 million pounds of cultured seafood. Three-quarters of the production in weight consisted of catfish, with more than 607 million pounds produced.<sup>12</sup>

**Figure 1.5: U.S. Aquaculture Production, 2005**



Source: Fisheries of the United States, 2006.

<sup>11</sup> UN Food and Agriculture Organization, *The State of World Fisheries and Aquaculture*, 2006.

<sup>12</sup> Fisheries of the United States, 2006.



Catfish production in the United States is more than three-quarters the production of all other aquacultured products combined (by weight) and represents almost 40 percent of the total U.S. production, yet production has been declining steadily for the past few years. Catfish is a popular item among Americans and has been in the top five most consumed species for many years,<sup>13</sup> only dropping to sixth place behind tilapia as of 2006. While the majority of catfish consumed in the United States is produced domestically, imports are on the rise. In 2006 imports exceeded 75 million pounds – up from just three million pounds in 1999 – and imports are expected to exceed 130 million pounds in 2007.<sup>14</sup>

The vast majority of catfish is produced in Mississippi, Arkansas, Alabama and Louisiana. The industry is largely comprised of small-scale producers utilizing embankment ponds. Embankment ponds are filled by groundwater and replenished primarily by rainfall with supplemental ground and surface water.

Although catfish require a diet including wild-caught fish, feeds generally have relatively low fishmeal content and reliance on marine resources overall is considered low.<sup>15</sup> Many conservation groups recommend U.S.-produced catfish as a good choice for consumers, based on sustainability criteria.

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<sup>13</sup> National Fisheries Institute, Top 10 U.S. Consumption by Species Chart.

<sup>14</sup> FAO GLOBEFISH, 2007.

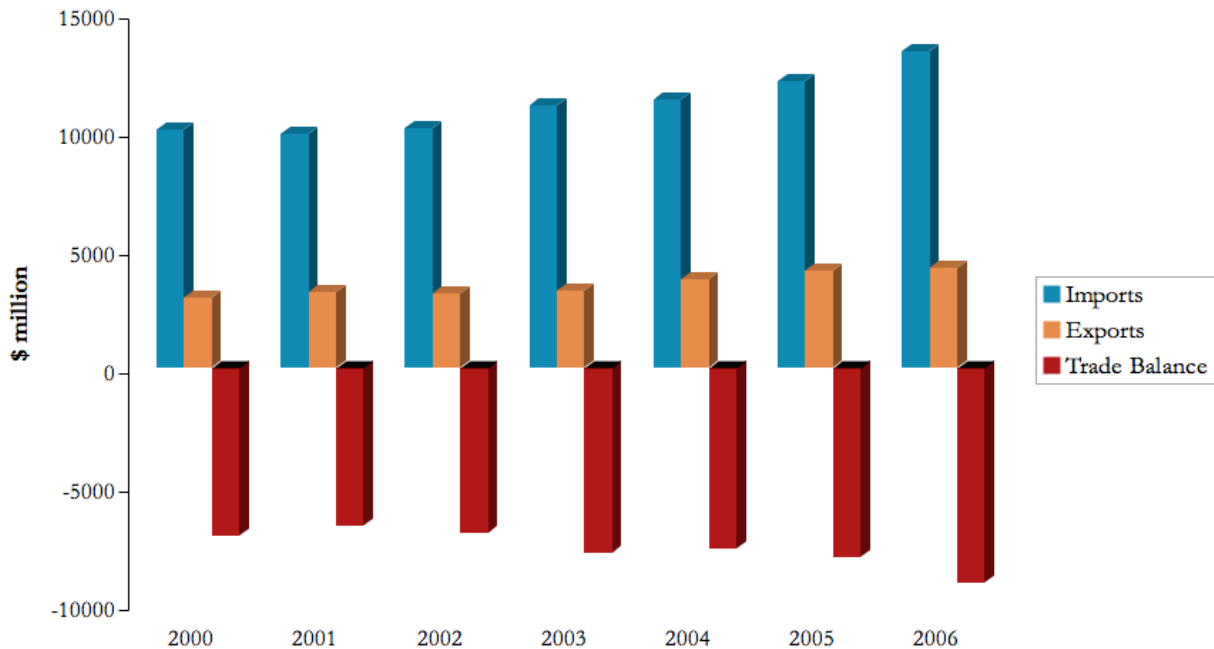
<sup>15</sup> Sustainable Fishery Advocates. Seafood Watch Seafood Report, U.S. Farmed Channel Catfish, 2005.

## U.S. Seafood Trade

As with global production and value, world trade of fish and fishery products is at record levels. According to the FAO, in 2004 the value of world trade was \$71.5 billion – a 23 percent increase over 2000 levels – and preliminary estimates are that numbers will be even higher in 2005.<sup>16</sup> Fish is one of the most highly traded food and feed commodities, with growth rates in developing countries higher than traditional exports such as rice or coffee, from \$4.6 billion to more than \$20 billion in the past two decades. Incredibly, shrimp alone represents more than 16 percent of the total value of internationally traded fishery products.

The United States contributes heavily to the international seafood trade; it has been the second largest importer for more than 10 years, behind only Japan. In addition, the United States is the fourth largest exporter, following China, Norway and Thailand.

**Figure 2.1: U.S. Balance of Trade: Edible Fishery Products, 2000-2006**

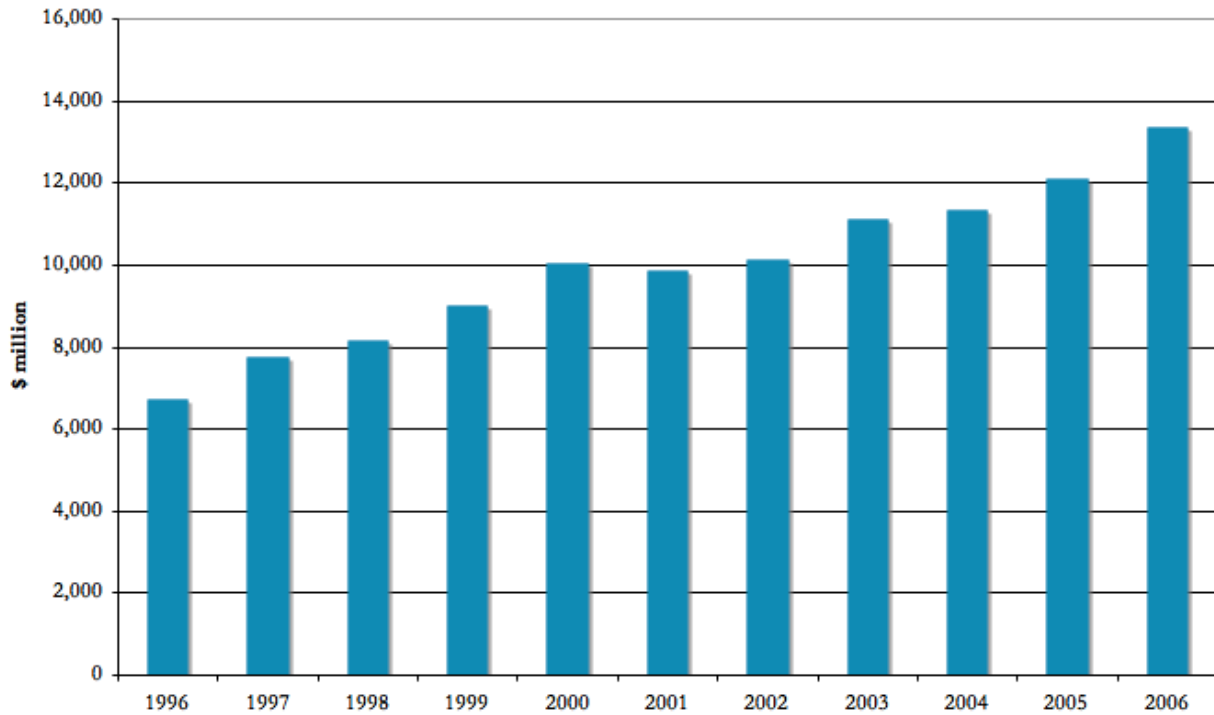


Source: Fisheries of the United States, 2006.

<sup>16</sup> UN Food and Agriculture Organization, The State of World Fisheries and Aquaculture, 2006.

## Imports

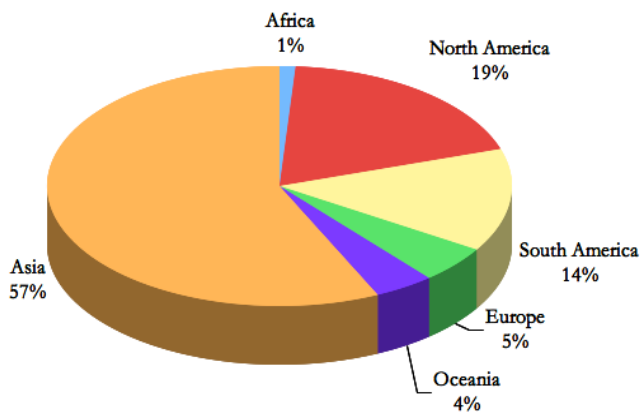
**Figure 2.2: U.S. Seafood Imports, 1996 - 2006**



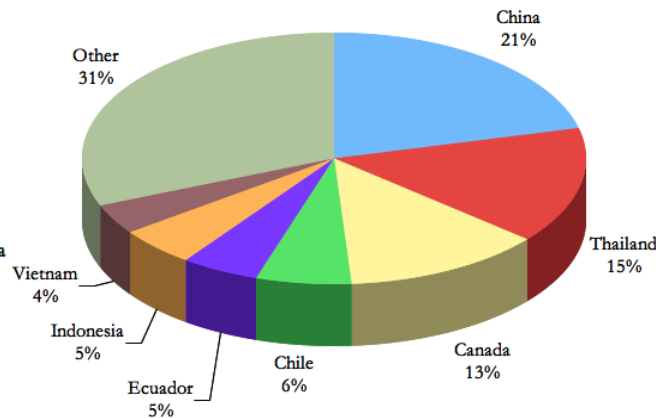
Source: Fisheries of the United States, 2006.

