



United States  
Department  
of Agriculture

LDP-AQS-20

Oct. 8, 2004



Electronic Outlook Report from the Economic Research Service

[www.ers.usda.gov](http://www.ers.usda.gov)

# Aquaculture Outlook

David J. Harvey

## Seafood Falling as Portion of Overall Livestock Consumption

### Contents

**Domestic Outlook**  
Catfish

### Intl. Outlook

Tilapia  
Shrimp  
Salmon  
Mollusk  
Ornamental

COOL Legislation  
Shrimp Antidumping  
Contacts and Links

### Tables

Catfish  
Tilapia  
Selected Imp./Exp.  
Shrimp  
Salmon

### Web Sites

Animal production  
and Marketing Issues  
WASDE

-----  
The next release is  
March 2005

-----  
Approved by the  
World Agricultural  
Outlook Board.

Over the 5 year period 1998 to 2002, total U.S. meat consumption (beef, pork, and poultry) has gone from 210 to 221 pounds per person on a retail-weight basis. Over the same period domestic seafood consumption increased by less than 1 pound, and most of that growth has come from higher seafood imports. To continue to expand their market at a pace beyond just the rate of population growth, the seafood industry (including aquacultural producers) will have to develop ways of making their products more appealing to consumers to gain a larger share of total protein consumption. While the major meat industries are much larger in size and have advantages in product development and promotions that their size allows, the seafood industry should have some advantage in the wide variety of products that it produces.

Aquacultural producers are likely to be at the forefront of seafood suppliers competing with the traditional meat industries. Advances on a number of research fronts are expected to continue to improve the production efficiencies of almost all aquacultural enterprises. While most of the attention has been focused on primary production issues such as feed efficiency, mortality rates, diseases, and growth rates, more attention will have to be focused on product development, especially with respect to at-home food preparation if a larger share of total protein consumption is to be gained.

The domestic aquaculture industry is expected to face strong competition in the remainder of 2004 and beyond from both the continued growth in imports of aquacultural products from around the globe and from the domestic poultry and livestock industries. Currently, domestic wholesale broiler products price declines have made them much stronger competitors to both the other livestock industries and seafood products.

The outlook for aquaculture production in general is based on a number of factors. First, what is the forecast for the domestic economy, in terms of growth in the Gross National Product and how will this translate into growth in personal disposable income? Food expenditures are a relatively small percentage of total expenditures for much of the U.S.

population, but a slow down in the growth of the economy can more heavily impact the food service industry, an outlet for a large percentage of seafood products. The second factor is what types of consumption growth and price changes are expected for the traditional livestock industries. Currently, both beef and pork consumption are expected to decrease in 2005. The total domestic supply of beef and pork are expected to be slightly lower than the previous year, pushing per capita consumption down for both products. Overall, wholesale beef prices are expected to increase slightly from 2004, but pork prices are expected to be lower. The situation for the broiler industry is different, with larger production and somewhat lower prices forecast for 2005. The larger production is expected to meet or exceed population growth, and per capita consumption of broilers is expected to reach a record level. Finally, the price of corn and soybeans are forecast to be lower in 2005. While declines in grain prices only benefit a portion of the aquaculture industry (mainly the catfish industry), it will make domestic producers who can utilize a mainly grain-based feed more price-competitive with foreign producers.

## Domestic Outlook

### *Catfish Sales Down, but Prices Rise*

In 2004, catfish sales by growers to processors are expected to total between 630 and 635 million pounds, down between 4.7 and 3.9 percent from 2003. Sales over the first 8 months of 2004 have been 429 million pounds, down 5.1 percent from the same period in 2003. Catfish processor sales through August 2004 have also been lower, totaling 210 million pounds, down 3.8 percent from 2002. Because sales to and by processors both have been lower, there has not been any build up in inventory of processed products. As of the end of August 2004, processor inventories were almost 12 million pounds, only slightly higher than at the same point in 2003.

Grower and processor sales so far in 2004 are lower than the last year, which has boosted prices at both the farm and processor levels. Over the first 8 months of 2004, farm prices have averaged 70 cents per pound, up 21.4 percent from the same period in 2003. Average processor prices have risen over the same period, averaging \$2.25 per pound, up 9.6 percent (20 cents per pound) from the previous year. This is still relatively low compared with years prior to 2003. For example, in 1994 average processor sales for the same time period (January to August) were \$2.37 per pound.

Over the first 8 months of 2004, the position of the catfish industry has been reversed from the previous year. Sales to processors have declined, and prices have responded by moving upward. Grower inventory estimates for July 1, 2004, showed lower holdings in most categories, a situation that is expected to result in a lower level of supplies over the second half of 2004 and into 2005. In addition, growers are expected to benefit from lower prices for both corn and soybeans during the remainder of 2004 and through at least the first several months of 2005. The expected slightly smaller catfish supplies would be expected to put upward pressure on prices. While catfish prices are expected to remain strong, they will face strong competition from large supplies of competing seafood products, such as tilapia imports.

Catfish imports so far in 2004 have continued the decline exhibited over the last 2 years. Catfish imports (mainly from Vietnam) peaked in 2001 at almost 12 million pounds. The imports had a major impact because almost all of them were frozen fillets, the largest product of the domestic catfish industry. Since 2001 imports have been gradually declining. Over the first 7 months of 2004, catfish imports have been only 1.7 million pounds, down over 60 percent from the previous year.

### *Catfish Inventories Down in Most Categories*

Even with stronger prices over the first half of 2004, catfish growers indicated that they have continued to reduce their inventories of fish from the previous year. In the latest survey by the U.S. Department of Agriculture's National Agricultural Statistics Service (NASS), growers reported their estimated fish holdings as of July 1, 2004. The survey only included growers in Mississippi, Alabama, Arkansas, and Louisiana, but these four States account for over 90 percent of catfish production. Reflecting low prices that had started in 2001, growers reported a decrease in the

number of stockers and small foodsize fish held in inventory. They also reported a decline in fingerling stocks for the third year in a row.

In the NASS report, catfish growers estimated that, as of July 1, 2004, the total number of foodsize fish in inventory was 317 million, down almost 30 million (9 percent) from a year earlier. This follows a decline of 10 percent in the estimate for foodsize fish inventories between 2002 and 2003. The estimates for foodsize fish were lower for medium and small sizes, while the inventory for large foodsize fish rose. The number of medium foodsize fish in inventory fell by 9 percent to 78.5 million. For medium foodsize fish, an increase in inventories in Mississippi was offset by declines in Louisiana, Alabama, and Arkansas. The inventory of small foodsize fish decreased by 9 percent, and it had fallen by 10 percent in 2003. The July 1 inventory of foodsize fish are a measure of the supply of fish that have already reached market size and will be available for processing during the third and fourth quarters.

The reduced inventory of foodsize fish means that, during the third quarter of 2004 and on into the fourth quarter, catfish farmers are likely to have a smaller supply of fish available to sell to processing plants. Lower supplies at the start of the second half of the year are expected to result in a decrease in processing volume compared with the previous year. This is expected to place some upward pressure on the prices paid to growers. The forecast is for slightly higher prices for the remainder of 2004, with a decrease in farm sales and a gradual decline in processor inventories.

The July 1, 2004, NASS grower survey estimated the number of stockers at 624 million, down 4 percent from the previous year. The number of fingerlings held on farms was estimated at 1.3 billion, down from 1.5 billion the previous year (down 13 percent). Grower-held stockers and fingerlings make up the majority of fish that will achieve a marketable size by the end of 2004 and during the first portion of 2005. Stockers are the fish that will form the bulk of market size fish towards the end of the fourth quarter of 2004. With the strong decrease in the inventory of fingerlings there will not be a large group of fish reaching market size during early 2005. Of course, the final amount of fish available for processing will be impacted by mortality rates, disease outbreaks, off-flavor problems, and feeding rates. The small combined number of stockers and fingerlings in grower inventory at the start of the third quarter of 2004 is expected to result in a lower supply of fish for processing at the end of 2004 and into 2005.