Imports of edible fishery products into the United States hit record highs in 2006; 5.4 billion pounds valued more than \$13 billion. The vast majority of imports originate in Asia, primarily China and Thailand.

**Figure 2.3: U.S. Imports from Major Areas by Volume, 2006**



**Figure 2.4: U.S. Imports from Major Exporters by Volume, 2006**

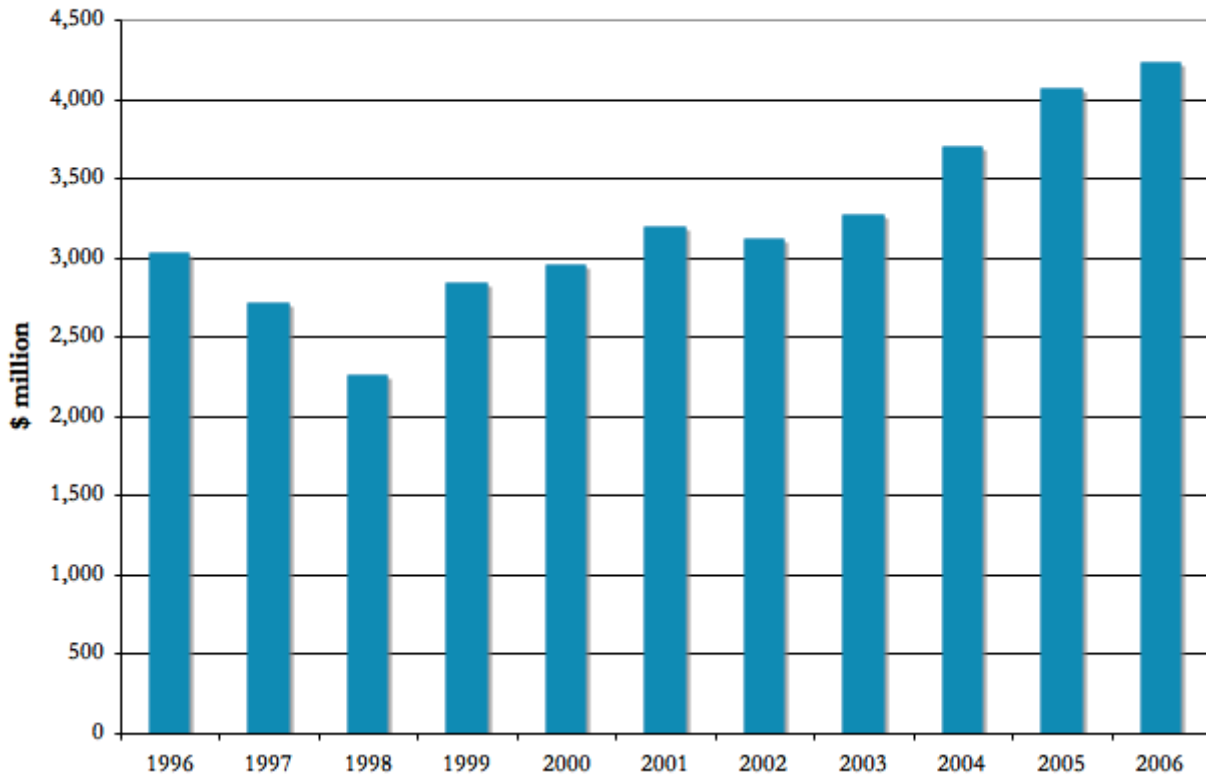


Graphs Reproduced From: Fisheries of the United States, 2006.

Top imports include shrimp, salmon, tuna and crabs. However, shrimp is the largest imported seafood item by far. Almost one-quarter of total imports by weight – 30 percent by value – were shrimp; over 1.29 billion pounds of shrimp were imported in 2006. Almost three-quarters of all shrimp were imported from Asia, with the majority – more than 427 million pounds – from Thailand.

## Exports

**Figure 2.5: U.S. Seafood Exports, 1996 - 2006**



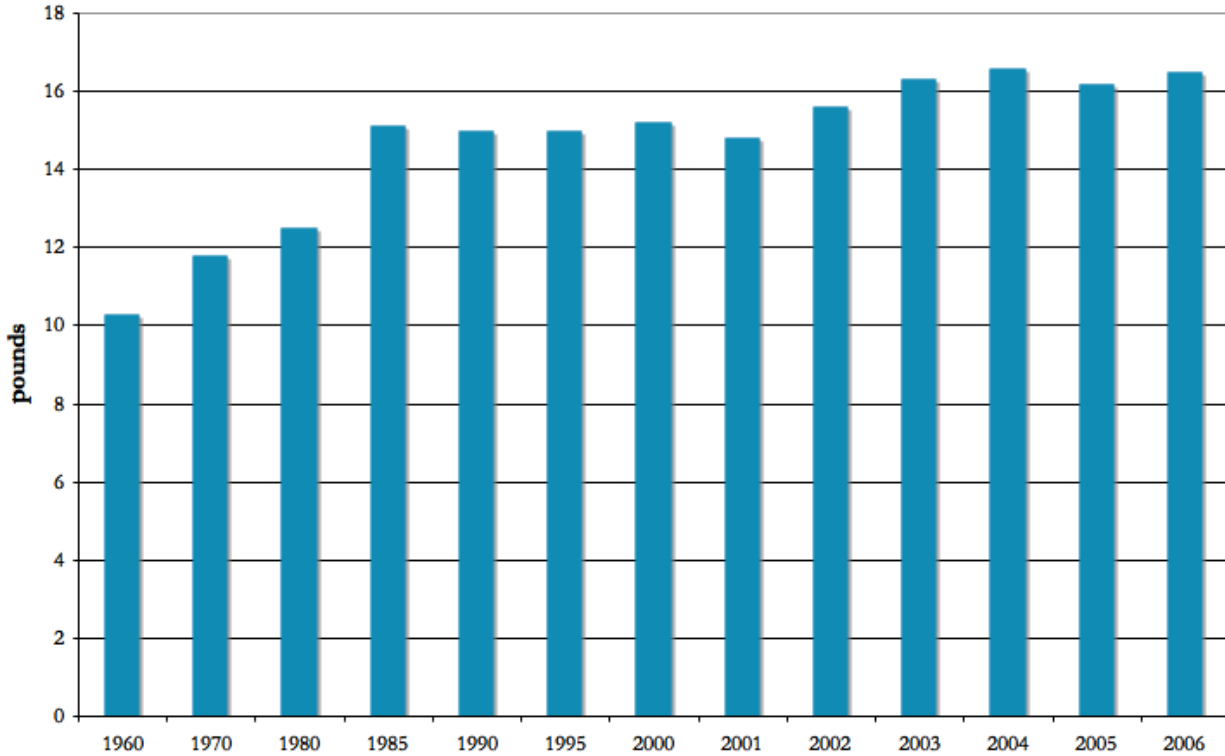
Source: Fisheries of the United States, 2006.

In 2006, the U.S. exported almost three billion pounds of edible seafood products, a 27.9 million pound increase over 2005, with surimi and groundfish as top export items by volume. The total value of all U.S. edible seafood exports was over \$4.2 billion, with lobsters leading the way at more than \$371 million. Salmon is also high on the list of export items in terms of both volume and value, with more than 254 million pounds exported in 2006 valued in excess of \$367 million. More than half of U.S. exports are destined for Asia, with Japan alone receiving 19 percent of total exports.

While edible seafood exports are relatively high, the non-edible products are what make the United States a top exporter. Non-edible fishery products, such as meals and oils (primarily processed from menhaden), exported from the United States in 2006 were valued at in excess of \$13.5 billion – more than three times the value of edible fishery products – bringing the U.S. export total to \$17.8 billion.

# U.S. Seafood Demand

**Figure 3.1: U.S. Annual Per Capita Seafood Consumption, 1960-2006**

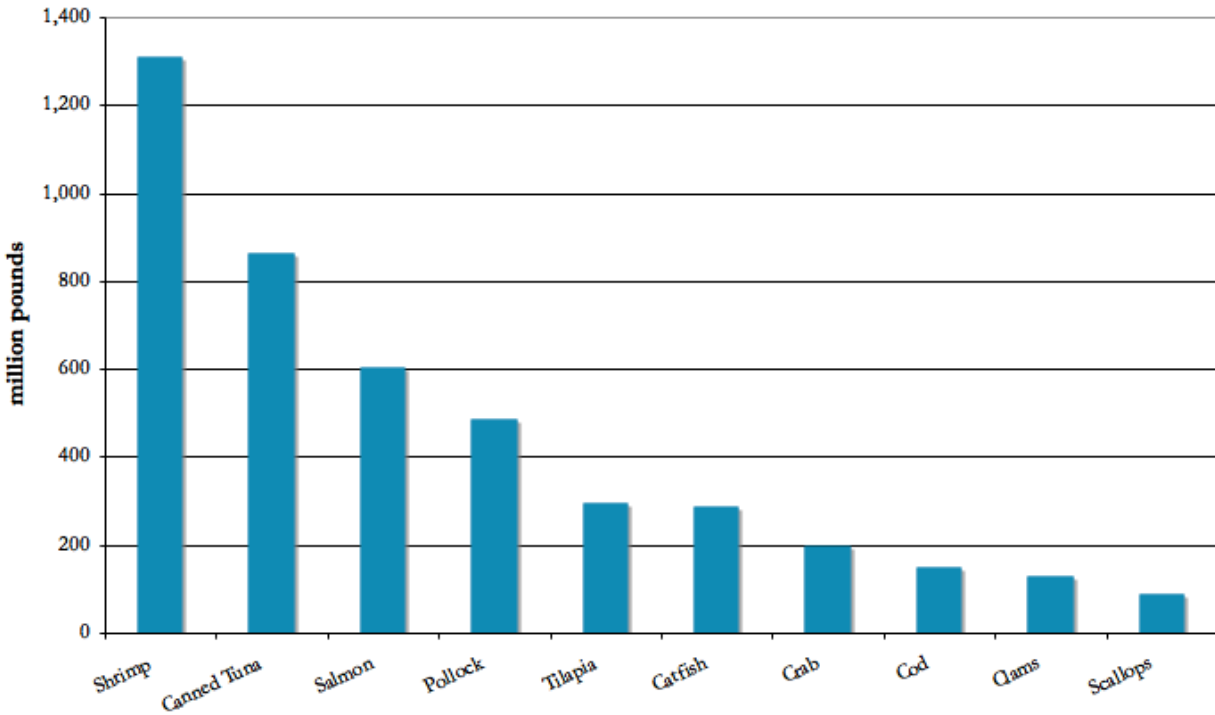


Source: Fisheries of the United States, 2006.

In 2006, U.S. consumers spent \$69.5 billion on fish and shellfish, just over seven percent of total food spending. At 16.5 pounds, per capita consumption increased by 0.3 pounds over 2005, but is still lower than its 2004 peak. Fresh and frozen seafood fared better than canned, with a record 12.3 pounds per capita for 2006 (4.92 billion pounds total). The consumption of canned seafood has declined from its high of more than five pounds per person in the mid-1980s to less than four pounds per person in 2006. Of canned products, tuna is still the leader, followed by shellfish, salmon and sardines.

Shrimp remained America's favorite seafood in 2006 with another increase of 0.3 pounds per person, having first edged out canned tuna in 2001. Of further note is the increasing popularity of tilapia, which replaced catfish as the fifth most consumed seafood item. Overall, however, the average person ate more finfish than shellfish, and the top 10 varieties of seafood made up about 90 percent of their seafood consumption.

**Figure 3.2: U.S. Top 10 Seafood Choices, 2006**



Source: Fisheries of the United States, 2006.

Americans split their seafood buying about equally between restaurants and retail outlets. Yet, while the quantity of seafood purchased may be about equal, the foodservice sector receives about two thirds of the revenues due to increased mark-ups, with expenditures in the retail and foodservice sectors totaling \$22.6 billion and \$46.5 billion respectively.

U.S. demand for seafood has steadily increased over the past 10 years and is projected to grow even faster in the future. Although Americans eat less than half of the global per capita average, overall U.S. seafood demand ranks behind only China and Japan. Imports comprise more than 80 percent of U.S. consumption and will account for the majority of mounting demand. As a result, the U.S. market plays a significant role in the health of fisheries across the globe.

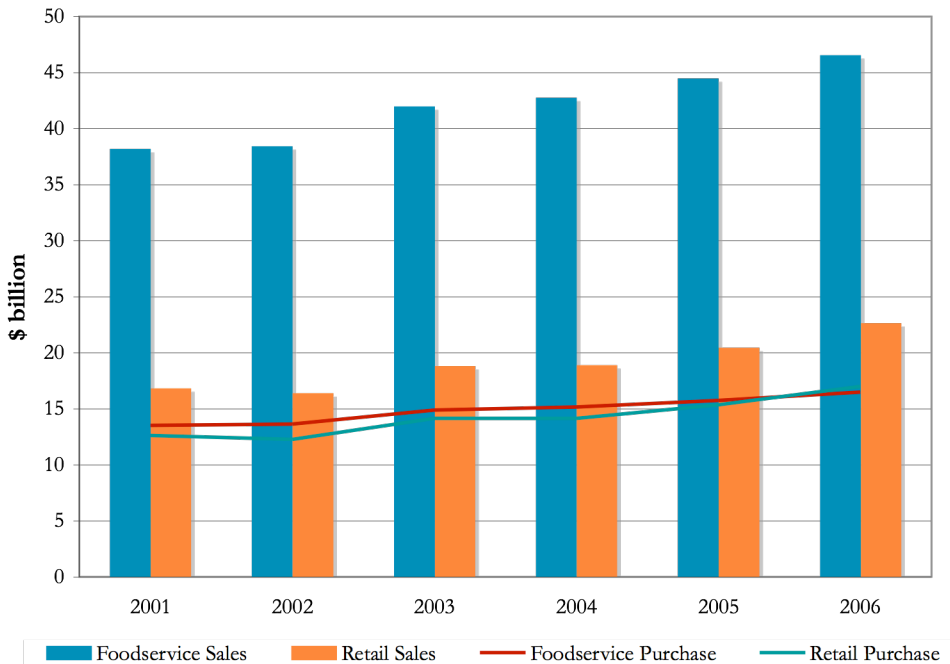


# Seafood Supply Chain

Consumers in the United States purchase seafood either in foodservice establishments or retail stores. Stores include supermarkets, independent grocery stores and specialty seafood markets. As a category, definitions of foodservice vary, but the National Marine Fisheries Service includes: restaurants with full menus and table service, restaurants with limited menus and table service, fast food and carryout, and institutional foodservice (including military, schools, hospitals, food served on airlines, corporate and university cafeterias, and off-site catering services).

While the amount of seafood purchased by each sector is almost equal, the value of sales by sector is heavily skewed towards foodservice, which represents close to two-thirds of total sales value.

**Figure 4.1: Value of Sales Price vs. Purchase Price of Fishery Inputs by Sector in the U.S., 2001-2006**



Source: Fisheries of the United States, 2001-2006.

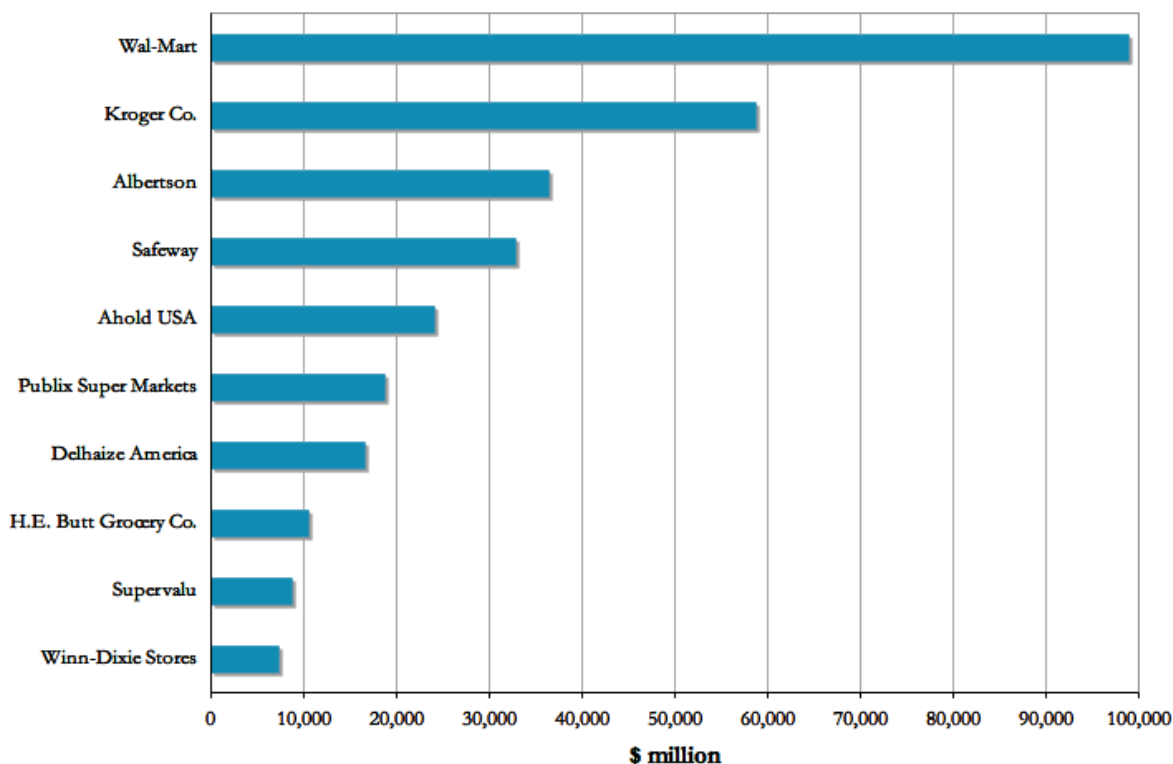
## Retail Stores

In 2006, retail sales of seafood were at an all-time high. With sales exceeding \$22.65 billion, it was the first year in many that the retail sector sold a higher volume of seafood than foodservice. The mark-up from wholesale purchase price to final sales price for the retail sector in 2006 was a little more than 21 percent.

Progressive Grocer reports the fastest-growing seafood categories are shrimp, salmon, haddock, tilapia, catfish nuggets, scallops, organic seafood of all kinds, and smoked seafood products.<sup>17</sup> Shrimp is the king of the retail sector, accounting for more than 30 percent of sales from seafood departments. Farmed salmon is the other top seller and leads finfish sales with more than 30 percent of the total. Overall, crustaceans account for the highest sales, followed closely by fresh fish, with lower sales of other items such as mollusks and side items.<sup>18</sup>

The retail category includes supermarkets, independent grocers and specialty seafood markets; the vast majority of retail sales is through supermarkets. There are more than 35,000 supermarkets in the United States. While most supermarkets are regional chains, of note is the growth in national chains as companies like Costco and Wal-Mart – the United States’ fastest growing seafood retailer – expand food sales, and regional chains buy out chains in other regions.<sup>19</sup>

**Figure 4.2: Top 10 Supermarket Chains in the U.S. by Total Sales, 2006**



Source: Progressive Grocer, The Super 50 - 2006.