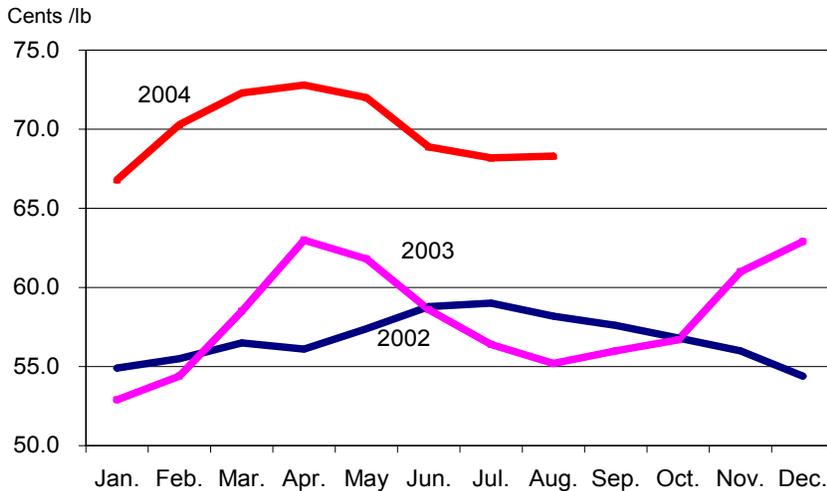
### ***Higher Farm Prices Expected***

In 2004, the farm price for catfish is expected to average between 68 and 71 cents per pound, up 10 to 13 cents per pound from 2003. Based on the lower July 1 estimates of available market size fish at the beginning of the second half of 2004, farm prices for fourth-quarter 2004 are expected to remain considerably higher than for the same period in 2003. This scenario of stronger grower prices is expected to continue into 2005 if a number of factors fall into place. First, growers' sales to processors are expected to remain below their year-earlier levels. Second, with lower sales by farmers, processors are expected to have gradually falling inventories. This is expected to be translated into upward pressure on processor prices which would allow them to pay more for live fish. Third, catfish prices

would greatly benefit from a slow down in the growth of imported seafood into the United States. This would be especially true if there was a decline or at least a slow down in tilapia imports. In many food service operations tilapia fillets are a direct competitor for catfish products.

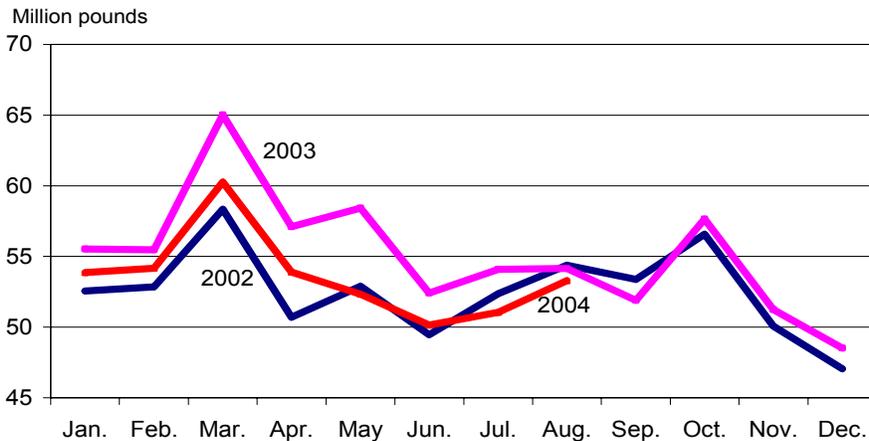
Over the first 8 months of 2004, farm sales to processors totaled 429 million pounds, with an average price of 70 cents per pound. This implies that catfish growers' sales to processors had a gross value of \$300 million, up 15 percent from a year ago, as higher prices offset the decline in volume. Over the last 4 months of 2004, farm prices for catfish are expected to average between 66 and 68 cents per pound, considerably higher than a year earlier. For 2004, catfish grower sales to processing plants are expected to generate approximately \$435 million, 13 percent more than 2003.

**Catfish farm prices**



Source: National Agricultural Statistics Service, USDA.

**Catfish farm sales**



Source: National Agricultural Statistics Service, USDA.

## ***Acreage Expected To Fall Again in Second Half of 2004***

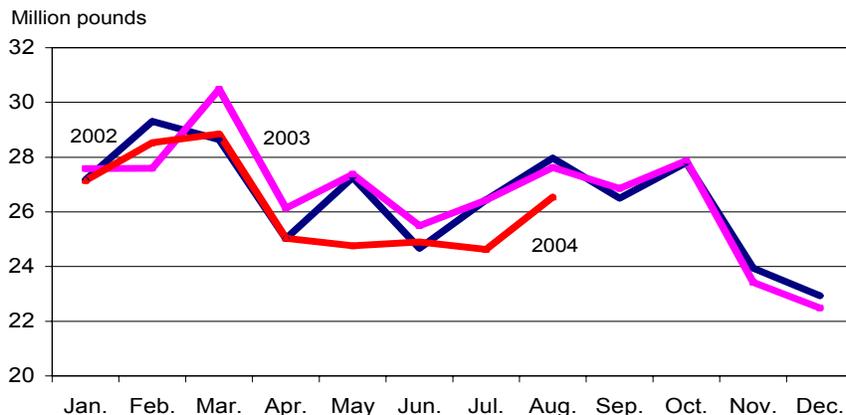
Although prices have been higher in 2004, catfish growers for the second year in a row have reported plans to use lower acreage in the second half of 2004 than in 2003. In the July 2004 NASS *Catfish Production* report, growers reported that they expected to have 165,310 acres of ponds in use between July 1 and December 31, 2004, over 5,000 acres less than the previous year. While the year-to-year changes in the various pond uses (foodsize, fingerlings, or broodfish) vary, most of the reduction comes from declining acreage in Mississippi. The total acreage use breakout for the four States is 141,200 acres for foodsize fish production (down 1 percent), 20,720 acres for fingerling production (down 13 percent), and 3,390 acres for broodfish production (down 16 percent).

## ***Processor Revenues Higher***

Over the first 8 months of 2004, catfish processors sold 210.4 million pounds of product. This is a 4-percent decrease from the previous year, as sales of both fresh and frozen products declined. Fresh sales declined by 6 percent after rising to record levels in 2003. Sales of frozen products fell by 2 percent compared with the same period in 2003. For all of 2004, processor sales are forecast at between 303 and 309 million pounds, between 3 and 5 percent lower than the previous year. Between January and August 2004, prices for catfish sold by processors averaged \$2.25 per pound, up 20 cents per pound from the previous year. With lower sales, but stronger average prices, gross processor revenues from catfish sales over the first 8 months of 2004 were \$473 million, up about \$25 million from the previous year, after falling the previous 2 years. Processor revenues for all of 2004 are expected to total between \$670 and \$685 million.

During the first 8 months of 2004, processor sales have fallen in most categories. Sales of fresh fish declined the most, falling 6.3 percent to 83 million pounds. Compared with the same time period in previous years, sales of fresh fish had increased for the last 10 consecutive years. The decline in fresh fish sales was the result of sales declines for whole fish and other products (mostly nuggets or strips).

### **Catfish processor sales**



Source: National Agricultural Statistics Service, USDA.

Sales of fresh fillets at 47.4 million pounds were up slightly from the same period in 2003. While the quantity of fresh fish sold was lower, prices were up considerably from the previous year. Overall, fresh fish prices were up almost 14 percent, with prices for fresh whole fish and fresh other products both up over 15 percent from the same period in 2003.

Sales of frozen catfish products totaled 127.5 million pounds over the first 8 months of 2004, down 2 percent from the same period in 2003 and the second consecutive year that sales have decreased. Sales declined for frozen whole fish and frozen fillets, while sales of frozen other products rose by 3 percent. Sales of frozen other products totaled 36.3 million pounds over the January to August 2004 period, and sales in this category have risen in 8 of the last 10 years. After falling in the past 3 years, the average price of frozen catfish products rose to \$2.26 per pound, up 7 percent from the same period in 2003. Prices for frozen whole fish and frozen fillets increased the most and prices for frozen other products which had an increase in volume were up only 2 percent. Prices for frozen fillets in the first 8 months of 2004 averaged \$2.63 per pound, only 2 cents per pound more than what they sold for in the same period in 1986. Since 1986 the quantity of frozen fillets sold has risen from 18.5 to 82 million pounds.