<sup>17</sup> Progressive Grocer, “2007 Seafood Operations Review,” March 2007.

<sup>18</sup> The David and Lucile Packard Foundation, “Mapping Global Fisheries and Seafood Sectors,” 2007.

<sup>19</sup> The David and Lucile Packard Foundation, “Mapping Global Fisheries and Seafood Sectors,” 2007.

When it comes to sustainability in seafood, some retailers in the U.S. are leading the way with corporate programs specifically addressing their seafood sourcing policies. The most publicized of these sourcing policies is that of Wal-Mart Stores, Inc. Late in 2005, Wal-Mart announced it would require its shrimp suppliers to adhere to “best aquaculture practices” as defined by the Global Aquaculture Alliance, an international, nonprofit trade association dedicated to advancing environmentally and socially responsible aquaculture. Shortly following that announcement, Wal-Mart also committed to sourcing its fresh and frozen seafood from sources certified to the Marine Stewardship Council (MSC) standard as sustainable and responsibly managed fisheries. These announcements, coming from the largest supermarket chain in the country, underscored to the rest of the seafood supply chain that sustainability was now a priority purchasing criteria to be considered along with freshness and quality.

Other regional retail chains have partnered with specific conservation organizations to tailor sourcing policies that meet the needs of the company. Ahold USA (Stop & Shop, Giant, and Peapod) and New England Aquarium have a partnership they call “Choice Catch”. The Choice Catch project is an audit of the environmental impact and sustainability of domestic and international sources of seafood. These audits directly affect the buying practices among Ahold’s U.S. retail outlets, shifting product choices to favor marine conservation.<sup>20</sup> Similarly, Wegmans Food Markets worked with Environmental Defense Fund to develop standards for sourcing farmed salmon and farmed shrimp in order to provide environmentally preferable products for their customers. Notably, Wegmans has indicated that these standards are also intended to promote environmental progress in the aquaculture industry in the Americas; a case of the retailer going beyond the needs of their customers to seek long-term change in the seafood industry.

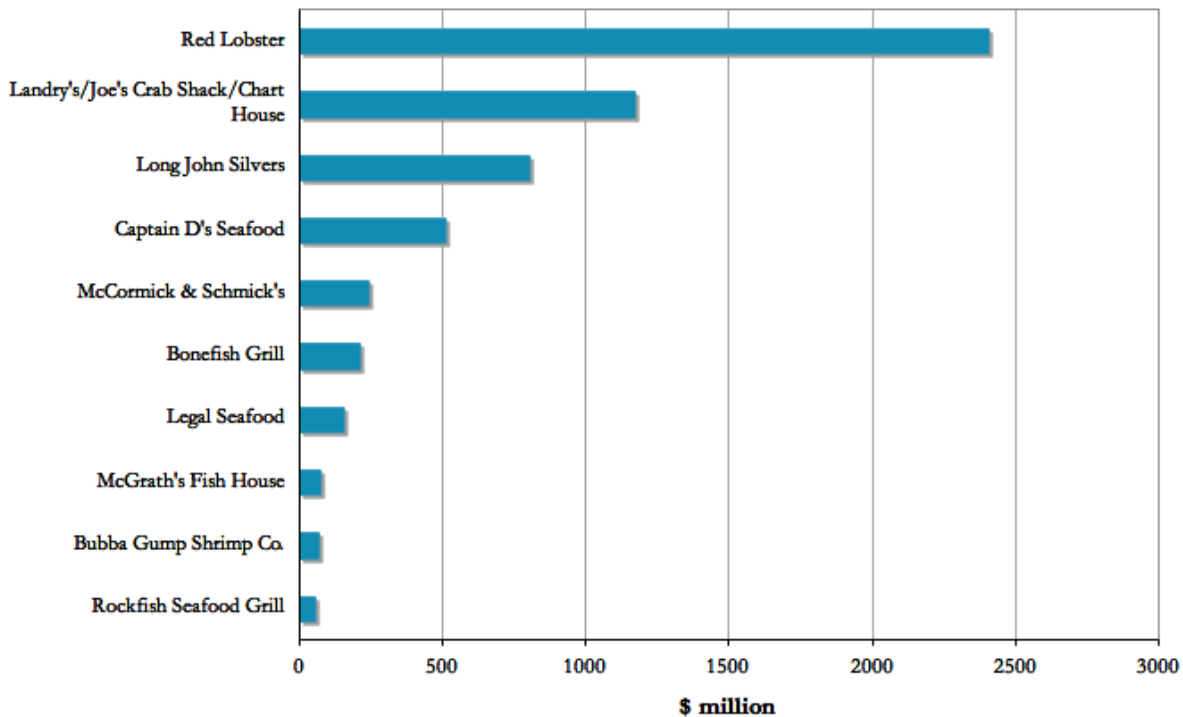
## Foodservice

The category of foodservice may be divided and discussed in a number of ways. As the majority of foodservice sales are in restaurants, rather than institutional foodservice, it is best to examine the various categories of restaurants: fine dining, casual dining, family restaurants, fast food (or QSR, quick service restaurants), and hotel or motel restaurants. The focus in this report will be on the largest categories of casual, family, and fast food.

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<sup>20</sup> [www.ahold.com](http://www.ahold.com), “Choice Catch”

**Figure 4.3: Top 10 Seafood Restaurant Chains in the U.S. by Total Sales**



Source: NFI, Top 10 Leading U.S. Seafood Restaurants

Total seafood sales for foodservice in 2006 were \$46.5 billion. The mark-up for seafood in foodservice is more than 280 percent, or \$30 billion. Red Lobster, a unit of Darden Restaurant Group, is the single largest seafood restaurant chain, with sales in excess of \$2.4 billion in 2006. Together with Wal-Mart Stores, Darden Restaurants also announced they would require their shrimp suppliers to adhere to “best aquaculture practices” as defined by the Global Aquaculture Alliance. With their announcement, Darden became the first company in the restaurant industry to adopt such standards. The company’s objective is to reduce the environmental impacts of shrimp farming.<sup>21</sup>

Among other restaurant sectors, quick service restaurants handle high volumes of seafood, while casual dining and family restaurants are able to offer more variety. Casual dining establishments – with Applebee’s and Chili’s Bar & Grill leading sales – have an overall menu focus on fried and grilled options; top items include fried shrimp, grilled farmed salmon, fried whitefish, grilled shrimp, and soups and chowders. The most popular shellfish types are shrimp, crab, scallops, calamari, lobster and clams; and the top selling finfish are farmed salmon, catfish, cod, tilapia and tuna.<sup>22</sup>

Top menu items at quick service restaurants are fish sandwiches and fish baskets/platters. In this category, McDonald’s is at the top of the sales chart by a wide margin, with more than \$25.6 billion in sales. For its Filet-O-Fish sandwich, McDonald’s consumes more than 100 million pounds of fish annually.<sup>23</sup> Interestingly, McDonald’s primarily uses Alaska pollock for its sandwich, with has been certified as sustainable to the Marine Stewardship Council standard. For a company needing to ensure long-term business sustainability, use of certified products is the best way to ensure continuity and sustainability of supply.

<sup>21</sup> IntraFish Media, “Red Lobster to eco-certify its farmed shrimp,” April 1, 2006.

<sup>22</sup> Fishery Products International & Seafood Business, “Driving Seafood Consumption: America’s Attitudes & Behaviors,” March 2007.

<sup>23</sup> The David and Lucile Packard Foundation, “Mapping Global Fisheries and Seafood Sectors,” 2007

# Seafood Trends and Sustainable Seafood

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## Sustainability and the Supply Chain

The issue of seafood sustainability has been on the radar screen of the U.S. seafood supply chain for a relatively short period of time. Despite this, and as documented throughout this report, there is movement from a number of places throughout the supply chain, most notably the retail and foodservice sectors. While eco-labeling and sustainability are not yet top of mind for many in the industry, the commitments to sustainable sourcing by large buyers in particular, such as Darden, Wal-Mart, McDonald's and Ahold, demonstrate the traction this issue is gaining in the marketplace.

In addition to the well-publicized sourcing policies of major corporations, quieter actions are also working to raise the profile of this issue and convince others within the supply chain of the importance of sustainability. Most notably, industry and conservation organizations are collaborating as never before. Whether in the form of specific partnerships such as those between Wegmans and Environmental Defense Fund or New England Aquarium and Ahold, or convenings such as Seafood Choices Alliance's Seafood Summit where top issues are highlighted and potential solutions discussed, these collaborations are leading to change.

The issue of sustainability now emerges in industry forums previously focused only on sales and health and safety issues, such as trade shows and conferences. And business-to-business dialogues, where same-sector businesses can discuss challenges and develop creative solutions, are proving that sustainability does not have to be a point of competition but rather an opportunity for collaboration.

## Eco-labels

In 2005, the Food and Agriculture Organization of the United Nations (FAO) published a set of voluntary guidelines for the eco-labeling of wild fish products. These guidelines outline general principles, including the need for reliable, independent auditing, transparency of standard setting, accountability, and for standards to be based on good science. Minimum requirements and criteria for assessing whether a fishery should be certified and awarded an eco-label are based on the FAO's Code of Conduct for Responsible Fisheries.