# International Outlook

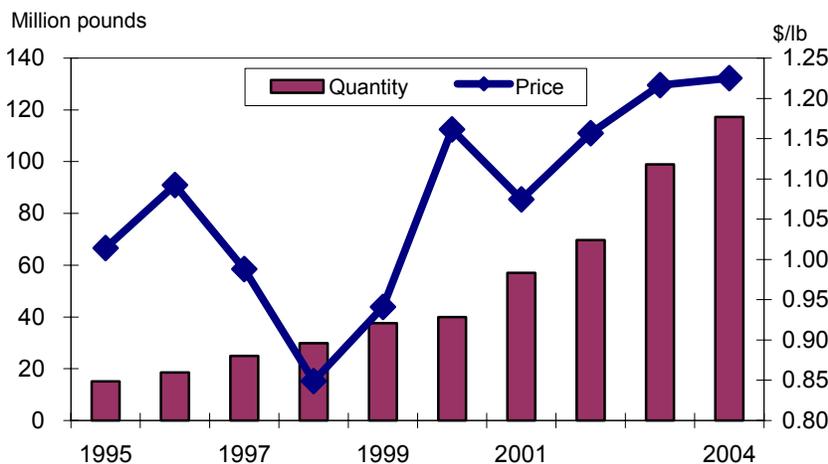
## Tilapia Imports Up 19 Percent

U.S. tilapia imports totaled 117.2 million pounds over the first half of 2004, up 19 percent from the same period in 2003. This is a continuation of the growth seen in tilapia imports over the last several years. Since 2000, the quantity of tilapia imports to the United States during the first half of the year has increased by 193 percent. The 117.2 million pounds of tilapia products imported in the first half of 2004 represent approximately 240 million pounds on a liveweight basis.

While whole fish still are the largest category of tilapia imports, over the past year imports of fresh and frozen fillets have accounted for most of the growth. Frozen whole tilapia imports totaled 57.5 million pounds over the first half of 2004, or 49 percent of the total, but imports of whole fish were only 3 percent higher than in the same period in 2003. Total imports of fresh fillets increased 32 percent to 25.7 million pounds, and imports of frozen fillets rose 44 percent to 34 million pounds.

For frozen whole tilapia, China and Taiwan account for close to 100 percent of all shipments. Over the last several years, almost 100 percent of the growth in imports of frozen whole fish has been from China. In 1998, shipment of frozen whole fish from Taiwan over the first half of the year totaled 23 million pounds and accounted for almost 100 percent all imports in that category. There were no imports of frozen whole tilapia from China. But between 1998 and 2004 rising shipments from China have accounted for almost all of the growth in imports of frozen whole fish, and imports of frozen whole tilapia from China grew to 34 million pounds of 61 percent of the total for the first half of 2004. Imports of frozen whole fish are expected to continue to expand, but at a much slower rate than fresh and frozen fillets, as many of the newer outlets for tilapia sales are likely to concentrate in sales of filleted products.

**U.S. tilapia imports, January to June**



Source: Bureau of Census, U.S. Dept. of Commerce.

Over the past year, imports of fresh tilapia fillets have risen by 30 percent, going from 20 million pounds to 26 million pounds in the first half of 2004. Shipments of fresh tilapia fillets basically come from four countries: Honduras, Costa Rica, Ecuador, and China. In the first half of 2004, shipments from these countries accounted for 96 percent of the total. Ecuador is the largest supplier, with shipments in the first half of 2004 totaling 12 million pounds, up 15 percent from the same period in 2003. Since 2000, shipments of fresh fillets have risen by 228 percent, with most of the growth coming from higher shipments from Ecuador and China. The market for fresh filleted tilapia is dominated by producers in Central and South America. In the first half of 2004, Ecuador, Costa Rica, and Honduras combined to ship 21 million pounds of fresh tilapia fillets to the United States, 82 percent of the total. China shipped 3.5 million pounds during the same period. Although there is no difference noted in the trade codes, based on prices there are a number of differences in the fresh tilapia fillets from Honduras, Costa Rica, and Ecuador and those from China. In the first half of 2004, fresh fillets from Ecuador and Costa Rica both averaged around \$2.55 per pound and those from Honduras were over \$2.80 per pound. In contrast the fresh fillets from China averaged only \$1.26 per pound.

Frozen fillet imports in the first half of 2004 were 34 million pounds, up 44 percent from the same period the previous year and up 580 percent from 2000. Unlike fresh fillets, the largest supplier of frozen tilapia fillets is China. In the first half of 2004, shipments from China totaled 26 million pounds, 76 percent of the total imports. Again there is a large difference in the average import price of products coming from China as opposed to other countries. The average import price of product from China was \$1.38 per pound, well below that of product from Ecuador at \$2.47 or even product from Indonesia, which averaged \$2.14 per pound. While part of the difference could be explained by the much greater volume of shipments from China, there is likely some size or quality difference in the products from the various countries that account for the price differences.

The average price for frozen tilapia fillets has fallen for the last 4 years, going from \$1.96 per pound in 2000 to \$1.52 per pound in the first half of 2004. Most of the decrease in price is attributable to the huge increase in the volume of frozen fillets imported over this time span. A large percentage of that growth has come from higher shipments from China (2 million pounds to over 25 million pounds). With China again being the lowest priced supplier, their large increases in shipments to the United States have pushed down the average price. This decline has not been across the board. The average price of frozen tilapia fillets from Indonesia were \$2.14 per pound in the first half of 2000 and they were also \$2.14 per pound in the first half of 2004. During the 2000 to 2004 period shipments of frozen fillets from Indonesia rose from less than 1 million pounds to 4.3 million pounds.

Overall, the value of tilapia imports averaged \$1.23 per pound in the first half of 2004, up 1 cent from the previous year. Most of the change in the average import value is related to the rising percentage of fresh and frozen filleted products relative to total imports. The value of all tilapia imports rose to \$144 million.

Total tilapia imports for 2004 are expected to reach between 235 and 245 million pounds on a product-weight basis, about 490 million pounds on a live-weight basis. Tilapia imports normally are a bit stronger in the second half of the year. Overall, tilapia product prices are expected to remain close to their average in the first half

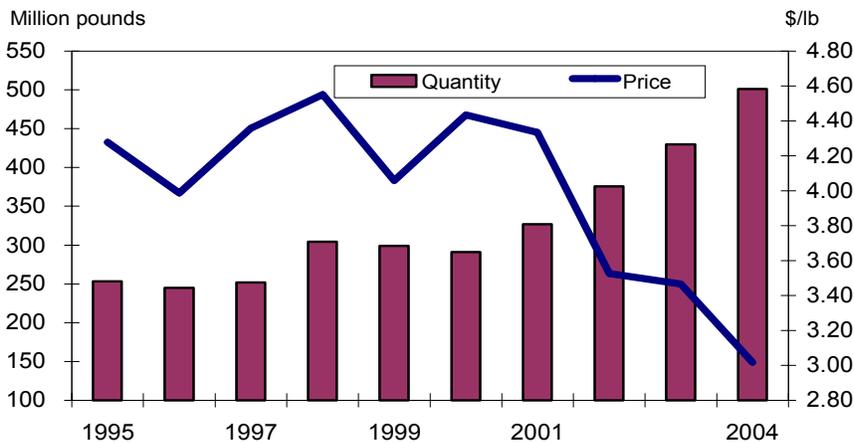
of 2004, around \$1.20 to \$1.25 per pound, so the total value of imports is expected to be in the \$280 to \$300 million range. In 2005, tilapia imports are again expected to expand as tilapia gains wider placement in supermarkets and food service. These vendors will likely place an emphasis on filleted products.

### ***Shrimp Imports Top 500 Million Pounds***

U.S. shrimp imports in the first 6 months of 2004 totaled 501 million pounds and valued at \$1.51 billion, a 17-percent increase in quantity and a 2-percent increase in value. Shrimp imports have now risen strongly over the last 4 years. Since 2000, shrimp imports in the first half of the year have risen from 290 million pounds, an increase of 73 percent. Fueling the import increase was a strong decline in the average price of imported shrimp products, a decline that continued in the first half of 2004. After falling strongly in 2002 and 2003, the average prices for imported shrimp products fell 45 cents (13 percent), to \$3.05 per pound. Prices fell in all three categories of shrimp imports, with the average price for fresh and processed shrimp declining by 45 and 43 cents a pound.

Over the first half of 2004, the quantity of imported frozen and processed shrimp products both increased strongly, while imports of fresh shrimp declined for the second consecutive year. Continuing a trend of the last several years, imports of processed shrimp products increased the most. Imports of frozen shrimp totaled 392 million pounds, making it by far the largest import category. This is a 14-percent increase from the same period in 2003, which in turn was 16 percent higher than the first half of 2002. However, the decrease in the average price of frozen shrimp pushed the total value down to \$1.18 billion, 1.1 percent below the previous year. Fresh shrimp imports fell 19 percent, but, at only 1.3 million pounds they are only a tiny portion of total shrimp imports. Fresh shrimp imports, often from nearby Caribbean or Central American countries compete in the U.S. market with products from the domestic wild harvest industry. Imports of prepared shrimp products (canned, cooked, etc.) expanded strongly in 2004, rising to 108 million pounds, an increase of 30 percent from the previous year.

**U.S. shrimp imports, January to June**



Source: Bureau of Census, U.S. Dept. of Commerce.

Even though imports of shrimp products were up strongly over the first half of 2004, the increase was not evenly spread over the major exporting countries. While shipments from a number of countries rose strongly (notably Thailand, Indonesia, and China) the shipments from other countries like India, Vietnam and Brazil declined. From 2003 to 2004, the largest volume increases in imports came from Thailand and China. Shipments from Thailand, representing 27 percent of all domestic shrimp imports, rose to 135 million pounds, 23 percent higher than in the same period in the previous year. Thailand is even more important in the processed shrimp market. In the first half of 2004 imports of processed shrimp products from Thailand totaled 62 million pounds, 23 percent higher than in the same period in 2003 and 57 percent of all processed shrimp imports. Shipments of shrimp products from China are also increasing strongly. Over the first 6 months of 2004, total shrimp imports from China were 64 million pounds, 64 percent higher than in the first 6 months of 2003 and 326 percent higher than in the same period in 2000. The value of China's shrimp shipments rose to \$143 million, an increase of 47 percent over the same period in 2003. The increase was held down by a 10-percent decrease in the average price, which dropped to \$2.23 per pound, down 27 cents per pound from the previous year.

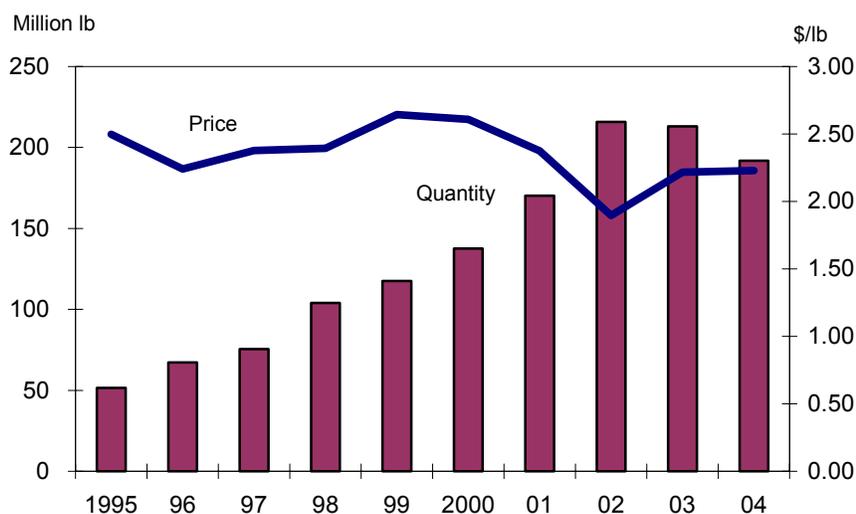
The large increases in imports of shrimp and shrimp products and their falling prices have resulted in several groups representing U.S. shrimp fishermen to state that the imported products were being dumped or receiving subsidies. At the present time, preliminary antidumping and countervailing duty investigations have been completed against shrimp imports from six countries (Brazil, Ecuador, India, Thailand, Vietnam, and China). Over the first half of 2004, imports from these six countries represented 64 percent of all the frozen shrimp imported and 89 percent of all the prepared shrimp products shipped to the United States. The investigations were limited to "imports of certain frozen and canned warm water shrimp" from the listed countries. The preliminary determinations have been published, but the final determinations from the U.S. Commerce Department and the U.S. International Trade Commission are not expected until around November 8th and January 8th 2005, respectively. (See special box for fuller discussion.)

U.S. shrimp imports for all of 2004 are expected to reach between 1.15 and 1.25 billion pounds with a value of between \$3.65 and \$3.75 billion. These estimates are based on shrimp imports following their normal seasonal pattern through the remainder of 2004, but with a slight slow down in the second half. This slight slow down is expected to put some upward pressure on prices which may result in average prices for all of 2004 being slightly higher than in the first half of the year. The outlook for 2005 will be heavily influenced by the expected strength of the U.S. economy and the final results of the shrimp antidumping investigations.

### ***Atlantic Salmon Imports Fall for Second Year***

U.S. imports of Atlantic salmon over the first half of 2004 totaled 192 million pounds, down 10 percent from the previous year. This is the second consecutive year that imports have declined after rising continuously since 1995, the first year that separate data on Atlantic salmon was available. The value of Atlantic salmon imports for the first half of 2004 fell by 9 percent or \$44 million and totaled \$428 million.

### Atlantic salmon imports January to June



Source: Bureau of Census, U.S. Dept. of Commerce.

Even with a decline in overall imports, shipments of Atlantic salmon fillets grew as a percentage of overall imports. In the first half of 2004, imports of Atlantic salmon fillets totaled 128 million pounds, about 67 percent of all Atlantic salmon imports. Filleted products are expected to account for much of the future growth in Atlantic salmon imports. Producers benefit twice from shipping filleted products as opposed to whole fish. First, they gain the added value of filleted products. Second, there is a reduction in the weight of the product for shipping, especially important for many salmon producers where a large percentage of the production is dedicated to the export market.

The decline in Atlantic salmon imports was chiefly due to lower shipments of fresh whole fish. Over the first 6 months of 2004, fresh Atlantic salmon imports totaled 59.3 million pounds, down 21 percent from the previous year. Most of the decline was due to lower imports from Canada, but imports from the United Kingdom were also lower.

Imports of fresh and frozen filleted products totaled 128.4 million pounds and were down 4 percent from the first half of 2003. While the overall quantity of imported Atlantic salmon products declined, the average price was basically the same as the previous year, moving upward only 1 cent to \$2.23 per pound. The prices for frozen salmon and filleted products strengthened slightly, but the average price of fresh salmon products declined by 4 cents to \$2.05 per pound. Over the last 2 years the average price of filleted products has increased by 46 cents, from \$1.86 per pound in the first half of 2002 to \$2.32 per pound in the first half of 2004. Even with this increase, prices for filleted products are still well below the price levels seen in the late 1990s. Chile has remained the lowest cost supplier of filleted products with an average import price of \$2.19 per pound. This is 13 cents a pound less than the average import price for all filleted products and \$1.45 per pound below the average price of filleted products from Canada, the second largest supplier.

Does a decline in imports for the second year in a row imply Atlantic salmon have reached some level of market saturation? It may be that the easier markets have already been gained and future growth will have to come from more intense marketing efforts by the salmon industry. While growers will continue to incorporate new advances in production, feeding, and fish health, processors and wholesalers are expected to concentrate their efforts on making salmon a more attractive dinner item. Salmon suppliers are in direct competition with not only other seafood products, but other protein products such as red meats and poultry. Success in increasing salmon consumption in the at-home market will be based on developing new products that present an attractive and healthy meal with only minimal preparation.

Atlantic salmon imports normally are higher in the second half of the year, so imports of Atlantic salmon products for all of 2004 are expected to be between 425 and 435 million pounds, with a value between \$945 million and \$955 million. Over the first half of 2004, the falling imports of Atlantic salmon have not pushed prices higher, as overall prices remained about even with the same period in 2003. If imports continue to remain below year-earlier levels, prices are expected to gradually strengthen. However, any gains in prices will also be dependent on the health of the domestic economy.

### ***Mollusk Exports and Imports Mixed***

Over the first 6 months of 2004, U.S. exports of oysters and clams were both higher, while exports of mussels declined. Oyster exports increased the most, with shipments in the first half of 2004 totaling 3.1 million pounds, up 38 percent from the same period in 2003 and following a 29-percent increase the previous year. Exports of clams also rose in the first half of 2004 after increasing in 2003, totaling 2.2 million pounds, 7 percent higher than in 2003. However, the total value of clam exports was down 22 percent, as the average price of clam exports dropped sharply. Mussel exports totaled only 543,000 pounds over the first 6 months of 2004, down 25 percent from the previous year. The domestic market for mussels has been expanding as they become a low cost seafood item for many restaurants. The increased demand as shown through steadily growing imports has limited the incentive for domestic producers to export. The outlook for mollusk exports is mixed. Japan is a major market for domestic oyster and clam exports. If its economy strengthens and customers are looking for seafood products in place of beef, exports may continue to grow through the second half of 2004 and into 2005.

Mussel imports expanded in the first half of 2004 to 28.2 million pounds, 17 percent higher than the previous year. The value of mussel imports rose by 19 percent to \$31 million due to increases in both quantity and prices. Mussel imports have increased in 6 of the last 7 years. Most of the imported mussels are either blue mussels from Canada or green shelled mussels from New Zealand. The two mussels fill slightly different markets, with blue mussels being more common and less expensive than the green shelled mussels. Most of the mussel production in Canada and New Zealand comes from farmed production.