Eco-labels, particularly for seafood, are generally not well recognized by consumers in the United States, yet the eco-label landscape is becoming increasingly crowded worldwide. Currently, the label with the most traction in the marketplace is that of the Marine Stewardship Council (MSC), which is based on its environmental standard for sustainable and well-managed wild fisheries. First established in 1997 by Unilever and WWF, and operating independently since 1999, the MSC label can now be found on more than 1200 products worldwide. The label is used at wet fish counters in supermarkets, on supermarket private-label products, as well as branded frozen, smoked and canned products. Currently 26 fisheries are certified to the MSC standard, and fisheries that are certified or in the assessment process represent approximately eight percent of global fisheries by volume.<sup>24</sup>

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<sup>24</sup> [www.msc.org](http://www.msc.org)

When it comes to eco-labels for aquaculture, the picture is less clear. While FAO has outlined clear guidelines for wild capture fisheries, similar guidelines for aquaculture have yet to be released but are in development. On a global scale, certification efforts exist or are in development from a variety of organizations, including: World Wildlife Fund (WWF), Global Aquaculture Alliance, GLOBALGAP, Friend of the Sea, and ISO (International Standards Organization). In the United States, the most visible of these efforts is that of the Global Aquaculture Alliance (GAA) and their associated certification body, the Aquaculture Certification Council (ACC). The GAA has developed best practices standards for aquaculture for a host of species, which the ACC – an independent nongovernmental body – then applies in a certification system to assess social, environmental and food safety standards at aquaculture facilities throughout the world. Currently, the ACC only certifies shrimp hatcheries, farms and processing plants. However, standards for tilapia, catfish and other species are under development by the GAA.<sup>25</sup> Also relevant to the U.S. market is the work being done by WWF, which has initiated a number of species-specific dialogues that are working to develop standards for aquaculture certification. Notably, these multi-stakeholder dialogues include producers, buyers, nongovernmental organizations and others. To date, species with standards in progress through the WWF Aquaculture Dialogues include catfish, mollusks, pangasius, salmon, shrimp and tilapia.<sup>26</sup>

## Consumer Responsibility

A report in 2006 by the Worldwatch Institute, *Catch of the Day, Choosing Seafood for a Healthier Ocean*, indicated that, with governments and fisheries management bodies apparently unable to reverse the decline in some fisheries, initiatives by seafood buyers – including restaurants, retailers and consumers – could prove effective.<sup>27</sup> As we have seen in the previous pages, restaurants and retailers are taking action and only time will tell if those actions will lead to direct change in the water. Consumers, too, are becoming more active in choosing sustainability at the counter and at the table. More tools than ever are available to assist them in making those choices.

In the United States, the most recognizable tool for consumers is the wallet card of seafood recommendations. Wallet cards offer consumers a very basic picture of sustainability, generally categorized in a traffic light system of “green” for best choices, “yellow” for good options, and “red” for seafood items to avoid. Cards have been developed by a number of conservation organizations in the United States, including Blue Ocean Institute, Environmental Defense Fund, and Monterey Bay Aquarium’s Seafood Watch program. Seafood Watch alone has distributed 21.6 million wallet cards since 2000.

Another tool just developed for consumers is Blue Ocean Institute’s Fish Phone, a sustainable seafood text messaging service. Now consumers with a question about seafood sustainability can simply send a text message with the name of the fish in question and rapidly get a response with assessment information and better alternatives for fish with environmental concerns.

Whether using a wallet guide, text messaging service or other tool, consumers have a role to play in ensuring the sustainability of our seafood supply. As the Worldwatch report notes, “a public that better understands the state of the world’s oceans can be a driving force in helping governments pass laws to ban destructive fishing practices.”<sup>28</sup>

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<sup>25</sup> [www.aquaculturecertification.org](http://www.aquaculturecertification.org)

<sup>26</sup> WWF, *The Aquaculture Dialogues: Ensuring responsible management of the world’s farmed fish*.

<sup>27</sup> Halweil, Brian, “Catch of the Day: Choosing Seafood for Healthier Oceans”, Worldwatch Institute, November 2006.

<sup>28</sup> *ibid.*



# Overview of Seafood Choices Alliance Market Research

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In 2007, Seafood Choices Alliance undertook a nationwide survey of seafood business decision-makers on their attitudes and actions surrounding seafood sustainability. Three sectors of the seafood industry were targeted:

- Chain Restaurant Seafood Decision-makers: including corporate executive chefs, menu designers and buyers;
- Seafood Retailers: including chain retail seafood buyers, independent store owners and seafood counter managers; and
- Seafood Wholesalers: including wholesalers with processing operations.

The surveys, designed and conducted by the independent research firm Edge Research, relied on in-depth telephone surveys. For the chain restaurant survey with 107 total respondents, qualifying establishments were screened to ensure seafood appeared on their menus. For the retailer survey with 150 respondents, participating establishments were screened to ensure they had a wet (fresh) fish counter. For the wholesaler survey with 100 respondents, businesses were screened to ensure their sale of seafood at the wholesale level. All respondents were screened to ensure they had decision-making authority for buying seafood within their establishments.

The objectives of this research were to understand the following:

- Where sustainable seafood sits vis-à-vis other food trends;
- Current challenges associated with sourcing and selling seafood;
- Awareness of, and action taken, on seafood sustainability issues; and
- Receptivity to programs and information on sustainable seafood.

## Key Findings

This survey presents positive evidence of a growing awareness in the seafood industry of sustainable seafood and the environmental impacts of commercial fishing and aquaculture. Chain restaurants, retailers and wholesalers are increasingly open to dialogue and are interested in obtaining information that can help them make informed and responsible choices for themselves, their customers and the ocean.

- All three sectors are being affected by, and responding to, new trends toward organic, local and sustainable foods.
- The importance and value-add of seafood labeling is mixed across the sectors. Retailers believe that USDA organic labeling for farmed seafood will have a significant impact whereas seafood wholesalers are the most aware of sustainability labeling for wild fish such as the Marine Stewardship Council label.
- Quality, variety and obtaining local and regional items are named as key challenges across all three sectors. Sector concerns include verification of sources and chain of custody as well as securing adequate supplies of popular seafood.
- Majorities in each sector are concerned about the health of the ocean and the its impact on their businesses, and respondents felt their personal concern about the ocean was often greater than that of their customers.
- Overfishing is seen as a top threat to seafood sustainability by all sectors, and wholesalers are additionally concerned about the impacts of aquaculture.
- All sectors have taken action to remove seafood items from their product list due to environmental considerations, and in greater numbers than a few years ago.
- Seafood professionals are looking for more information about sustainable seafood, particularly information on specific species.

## Food Trends

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All three sectors are being affected by, and are responding to, new food trends toward organic, local and sustainable. By any measure, the chain restaurant, seafood retail and seafood wholesale sectors are responding to broader organic, local and sustainable food trends and foresee growth in these products.

After recycling (with three-quarters of restaurants having initiatives), using locally grown food (69 percent) or supporting sustainable food and farming (59 percent) were the most common new environmental initiatives.

**Figure 5.1: Issues Facing the Restaurant Industry**

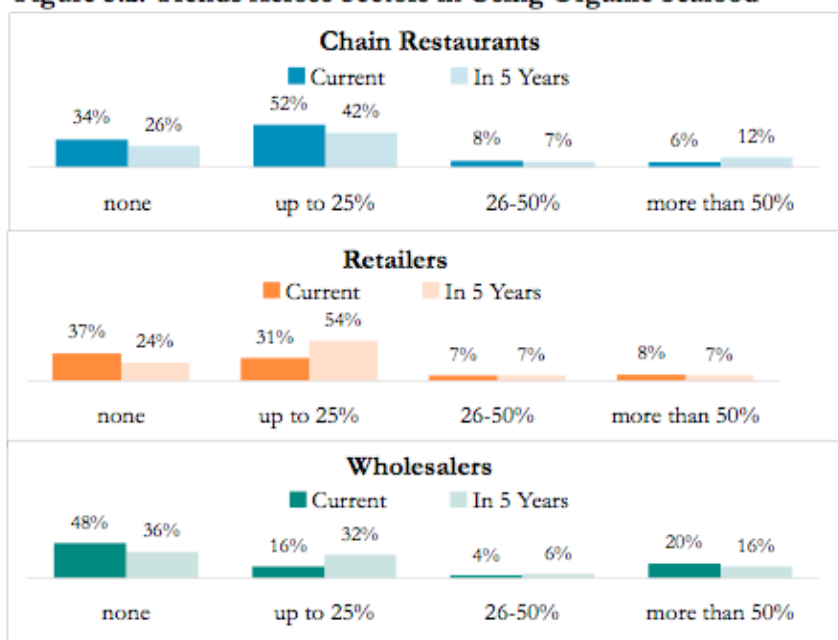
	Has initiatives	Planning initiatives	No Action/ Not Sure
Recycling	72%	9%	19%
Using locally grown food products	69%	6%	25%
Using/supporting sustainable food + farming	59%	11%	30%
Disposal of packaging	51%	15%	34%
Using eco-friendly cleaning/kitchen products	48%	22%	30%
Using organic products	46%	10%	44%
Use of genetically modified foods	22%	2%	76%
Reducing carbon emissions	21%	11%	68%

## Trends in Organic and Sustainable Seafoods

Although currently in development by the United States Department of Agriculture (USDA), no organic standard yet exists for seafood in the United States. As such, little organic seafood is available on the U.S. market, yet many restaurants and seafood purveyors consider a significant portion of the seafood they sell to be organic. Significant percentages of both chain restaurants (52 percent) and retailers (31 percent) claim that up to 25 percent of the seafood they sell is currently organic (see figure 5.2).