Imports of oysters were higher while clam imports fell. Oyster imports rose by 8 percent to 10.5 million pounds. Clam imports fell by 14 percent to only 3.8 million pounds. The quantity of clam and oyster imports over the rest of 2004 and into

2005 is expected to expand as the U.S. economy strengthens, but it will also depend on our exchange rate with Canada, our major supplier.

***Ornamental Fish Imports and Exports Rise, Again***

Over the first 6 months of 2004, both imports and exports of imported ornamental fish increased. After falling for a number of years, the value of U.S. ornamental fish exports has risen for the last 3 years in a row. Exports in the first half of 2004 were valued at \$5.1 million, up 16 percent from the same period last year and 39 percent higher than in the first half of 2001. The largest market for U.S. ornamental fish exports is Canada, which over the first 6 months of 2004 accounted for 42 percent of the export value. Shipments to Hong Kong and Taiwan were also considerably higher in 2004.

The value of ornamental fish imports totaled \$23.0 million in the first half of 2004, up 4 percent from the previous year. Over the past several years the value of ornamental fish imports has stayed relatively constant. The only major supplier that has shown steady growth over the last several years is Japan, perhaps due to the increased popularity of backyard water gardens. As people become more familiar with maintaining fish in water gardens they may begin purchasing more expensive fish, such as higher price koi from Japan.

## Country-of-Origin Labeling Legislation

The 2002 Farm Bill, Public Law 107-171, directed the U.S. Department of Agriculture to develop regulations that would require U.S. retailers to provide country-of-origin labels (COOL) for red meats (beef, lamb, and pork), fish and shellfish, fresh and frozen fruits and vegetables, and peanuts. In addition, fish and shellfish must be identified as either wild or farm raised. On January 27, 2004, President Bush signed Public Law 108-199 which delays the implementation of mandatory COOL for all commodities except wild and farm-raised fish and shell fish until September 30, 2006. The interim final rules for the implementation of the regulations for fish and shellfish were published in the *Federal Register* on October 5, 2004, and will go into effect on April 4, 2005. The purpose of the requirements is to provide consumers with greater information when purchasing seafood.

Whether the labeling regulations will have a positive effect on sales of domestic seafood as opposed to seafood from other countries remains to be seen. It also remains to be seen what effect, if any, being identified as farm raised versus a wild harvest product will have on sales.

The rule defines “covered commodities” as wild and farm-raised fish and shellfish, including fillets, steaks, nuggets, and any other seafood flesh. Thus, the rule covers fish such as salmon, trout, tuna, cod, and other species whether they are farm-raised trout from Idaho or wild harvest cod from Iceland. The rule also covers shellfish and mollusks such as shrimp, crawfish, oysters, clams, scallops, and mussels.

Businesses affected by this rule are retail food stores and their suppliers, from fish farmers and harvesters through processors and wholesalers. Under the law, retailers required to provide country of origin and method of production information are those defined as retailers under the Perishable Agricultural Commodities Act. Thus, retailers affected by the rule are chiefly supermarkets, and most fish markets would be exempt.

Food service establishments are exempt from the requirements of the law. This basically would be seafood sales through restaurants and similar establishments. The rule also defines food service establishments to include food service facilities within retail stores. An example would be a deli in a retail store that sells ready-to-eat foods to be consumed either on or off the retailer’s premises.

Products that are exempt from the rule are those defined as ingredients in a processed food item. An ingredient is a component, either in part or in full, of a finished retail food product. A processed food item is defined as seafood products that have changed in character through specific processing or has combined with another covered commodity or other substantive food component. There are numerous examples of processed items such as canned tuna, fish stews, smoked salmon, and breaded catfish fillets.

This is a basic overview of various labeling issues. The rule provides more detail about how to label an item, whether it is of U.S. origin or imported, and how to label a product that is commingled from a number of countries. An example is a display of shrimp at a supermarket where the shrimp may be from a number of countries and may be either wild harvest or farm raised.

More information about the requirements of the rule are available at the COOL website at <http://www.ams.usda.gov/cool/index.htm>. Retailers, producers, and other suppliers with further questions about whether a specific seafood commodity is covered by this rule should contact [cool@usda.gov](mailto:cool@usda.gov) for further information.

Analysis by ERS shows that requiring COOL would add labeling, recordkeeping, and operating costs for many suppliers of covered commodities and livestock (see Country-of-Origin Labeling: Theory and Observation at <http://www.ers.usda.gov/publications/WRS04/jan04/wrs0402/wrs0402.pdf>).

## Antidumping or Countervailing Duty Investigations

### Antidumping or Countervailing Duty Investigations of Shrimp Imports

Responding to large increases in the amount of shrimp imported into the United States and to falling prices for shrimp products over the last several years, several groups representing the domestic shrimp fishing industry filed petitions asking the U.S. International Trade Commission (ITC) 1/ and the U.S. Department of Commerce (DOC) 2/ to investigate whether these imports were being sold in the United States below fair value or were receiving subsidies from foreign government programs.

There are two phases to the preliminary investigations. The first phase is handled by the ITC. In this phase the ITC determines whether the domestic industry has been “materially injured or is threatened with material injury”. If the result of the ITC investigation is affirmative the investigation moves on to the second phase. The second phase of the investigation is handled by the DOC and focuses on whether the imported product is being sold at below fair value or subsidized. If the investigation shows that the product was dumped or subsidized, then preliminary antidumping margins are put in place.

After the preliminary phases are completed and if affirmative determinations have been made by both the ITC and the DOC the results of the investigations are opened to public comments. After the comment period the DOC makes a final determination in the case. If the final determination by the DOC is affirmative, then the ITC will make a final determination. If this determination is also affirmative then DOC will instruct Customs to apply the dumping margins.

The preliminary investigations by both the ITC and DOC were affirmative and preliminary antidumping margins for shrimp exporting corporations in Brazil, Ecuador, India, Thailand, Vietnam, and China have been made public. The antidumping margins run from zero to a high of 112.81 percent.

The products covered in the investigations are chiefly frozen and canned products from warm water shrimp species. A more detailed description of exactly which products are covered is included in the preliminary anti-dumping investigation report. However, the majority of the imports from the six countries listed are expected to be covered in the determinations. U.S. Customs is now collecting funds based on the preliminary antidumping margins.

1/ “Understanding Antidumping and Countervailing Duty Investigation”.

2/ Fact Sheet for Preliminary Determinations on Antidumping Duty Investigations.

The DOC is scheduled to release a final determination covering China and Vietnam on or around November 24, 2004. If it is positive then the ITC will release a final determination on or around January 8, 2005. If this is also positive the antidumping margins will go into effect on January 15, 2005. In the investigations covering Brazil, Ecuador, India, and Thailand the steps are the same, but the dates for final determinations are slightly later.

The six countries listed in the two investigations represent a large percentage of the shrimp imported into the United States. In 2003 these six countries were the sources for approximately 73 percent of the over 1.1 billion pounds of shrimp products imported. The value of these exports was approximately \$2.8 billion. Estimating the impact of the antidumping margins is difficult because they vary from company to company, and the exact percentage of the products from these countries that will be assessed a certain margin is not clear. However, if 85 percent of the shrimp imported from these six countries were assessed antidumping margins and if the average margin was 10 percent, then in 2003 U.S. Customs would have collected around \$230 million on these products.

If these antidumping margins are placed into effect, shrimp exporters from countries not under investigations would become more competitive. The major shrimp suppliers not covered by the investigations are Mexico, Bangladesh, and Indonesia. Any increase in prices would also benefit domestic shrimp fishermen, while domestic consumers would likely be faced with higher shrimp prices.

## Contacts and Links

### Contact Information

David J. Harvey (202) 694-5177 [djharvey@ers.usda.gov](mailto:djharvey@ers.usda.gov)  
Laverne M. Creek (202) 694-5191 [lmcreek@ers.usda.gov](mailto:lmcreek@ers.usda.gov)

### Subscription Information

Subscribe to ERS e-mail notification service at <http://www.ers.usda.gov/updates/> to receive timely notification of newsletter availability. Printed copies can be purchased from the USDA Order Desk by calling 1-800-999-6779 (specify the issue number).

### Related Websites

Aquaculture Briefing Room, <http://www.ers.usda.gov/briefing/aquaculture/>

NASS Catfish Production, <http://usda.mannlib.cornell.edu/reports/nassr/other/pcf-bbc/>

NASS Catfish Processing, <http://usda.mannlib.cornell.edu/reports/nassr/other/pcf-bb/>

NASS Trout, <http://usda.mannlib.cornell.edu/reports/nassr/other/ztp-bb/>

National Marine Fisheries Service, Fisheries of the United States (wild harvest data), <http://www.st.nmfs.gov/st1/publications.html>

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, sex, religion, age, disability, political beliefs, sexual orientation, or marital or family status. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD).

To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, DC 20250-9410 or call (202) 720-5964 (voice and TDD). USDA is an equal opportunity provider and employer.

**Table 1--Catfish sales and prices**

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual total
Catfish sold to processors							1,000 lb						
1997	42,409	45,067	48,431	45,721	43,409	42,282	43,376	44,154	43,472	46,275	40,137	40,216	524,949
1998	46,723	47,606	53,761	49,393	45,218	46,244	46,383	47,739	46,579	47,904	43,224	43,581	564,355
1999	48,723	48,891	56,310	46,830	47,703	48,445	50,074	50,372	50,414	52,407	48,118	48,341	596,628
2000	50,552	50,942	56,856	48,781	48,424	48,011	49,023	53,204	49,422	51,412	45,535	41,441	593,603
2001	46,999	50,257	57,766	52,478	51,736	47,883	47,829	51,690	49,699	52,264	44,670	43,837	597,108
2002	52,551	52,856	58,340	50,694	52,902	49,450	52,363	54,383	53,366	56,576	50,072	47,048	630,601
2003	55,523	55,461	65,007	57,105	58,424	52,411	54,089	54,153	51,885	57,652	51,246	48,518	661,474
2004	53,849	54,173	60,272	53,896	52,324	50,155	51,055	53,295					
Average price paid by processors for farm-raised catfish							Cents per pound 1/						
1997	73.0	73.0	73.0	73.0	73.0	72.0	71.0	70.0	69.0	69.0	69.0	69.0	71.2
1998	69.0	73.0	78.0	79.0	79.0	78.0	76.0	74.0	73.0	71.0	70.0	70.0	74.2
1999	70.3	71.4	73.2	75.6	77.7	77.5	76.8	74.3	72.8	71.6	71.3	71.6	73.7
2000	74.4	78.8	78.9	78.9	78.5	78.6	76.0	74.1	72.7	71.0	69.6	68.2	75.0
2001	69.3	69.6	69.7	69.4	68.7	66.9	65.6	62.4	61.0	59.6	56.6	55.4	64.5
2002	54.9	55.5	56.5	56.1	57.4	58.8	59.0	58.2	57.6	56.8	56.0	54.4	56.8
2003	52.9	54.4	58.5	63.0	61.8	58.6	56.4	55.2	56.0	56.7	61.0	62.9	58.1
2004	66.8	70.3	72.3	72.8	72.0	68.9	68.2	68.3					
Catfish sold by processors							1,000 lb						
1997	20,746	23,058	24,624	22,154	22,444	21,471	21,866	22,548	21,518	23,408	19,645	18,278	261,760
1998	23,576	26,650	26,207	23,195	22,960	23,002	22,973	24,089	22,805	23,241	21,581	21,119	281,398
1999	23,107	25,780	28,544	23,488	23,964	23,720	25,069	24,618	24,430	25,229	22,344	22,372	292,665
2000	25,412	25,354	29,161	24,924	24,763	25,342	24,911	25,847	23,743	25,036	21,911	20,752	297,156
2001	24,507	25,968	28,752	25,167	24,728	23,690	24,816	26,004	24,210	25,083	21,807	21,635	296,367
2002	27,173	29,308	28,645	25,023	27,261	24,670	26,441	27,961	26,498	27,800	23,939	22,930	317,649
2003	27,584	27,586	30,485	26,135	27,370	25,487	26,427	27,627	26,853	27,875	23,416	22,482	319,327
2004	27,140	28,526	28,845	25,033	24,764	24,896	24,623	26,538					
Average price received by processors for all catfish							Cents per pound						
1997	227.7	230.2	230.4	227.3	227.9	226.0	225.6	225.3	224.8	220.5	220.3	223.3	225.8
1998	220.0	227.9	236.6	237.7	239.5	234.4	234.6	232.9	229.6	226.7	226.4	224.0	230.9
1999	225.6	226.2	231.8	236.2	239.5	239.9	239.7	234.6	236.9	235.9	235.6	230.9	234.4
2000	235.2	240.4	244.8	244.6	244.5	237.7	238.7	239.6	237.1	232.7	232.4	227.1	237.9
2001	231.8	236.9	233.2	234.1	232.7	227.6	226.2	223.8	218.5	216.3	211.4	209.0	225.1
2002	208.4	210.3	206.6	208.2	209.0	209.4	207.2	205.9	207.4	205.2	203.8	202.5	207.0
2003	202.2	201.6	206.9	210.7	207.5	203.5	203.6	202.9	202.1	204.7	207.6	208.7	205.2
2004	214.4	221.2	227.5	233.2	229.3	223.9	227.1	220.2					

1/ Live weight.

Source: Monthly Catfish Processing Report, National Agricultural Statistics Service, USDA.

**Table 2--Catfish: Inventory numbers, in thousands, as of July 1 1/**

State	Broodfish			Fingerling/fry			Stockers		
	2002	2003	2004	2002	2003	2004	2002	2003	2004
Alabama	135	65	130	121,700	92,500	91,000	153,900	90,800	113,200
Arkansas	140	110	110	297,000	220,000	220,000	128,400	109,100	102,400
Louisiana	27	19	23	94,300	85,300	49,000	45,000	16,900	14,720
Mississippi	750	700	650	1,123,000	1,104,000	940,000	439,600	432,000	394,000
Total	1,052	894	913	1,636,000	1,501,800	1,300,000	766,900	648,800	624,320

State	Small foodsize			Medium foodsize			Large foodsize		
	2002	2003	2004	2002	2003	2004	2002	2003	2004
Alabama	45,700	55,100	40,500	23,300	19,200	17,300	3,900	2,500	3,100
Arkansas	41,800	43,800	45,700	24,800	20,300	16,400	3,100	1,130	1,210
Louisiana	8,400	12,000	6,700	4,900	8,900	4,970	520	450	690
Mississippi	185,100	143,400	138,000	41,400	36,800	39,800	2,700	3,300	2,800
Total	281,000	254,300	230,900	94,400	85,200	78,470	10,220	7,380	7,800

1/ July 1 inventory data are only collected from the four largest producing States.

Source: Catfish Growers Survey, National Agricultural Statistics Service, USDA.