**Figure 5.2: Trends Across Sectors in Using Organic Seafood**

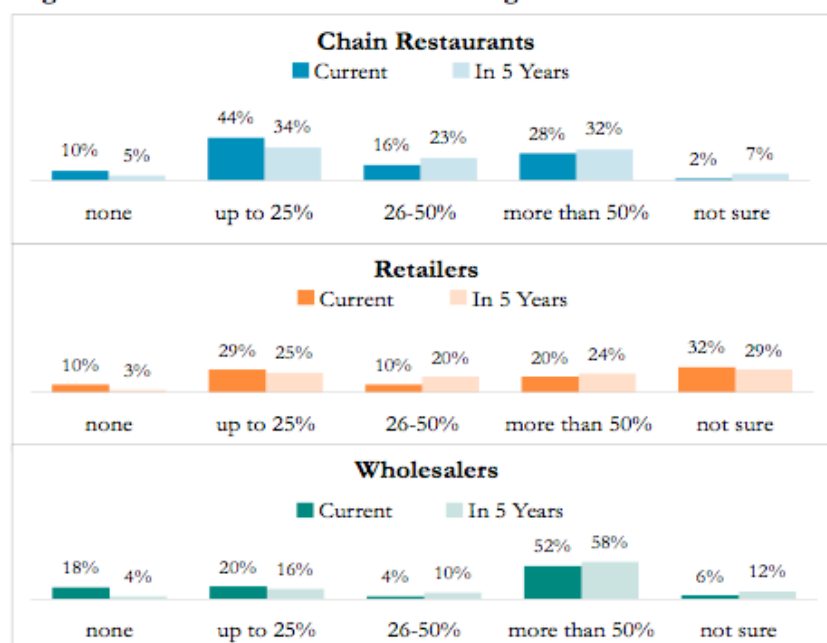
- Chain restaurants report using organic seafood and foresee continued modest growth.
- Retailers claim to already carry significant amounts of organic seafood and expect continued growth.
- Wholesalers are split with almost half saying they have no organic seafood, but many saying more than 50 percent of product is organic.



Sustainable seafood appears to be a rising trend but the trend is difficult to confirm, in part because the “sustainable” label lacks a common definition. Nonetheless, significant percentages of chain restaurants (28 percent), seafood retailers (20 percent) and wholesalers (52 percent) report that 50 percent or more of the seafood they currently sell is “sustainable.” Each sector sees significant growth in the percentage of their seafood that will be sustainable in five years (see Figure 5.3).

**Figure 5.3: Trends Across Sectors in Using Sustainable Seafood**

- Chain restaurants say that many of their seafood items are already sustainable, and they see significant growth ahead.
- Many retailers are uncertain about what percentage of their seafood is sustainable, but they estimate a substantial amount.
- Wholesalers say the majority of their seafood is already sustainable.



Purveyor requests can be a reliable indicator of trends. Based on the questions purveyors are asking of wholesalers, there is a clear trend toward wanting to know where fish are coming from and how they are being produced.

**Figure 5.4: Frequently Asked Questions for Wholesalers**

	Frequently	Sometimes	Total
Whether fish is caught or produced locally	35%	27%	62%
Whether fish is wild or farmed	38%	18%	56%
Whether fish is fresh or previously frozen	30%	23%	53%
Health benefits associated with fish	25%	25%	50%
Ability to get whole fish	25%	21%	46%
value-added processing	20%	21%	41%
Environmental impact of catching or producing the fish	16%	20%	36%
Whether species is overfished	17%	19%	36%
Whether fish is certified as organic	5%	10%	15%

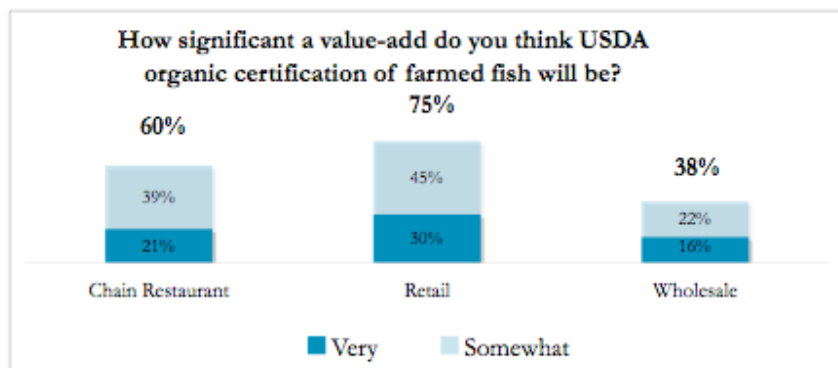
# Labeling

## Value-add Labels: USDA Organics & Marine Stewardship Council

Awareness of labeling and opinions about its importance are mixed among the sectors. Awareness of the upcoming USDA standards for organic certification of farmed fish is modest with 30 percent of retailers saying they heard a great deal (5 percent) or some (25 percent) about it and 48 percent of wholesales saying they have heard a great deal (12 percent) or some (30 percent).

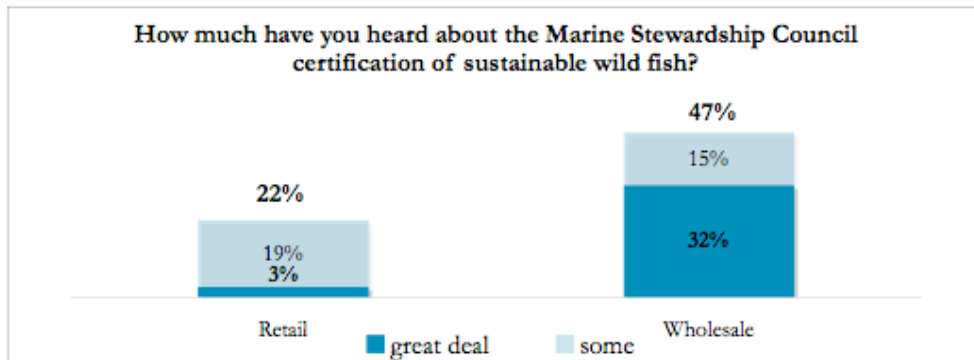
When asked about the perceived value of an organic certification for seafood by the USDA, retailers placed the most significance on organic labeling, with 75 percent saying that a USDA label would be a significant value add.

**Figure 6.1: The Perceived Value of a USDA Organic Label**



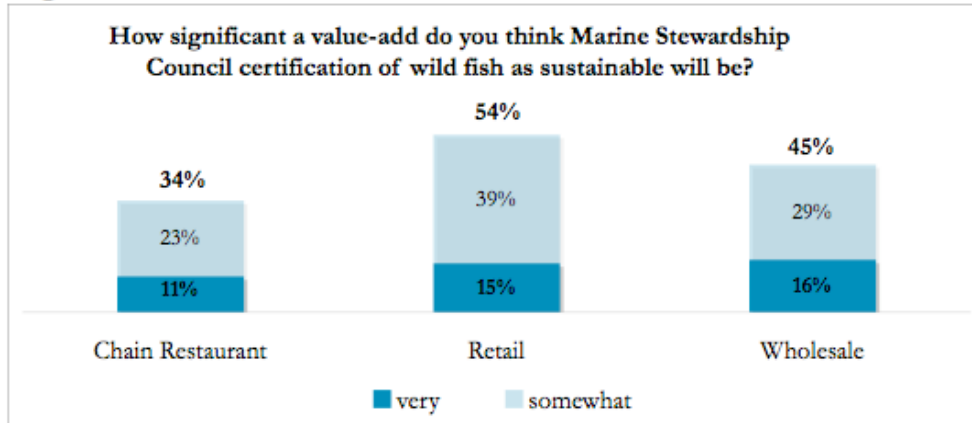
Sustainability labeling generates significantly more interest and attention from seafood wholesalers than from the other two sectors. Wholesalers are twice as likely (47 percent a great deal or some) to have heard about Marine Stewardship Council certification for sustainable wild fish as retailers (22 percent a great deal or some).

**Figure 6.2: Knowledge of the MSC Eco-label**



And while chain restaurants and retailers consider organic labeling to be a bigger overall value-add, wholesalers are more excited about the MSC label with 45 percent saying it will be a significant value-add (compared to 34 percent of chain restaurant decision makers and 54 percent of retailers).

**Figure 6.3: The Perceived Value of the MSC Eco-label**

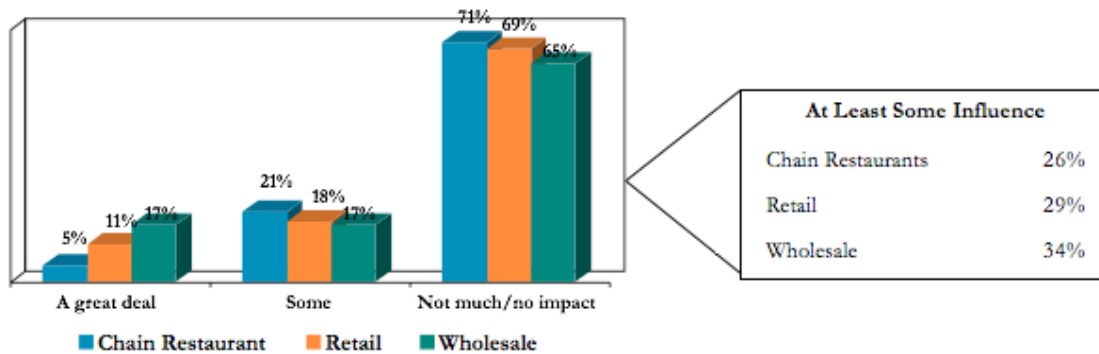


### The Effect of Industry Leaders

When it comes to eco-labeling for seafood, chain restaurants are more likely to be influenced by a peer (competitive company) than either retailers or wholesalers. Wal-Mart’s decision to carry seafood certified to the MSC standard has had limited impact on others in the retail industry; wholesalers are the most likely to be influenced by such a decision.