**Table 3--Catfish: Supply, sales, prices, and inventory**

Item	2003					2004							
	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
<b>Supply</b>	1,000 lb												
Grower sales 1/	54,153	51,885	57,652	51,246	48,518	53,849	54,173	60,272	53,896	52,324	50,155	51,055	53,295
Processor sales	27,627	26,853	27,875	23,416	22,482	27,140	28,526	28,845	25,033	24,764	24,896	24,623	26,538
Fresh	10,889	10,014	10,674	9,123	8,537	10,604	11,239	12,190	10,314	9,840	9,455	9,615	9,658
Whole	3,510	3,233	3,231	2,798	2,693	3,205	3,266	3,808	3,001	2,853	2,707	2,875	3,002
Filletts	6,013	5,308	6,082	5,187	4,710	5,964	6,455	6,815	5,887	5,688	5,500	5,559	5,483
Other	1,366	1,473	1,361	1,138	1,134	1,435	1,518	1,567	1,426	1,299	1,248	1,181	1,173
Frozen	16,783	16,839	17,201	14,293	13,945	16,536	17,287	16,655	14,719	14,924	15,441	15,008	16,880
Whole	1,399	1,290	1,383	1,093	958	1,185	1,349	1,302	1,008	991	1,024	1,100	1,164
Filletts	10,597	10,805	10,924	9,354	8,915	10,843	11,232	10,572	9,871	9,762	9,579	9,836	10,352
Other	4,742	4,744	4,894	3,846	4,072	4,508	4,706	4,781	3,840	4,171	4,838	4,072	5,364
Processor inventory 2/	11,617	10,422	10,961	12,977	13,592	12,705	10,788	10,958	12,061	11,992	11,391	11,879	11,657
Fresh	706	870	795	795	543	836	866	1,027	799	825	950	832	798
Whole	212	172	183	169	111	191	188	316	184	211	237	162	146
Filletts	398	581	495	505	343	507	550	552	487	512	579	540	530
Other	96	117	117	121	89	138	128	159	129	102	134	130	122
Frozen	10,911	9,552	10,166	12,182	13,049	11,869	9,922	9,931	11,262	11,167	10,441	11,047	10,859
Whole	1,066	1,007	936	862	1,178	1,401	1,438	1,415	1,363	1,327	1,133	1,060	806
Filletts	6,665	6,130	6,706	8,365	8,470	7,438	5,674	5,539	6,032	6,120	6,232	6,610	7,319
Other	3,180	2,415	2,524	2,955	3,401	3,030	2,810	2,977	3,867	3,720	3,076	3,377	2,734
<b>Prices</b>	Dollars per pound												
Farm price 3/	0.55	0.56	0.57	0.61	0.63	0.67	0.70	0.72	0.73	0.72	0.69	0.68	0.68
Processor prices	2.03	2.02	2.05	2.08	2.09	2.14	2.21	2.27	2.33	2.29	2.24	2.27	2.20
Fresh	2.00	1.97	2.03	2.05	2.07	2.13	2.18	2.23	2.27	2.28	2.28	2.25	2.25
Whole	1.33	1.34	1.36	1.40	1.43	1.49	1.53	1.57	1.60	1.60	1.57	1.57	1.58
Filletts	2.48	2.49	2.49	2.50	2.54	2.59	2.62	2.71	2.73	2.74	2.74	2.73	2.73
Other	1.58	1.50	1.58	1.60	1.64	1.63	1.70	1.71	1.78	1.78	1.78	1.62	1.76
Frozen	2.05	2.05	2.06	2.09	2.10	2.15	2.23	2.31	2.37	2.30	2.22	2.29	2.17
Whole	1.82	1.83	1.84	1.87	1.91	1.90	1.93	1.97	2.03	2.01	1.96	1.95	1.97
Filletts	2.39	2.37	2.39	2.41	2.43	2.47	2.57	2.67	2.70	2.68	2.65	2.65	2.63
Other	1.36	1.38	1.37	1.38	1.41	1.46	1.52	1.61	1.63	1.48	1.41	1.50	1.33

1/ Total live weight of fish delivered for processing. 2/ Inventory at end of reporting period. 3/ Live weight.

Source: National Agricultural Statistics Service, USDA.

**Table 4-Quantity and value of U.S. imports and exports of selected seafood products, January to June**

Commodity	2000	2001	2002	2003	2004	2000	2001	2002	2003	2004
<b>Exports</b>			\$1,000					1,000 lb		
Ornamental fish	4,243	3,681	4,348	4,369	5,103	0	0	0	0	0
Trout, live	148	219	141	205	1,231	0	0	0	0	0
Trout, fresh & frozen	1,827	917	982	4,017	970	1,082	662	744	2,042	512
Atlantic salmon, fresh	19,127	19,954	10,462	5,509	16,734	8,899	9,388	5,583	2,738	8,603
Pacific salmon, fresh 1/	7,529	6,280	9,459	7,005	12,535	4,792	4,173	6,103	4,936	8,119
Atlantic salmon, frozen	304	47	102	101	134	154	26	47	48	66
Pacific salmon, frozen 1/	55,541	34,852	26,512	29,069	31,682	34,287	26,843	21,985	22,884	21,369
Canned & pre. salmon 2/	60,537	62,294	57,937	51,384	66,393	34,599	38,015	41,244	35,761	46,363
Shrimp, frozen	28,866	33,194	29,913	29,712	21,355	7,563	8,512	7,891	9,366	6,843
Shrimp, fresh & pre. 3/	24,593	30,591	24,608	31,695	20,334	6,027	7,562	6,387	8,489	5,671
Oysters 4/	3,116	3,576	3,717	4,264	5,922	1,442	1,868	1,763	2,275	3,132
Mussels 5/	835	898	868	919	596	708	830	709	726	543
Clams 6/	3,223	3,289	2,792	4,248	3,305	1,880	2,014	1,709	2,030	2,170
<b>Imports</b>			\$1,000					1,000 lb		
Ornamental fish	20,534	21,648	20,811	22,093	23,022	0	0	0	0	0
Trout, live	21	9	52	132	419	0	0	0	0	0
Trout, fresh & frozen	3,782	5,992	7,025	7,345	6,875	2,278	3,702	4,408	4,316	4,246
Atlantic salmon, fresh	319,636	366,803	360,246	362,381	345,644	122,993	154,470	186,435	183,176	157,639
Pacific salmon, fresh 1/	22,786	16,424	18,803	21,215	25,358	9,550	7,825	11,305	9,667	11,248
Atlantic salmon, frozen	39,536	37,428	49,083	69,963	82,065	14,624	15,766	29,320	29,834	34,202
Pacific salmon, frozen 1/	9,007	7,530	9,947	15,666	29,076	5,397	4,585	8,936	12,611	22,500
Canned & pre. salmon 2/	14,103	16,731	18,903	30,765	33,949	4,710	5,245	7,145	11,475	12,879
Shrimp, frozen	1,100,383	1,176,838	1,049,279	1,197,950	1,183,799	247,068	270,193	297,307	343,640	391,859
Shrimp, fresh & pre. 3/	189,237	252,516	276,238	292,461	328,428	43,834	57,090	78,927	84,519	109,380
Oysters 4/	16,922	16,126	14,697	18,621	20,681	8,644	7,760	7,394	9,692	10,470
Mussels 5/	25,429	24,318	31,107	26,013	31,020	22,955	21,420	26,189	24,170	28,240
Clams 6/	3,995	3,653	3,372	4,029	3,361	4,553	3,510	3,417	4,339	3,752
Tilapia 7/	46,400	61,304	80,628	120,293	143,613	39,946	57,043	69,700	98,921	117,222

NA - Not available. 1/ Also includes salmon with no specific species noted. 2/ Includes smoked and cured salmon. 3/ Shrimp, canned, breaded, or prepared. 4/ Oysters, fresh or prepared. 5/ Mussels, fresh or prepared. 6/ Clams, fresh or prepared. 7/ Frozen whole fish plus fresh and frozen fillets. Data first available in July 1992.

Source: Bureau of the Census, U.S. Department of Commerce.

**Table 5--U.S. tilapia imports, volume by country, (January to June)**

Country	Whole, frozen			Fillets, fresh			Fillets, frozen			Total		
	2002	2003	2004	2002	2003	2004	2002	2003	2004	2002	2003	2004
1,000 Pounds												
Mexico	0	0	0	0	0	0	0	0	0	0	0	0
Honduras	0	0	0	2,890	2,940	4,411	0	0	0	2,890	2,940	4,411
Nicaragua	0	0	0	2	0	45	28	13	18	30	13	63
Costa Rica	0	0	16	3,554	4,596	4,777	1	5	6	3,555	4,602	4,799
Jamaica	0	0	0	36	0	2	28	23	9	64	23	12
Colombia	0	0	0	0	0	0	0	0	0	0	0	0
Ecuador	24	199	110	7,169	10,421	11,935	283	198	275	7,476	10,818	12,320
Thailand	413	88	131	11	0	0	188	1,278	828	612	1,365	959
Indonesia	6	0	6	0	0	0	2,475	3,883	4,347	2,480	3,883	4,353
China	18,997	33,963	34,304	320	635	3,532	4,762	15,557	25,527	24,078	50,155	63,363
Taiwan	24,568	21,070	22,664	200	306	164	3,148	2,468	2,777	27,916	23,843	25,605
Other	163	410		264	594	860	172	261	236	599	1,264	1,337
<b>Total</b>	<b>44,170</b>	<b>55,729</b>	<b>57,473</b>	<b>14,446</b>	<b>19,492</b>	<b>25,726</b>	<b>11,085</b>	<b>23,684</b>	<b>34,023</b>	<b>69,700</b>	<b>98,906</b>	<b>117,222</b>

**U.S. tilapia imports, value by country, (January to June)**

Country	Whole, frozen			Fillets, fresh			Fillets, frozen			Total		
	2002	2003	2004	2002	2003	2004	2002	2003	2004	2002	2003	2004
1,000 Dollars												
Mexico	0	0	0	0	0	0	0	0	0	0	0	0
Honduras	0	0	0	7,992	7,988	11,282	0	0	0	7,992	7,988	11,282
Nicaragua	0	0	0	5	0	116	52	20	38	57	20	154
Costa Rica	0	0	16	9,346	11,843	12,129	6	14	14	9,352	11,857	12,159
Jamaica	0	0	0	104	0	7	48	46	22	152	46	29
Colombia	0	0	0	0	0	0	0	0	0	0	0	0
Ecuador	29	187	112	19,937	27,622	33,830	610	428	679	20,576	28,237	34,620
Thailand	266	51	58	53	0	0	328	2,265	1,482	647	2,316	1,540
Indonesia	3	0	3	0	0	0	5,590	8,832	9,303	5,592	8,832	9,306
China	8,925	16,793	16,359	506	949	4,452	7,463	24,267	35,226	16,894	42,009	56,037
Taiwan	12,465	11,760	11,297	302	595	72	5,543	4,777	4,562	18,310	17,133	15,931
Other	74	210	123	677	1,383	1,969	305	275	464	1,056	1,868	2,555
<b>Total</b>	<b>21,762</b>	<b>29,001</b>	<b>27,967</b>	<b>38,921</b>	<b>50,380</b>	<b>63,857</b>	<b>19,945</b>	<b>40,925</b>	<b>51,789</b>	<b>80,628</b>	<b>120,306</b>	<b>143,613</b>

Source: Bureau of the Census, U.S. Department of Commerce.