**Figure 6.4: Influence of Wal-Mart’s MSC Pledge on Seafood Purchasing Practices**

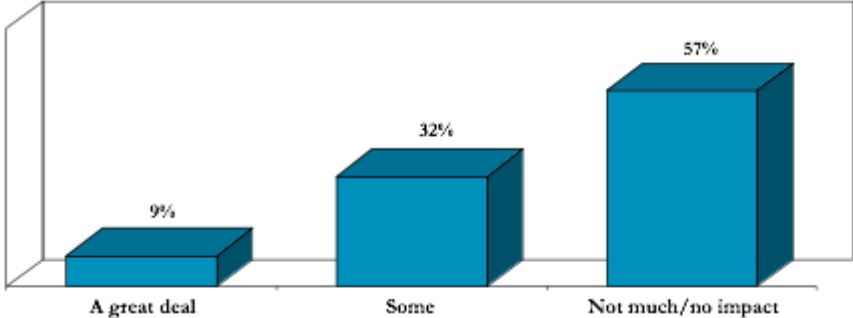
**How much influence do you think Wal-Mart's decision will have on your own company's seafood purchasing?**



However, similar moves by Darden Restaurants and McDonald's toward sustainable sourcing policies are more likely to have an impact on other chain restaurant decision-makers (41 percent, see figure 6.5) than their colleagues in the retail sector (only 29 percent, see figure 6.4).

**Figure 6.5: Influence of Darden and McDonald's Sustainability Pledges on Chain Restaurants**

**How much influence would a commitment by a large restaurant group like Darden or McDonald's have on your company?**

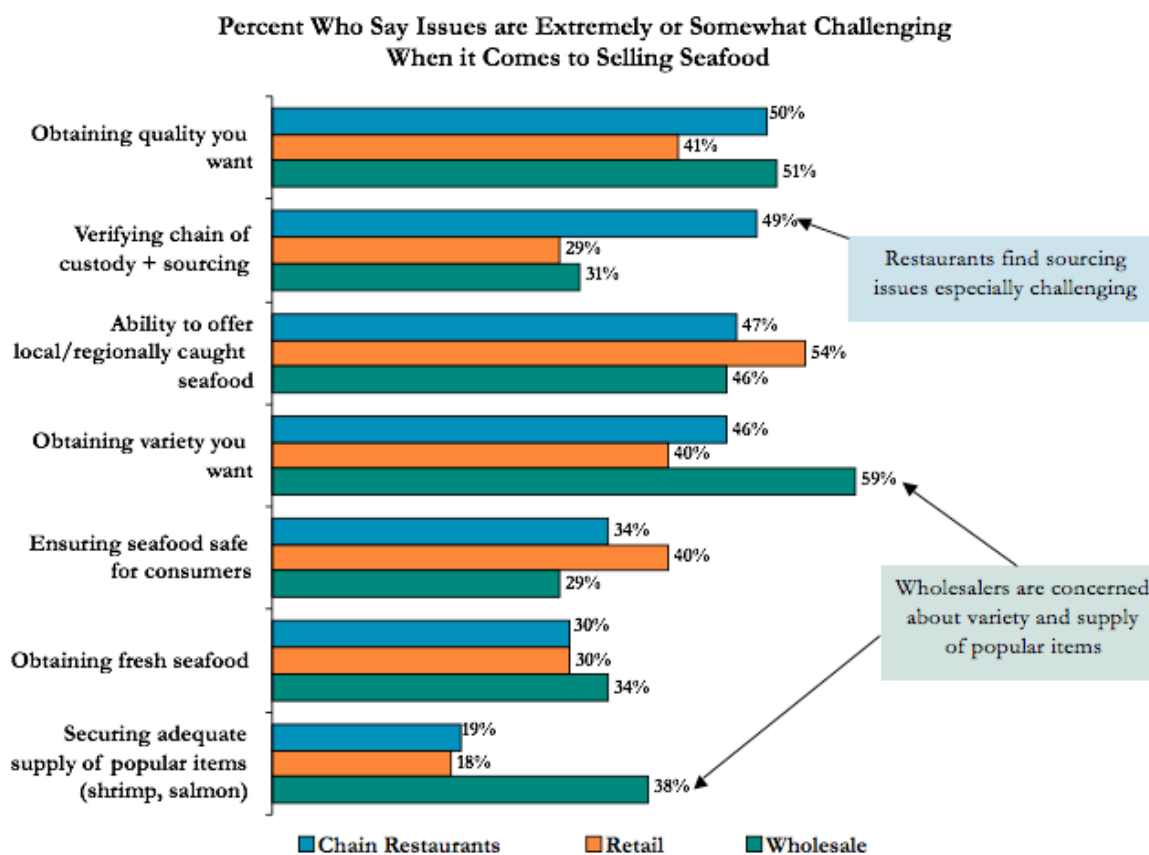


## Challenges and Considerations in Selling Seafood

Quality, variety and obtaining local and regional seafood are named as key challenges across the three sectors. Chain restaurant chefs and menu planners are also quite concerned with verifying the source and chain of custody for the fish (49 percent). Retailers express the most frustration about the availability of local/regional seafood (54 percent saying extremely or somewhat challenging). Unlike the chain restaurant sector they do not find sourcing and chain of custody issues to be especially difficult (only 29 percent). Interestingly, retailers are the most likely of the three sectors to say ensuring that seafood is safe for consumers (40 percent) is a challenge (compared to 34 percent among chain restaurants and 29 percent among wholesalers).

Wholesalers are far and away most concerned with getting the variety of seafood they need with 59 percent saying this is extremely or somewhat challenging. Unlike restaurants and retailers, wholesalers are significantly more concerned with securing adequate supplies of popular items like shrimp and salmon (38 percent find this challenging compared to only 19 percent among chain restaurants and 18 percent among retailers).

**Figure 7.1: Challenges in Sourcing Seafood Across Sectors**

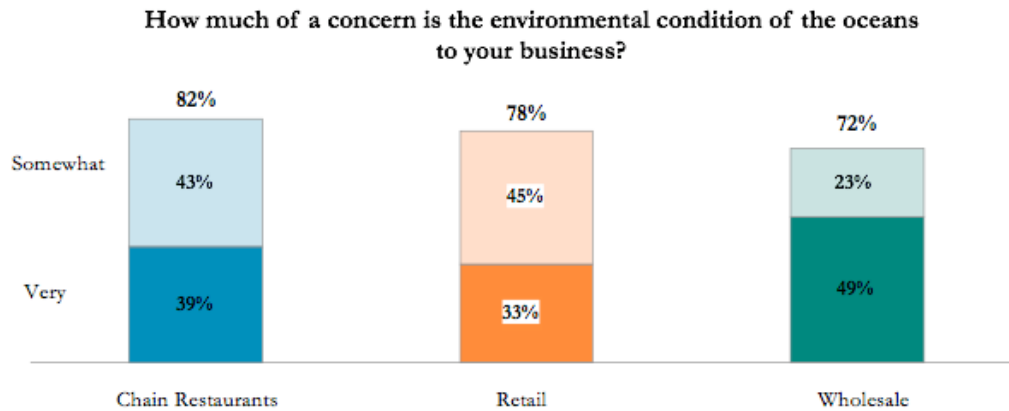




## Business Impacts of Ocean Health

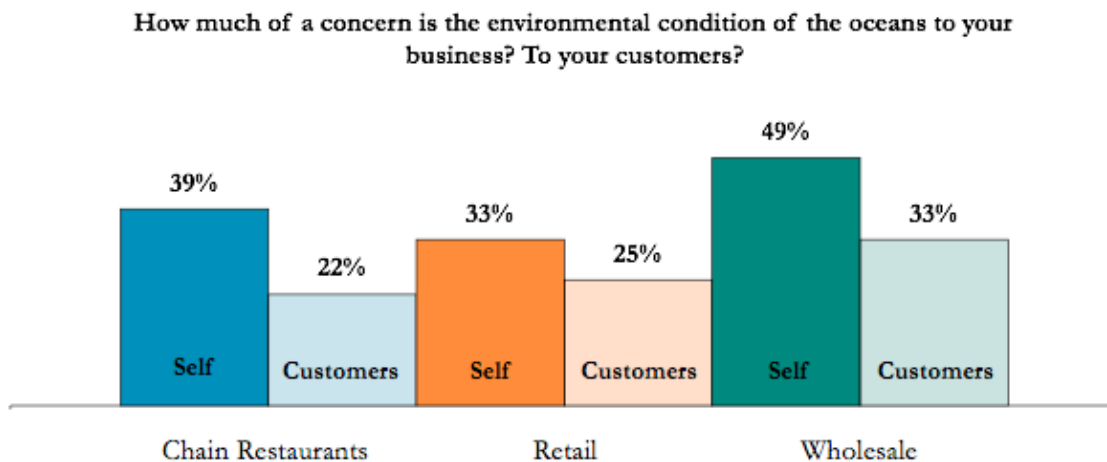
Majorities in each sector are concerned about the health of the ocean and its impact on their businesses. In each sector, respondents were more likely to feel their personal concern about the ocean was greater than that of their customers. Large majorities in each of the three sectors say that the current condition of the oceans is very or somewhat concerning for their business. Seafood wholesalers express the most intense concern with 49 percent saying the condition of the ocean is very concerning to their business.

**Figure 8.1: Condition of the Ocean as a Concern For Business**



Each sector perceives itself to be more concerned about the oceans than its customers are. Among chain restaurant decision-makers, 39 percent say they are very concerned about the ocean, but only 22 percent say their customers share that level of concern. Among retailers, 33 percent say they are very concerned, but only 25 percent believe their customers are equally concerned. Seafood wholesalers are the most likely to say their customers are very concerned about the oceans (33 percent) – which makes sense given their customers are restaurants and retailers – however wholesalers still rate their own concern significantly higher (49 percent).

**Figure 8.2: Percent of Businesses and Their Customers That Are Concerned About the Ocean**



When it comes to factors that drive purchasing decisions for seafood, the three sectors agree that quality, availability and perceived demand drive the market. Quality trumps all other factors with 85 percent of chain restaurants, 88 percent of retailers and 81 percent of wholesalers saying this is an extremely important factor. The next most important factor is perceived customer demand. While restaurants feel they have more flexibility on what they offer (64 percent say this is an extremely important factor), retailers (80 percent) and wholesalers (77 percent) are much more responsive to perceived customer demand in their decision-making.

When it comes to environmental considerations in seafood purchasing, attitudes about its importance are mixed and different issues emerge as more or less important in the three different sectors. Among chain restaurants and retailers, the most important environmental factor considered in purchasing is whether the species is caught in a way that causes damage to the marine environment while wholesalers are less concerned with this aspect.

Where the three sectors agree almost uniformly is that overfishing has become an important consideration. On this issue, half or more in each sector say this is an extremely important factor in deciding what fish to sell (see figure 8.3). On the other hand, fish farming issues have yet to fully materialize in this sector. As noted earlier, while there is a clear preference for wild salmon as compared to farmed, that preference is driven primarily by perceived taste superiority. Currently, whether a fish is wild or farmed is much more significant to wholesalers and retailers than to the chain restaurants.

**Figure 8.3: Factors Driving Seafood Purchasing Decisions**

Which factors are important in your decision to buy seafood?	“Extremely Important”		
	Chain Restaurant	Retail	Wholesale
Quality of the fish available	85%	88%	81%
Availability	66%	59%	69%
Customer demand	64%	80%	77%
Whether species is caught in a way that harms marine environment	54%	62%	49%
Whether aquaculture causes harm to marine environment	n/a	57%	62%
Whether fish is fresh/previously frozen	54%	47%	38%
Whether species is <u>overfished</u>	50%	58%	57%
Price	49%	49%	53%
Health benefits	45%	61%	69%
Environmental impact associated with catching/producing fish	40%	43%	40%
Whether fish is wild or farmed	19%	46%	51%
Whether fish is certified organic	14%	22%	17%
Whether fish is caught/produced locally	12%	19%	43%

## Sustainable Seafood: Awareness, Attitudes and Actions

Without a doubt, awareness about overfishing is cutting through the seafood sector. Fully 88 percent of chain restaurant decision-makers, 73 percent of retailers and 59 percent of seafood wholesalers said this is one of the most serious, or very serious, threats to the future supply of seafood.

For chain restaurants and retailers, of somewhat less concern, yet still important, are issues such as inadequate regulations on commercial fishing, global warming, and aquaculture issues such as the use of drugs to control disease and the use of wild fish for feed. The foremost concern for retailers is the presence of mercury and other toxic chemicals in fish with 83 percent saying that it is one of the most serious, or very serious, threats to the future supply of seafood.

Seafood wholesalers are significantly different in their views of the seriousness of threats to the supply of seafood. This sector tends to view all threats as less serious. The top threat to the future supply of seafood according to 62 percent of wholesalers is the spread of disease and parasites from fish farms to wild fish.

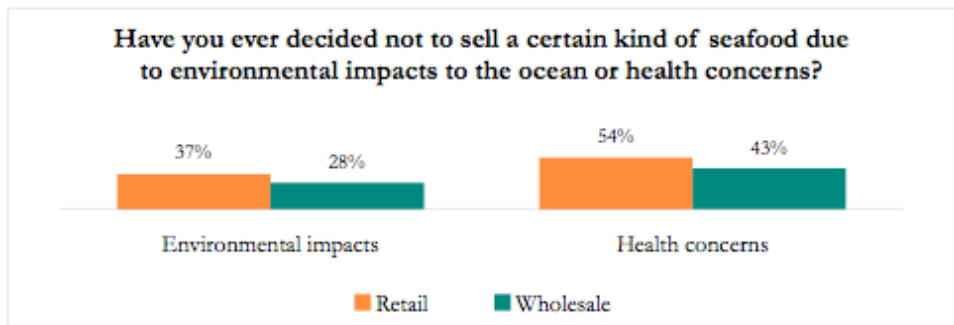
**Figure 9.1: Perceived Threats to the Future Supply of Seafood**

How serious a threat is each of the following to the future supply of seafood?						
	Chain Restaurants		Retail		Wholesale	
	one of most serious	One of the most + very serious	one of most serious	One of the most + very serious	one of most serious	One of the most + very serious
Overfishing	29%	88%	25%	73%	24%	59%
Fishing with gear that damages habitat that fish need to reproduce and survive	16%	77%	20%	69%	15%	49%
Presence of mercury and other toxic chemicals in fish	17%	76%	28%	83%	20%	56%
Catching and killing species such as dolphins and turtles in the process of catching fish	19%	75%	23%	71%	15%	48%
Waste water and discharge from fish farming in coastal waters	16%	70%	20%	66%	21%	57%
Spread of parasites from fish farms to surrounding wild fish	15%	69%	14%	66%	21%	62%
Inadequate regulations on commercial fishing	14%	64%	17%	59%	16%	45%
Global warming and changing ocean temps	14%	58%	17%	56%	18%	50%
Use of drugs and chemicals to control diseases in farmed fish and shellfish	11%	50%	11%	54%	24%	61%
Use of wild fish for feed in fish farming	8%	38%	7%	29%	10%	31%

There is evidence for growing retail action to stop or limit the sales of fish because of environmental considerations. While more retailers have taken action to remove seafood items because of health concerns (54 percent), more than a third have decided not to sell certain seafood items because of concern about environmental impacts. This represents a 17-point increase since the question was asked in the 2001 Seafood Choices Alliance Seafood Retailer Survey (20 percent in 2001 compared to 37 percent in 2007).

Similarly, while wholesalers are more likely to have dropped a seafood item because of health concerns (43 percent), more than a quarter say they have decided not to sell certain items because of environmental considerations. Among the species dropped for environmental considerations are: shark, shrimp, tuna, swordfish, salmon and cod.

**Figure 9.2: Action on Environmental and Health Concerns About Seafood**



**Fish that Wholesalers have dropped for environmental reasons include:**

- 14% Shark
- 11% Shrimp
- 11% Tuna
- 7% Swordfish
- 7% Salmon

## Information: Needs and Sources

While there are many who feel they are already getting the information they need to make decisions about the environmental impacts of seafood, substantial numbers in all three sectors say they are not. Indeed, regardless of whether they feel they have the information they need, the majorities across each sector are receptive to getting more information about environmental issues related to seafood.

Chain restaurant decision-makers are very receptive to learning more about sustainable seafood choices and the environmental impacts of seafood. While many (59 percent) say they are getting most of the information they need to make decisions about seafood, 40 percent say are getting only some or none of the information they need. As a result they are very receptive to the idea of getting more information about environmental impacts of seafood (46 percent very interested, 44 percent somewhat interested).

Of a range of information content tested in the survey, the chain restaurant sector was most interested in a directory of seafood that included the environmental impacts associated with each seafood item and recommendations on whether to serve it (66 percent said this would be very useful). Also considered useful by this sector were a national database of suppliers and a list of environmentally responsible seafood choices.

Retailers are also quite receptive to more information on this topic with 49 percent very interested and another 39 percent somewhat interested. Retailers primarily want information on what to sell. Sixty percent said a directory of seafood that included the environmental impacts associated with each seafood item and recommendations on whether to serve it would be very useful and 50 percent said a simple list of environmentally responsible seafood choices would be very useful.

While seafood wholesalers are the most likely to feel they have all or most of the information they need to make informed decisions about environmental impacts, a significant portion remain open to receiving more. They are less interested than the other sectors in many of the information products tested, however 32 percent say a national database of suppliers who can source environmentally responsible seafood would be a valuable tool and 30 percent say a scientific database of how species are fished and associated environmental impacts would be very helpful.

**Figure 10.1: Interest in Information on Environmental Issues and Seafood**



## Conclusions

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World trade and consumption of seafood is on the rise, and this trend is reflected in the United States with seafood imports at record levels, and retail and food service seafood sales rising year on year. Yet world resources are in a tenuous position with more than 75 percent of fish stock fully or over exploited, and the increase in demand for seafood is projected to continue. Those that buy and sell seafood have a responsibility to seek out seafood that is caught or raised in an environmentally and socially responsible manner in order to ensure the long-term sustainability of ocean resources and the communities that depend on them.

It is clear from the research results that there is a growing awareness of sustainable seafood and the environmental impacts of commercial fishing and aquaculture. The results present positive evidence of a growing awareness in the seafood industry of sustainable seafood and the environmental impacts of commercial fishing and aquaculture.

- Sustainable seafood appears to be a rising trend among chain restaurants, retailers and wholesalers and each sector sees significant growth in the percentage of their seafood that will be sustainable in five years.
- All three sectors are aware of, and becoming responsive to, trends toward local, organic and sustainable foods. Although these larger food trends have yet to transform the seafood industry, they are bringing important pressure to bear.
- Majorities in each sector are concerned about the health of the ocean and its impact on their businesses.
- Overfishing is seen as a top threat to seafood sustainability by all sectors, and wholesalers are additionally concerned about the impacts of aquaculture.
- All sectors have taken action to remove seafood items from their product list due to environmental considerations, and in greater numbers than a few years ago.

The good news is all three of these sectors of the seafood industry are open to dialogue on these issues and interested in information that can help them make informed and responsible choices for themselves, their customers and the ocean. Seafood Choices Alliance supports all sectors of the seafood industry in efforts to make the seafood marketplace environmentally, economically and socially sustainable. This is achieved through solution-driven collaboration with the industry, and partnering with the conservation community to continue to bring the issue of sustainability to the attention of industry, media, consumers and policymakers.

Together we can make more responsible choices and advance actions that reflect our shared concern for the long-term supply of seafood and the long-term health of the ocean environment.





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For information on membership and more, visit [www.seafoodchoices.org](http://www.seafoodchoices.org).

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