**Table 6--U.S. Shrimp imports in pounds (January to June)**

Country	Frozen			Fresh			Prepared			Total		
	2002	2003	2004	2002	2003	2004	2002	2003	2004	2002	2003	2004
Mexico	10,559,822	10,725,189	11,952,281	250,035	37,359	1,453	73,272	92,419	163,151	10,883,129	10,854,968	12,116,885
Ecuador	36,822,320	43,687,948	45,229,620	780	2,802	29,599	1,600,332	943,485	1,732,705	38,423,433	44,634,235	46,991,924
Brazil	20,403,125	30,380,819	14,143,311	0	1,014	0	0	0	0	20,403,125	30,381,833	14,143,311
India	38,201,476	38,346,191	35,985,190	421,306	402,379	207,276	3,564,717	3,645,943	4,755,604	42,187,499	42,394,513	40,948,071
Bangladesh	7,174,946	4,696,314	10,267,999	0	0	0	0	0	180,453	7,174,946	4,696,314	10,448,453
Thailand	56,878,146	59,658,079	73,434,236	47,875	143,001	252,619	47,826,683	49,946,459	61,743,622	104,752,704	109,747,539	135,430,476
Vietnam	25,966,339	38,119,814	34,579,753	14,550	126,868	163,026	6,755,964	9,680,081	11,569,578	32,736,853	47,926,763	46,312,356
Indonesia	18,039,816	22,210,324	36,963,258	40,917	39,198	3,481	2,005,655	1,577,237	2,363,918	20,086,388	23,826,759	39,330,657
Philippines	1,024,733	1,089,183	899,841	573	1,228	1,204	463,056	260,623	273,234	1,488,363	1,351,034	1,174,278
China	18,176,993	27,968,978	46,703,113	452,622	370,999	247,241	5,490,124	10,507,229	16,924,450	24,119,739	38,847,206	63,874,804
Others	63,690,936	68,300,792	449,908	508,751	449,908	6,290,524	9,388,285	6,290,524	75,041,224	73,587,972	75,041,224	90,468,270
<b>Total</b>	<b>296,938,654</b>	<b>345,183,629</b>	<b>391,859,319</b>	<b>1,737,410</b>	<b>1,574,757</b>	<b>1,270,000</b>	<b>77,168,088</b>	<b>82,944,001</b>	<b>108,110,167</b>	<b>375,844,152</b>	<b>429,702,387</b>	<b>501,239,485</b>

**Value of U.S. Shrimp imports (January to June)**

Country	Frozen			Fresh			Prepared			Total		
	2002	2003	2004	2002	2003	2004	2002	2003	2004	2002	2003	2004
Mexico	54,571,896	68,829,821	60,182,223	440,759	96,640	9,885	477,358	503,897	681,176	55,490,013	69,430,358	60,873,284
Ecuador	110,976,887	126,103,233	114,358,334	4,560	10,739	110,122	5,187,925	2,621,895	4,557,538	116,169,372	128,735,867	119,025,994
Brazil	48,275,087	62,204,003	27,512,777	0	2,162	0	0	0	0	48,275,087	62,206,165	27,512,777
India	138,111,213	161,422,035	141,783,389	4,317,477	4,189,561	2,037,197	6,070,244	8,451,815	9,610,769	148,498,934	174,063,411	153,431,355
Bangladesh	31,273,712	23,581,945	47,489,951	0	0	0	0	0	825,776	31,273,712	23,581,945	48,315,727
Thailand	221,235,561	218,335,902	189,155,885	202,975	1,003,739	1,575,084	171,878,019	173,729,095	183,120,172	393,316,555	393,068,736	373,851,141
Vietnam	131,877,829	187,284,638	170,733,806	62,509	285,508	304,247	32,142,316	48,150,110	54,001,747	164,082,654	235,720,256	225,039,800
Indonesia	71,674,734	84,841,143	115,523,972	180,531	214,764	4,405	8,457,417	4,992,763	7,818,294	80,312,682	90,048,670	123,346,671
Philippines	5,117,669	5,470,643	4,743,764	2,600	5,572	5,457	485,366	291,196	322,277	5,605,635	5,767,411	5,071,498
China	42,328,169	67,897,819	104,829,047	3,826,095	3,188,646	1,728,336	15,598,713	25,908,701	36,118,627	61,752,977	96,995,166	142,676,010
Others	193,567,377	190,978,421	207,486,250	2,214,171	1,788,128	1,935,960	24,594,682	17,025,780	23,660,586	220,376,230	209,792,329	233,082,796
<b>Total</b>	<b>1,049,010,134</b>	<b>1,196,949,603</b>	<b>1,183,799,398</b>	<b>11,251,677</b>	<b>10,785,459</b>	<b>7,710,693</b>	<b>264,892,040</b>	<b>281,675,252</b>	<b>320,716,962</b>	<b>1,325,153,851</b>	<b>1,489,410,314</b>	<b>1,512,227,053</b>

Source: Bureau of the Census, U.S. Department of Commerce.

**Table 7--U.S. Atlantic salmon imports, volume by country, (January to June)**

Country	Fresh			Frozen			Fillets 1/			Total		
	2002	2003	2004	2002	2003	2004	2002	2003	2004	2002	2003	2004
1,000 Pounds												
Canada	68,930	57,946	44,190	72	123	107	20,606	19,391	11,116	89,608	77,460	55,413
Chile	2,340	2,744	2,540	615	2,017	1,950	104,744	107,070	109,392	107,699	111,830	113,882
Iceland	288	730	1,131	178	45	0	66	160	402	532	935	1,533
Norway	879	641	317	1,283	2,373	1,670	7,152	5,185	4,767	9,314	8,199	6,753
Faroe Islands	520	280	866	85	6	42	10	2	0	615	288	908
United Kingdom	7,208	12,103	10,101	0	0	0	392	738	950	7,600	12,841	11,050
Other	179	842	124	85	0	453	122	645	1,725	386	1,487	2,301
<b>Total</b>	<b>80,346</b>	<b>75,285</b>	<b>59,269</b>	<b>2,318</b>	<b>4,565</b>	<b>4,222</b>	<b>133,092</b>	<b>133,190</b>	<b>128,350</b>	<b>215,755</b>	<b>213,040</b>	<b>191,841</b>

**U.S. Atlantic salmon imports, value by country, (January to June)**

Country	Fresh			Frozen			Fillets 1/			Total		
	2002	2003	2004	2002	2003	2004	2002	2003	2004	2002	2003	2004
1,000 Dollars												
Canada	143,441	131,068	95,065	94	215	223	58,736	60,490	38,188	202,272	191,773	133,476
Chile	3,169	4,320	4,678	798	3,630	3,665	171,367	227,893	239,193	175,334	235,843	247,536
Iceland	289	986	1,578	901	294	0	222	508	1,022	1,413	1,788	2,600
Norway	1,513	1,084	564	1,655	4,369	3,323	16,333	14,955	14,022	19,502	20,408	17,909
Faroe Islands	673	380	1,290	66	15	79	25	6	0	764	402	1,369
United Kingdom	8,737	18,115	18,018	0	0	0	738	1,869	3,197	9,475	19,984	21,215
Other	219	1,343	400	97	0	1,050	254	766	2,154	570	2,109	3,605
<b>Total</b>	<b>158,042</b>	<b>157,295</b>	<b>121,594</b>	<b>3,611</b>	<b>8,523</b>	<b>8,339</b>	<b>247,677</b>	<b>306,487</b>	<b>297,776</b>	<b>409,329</b>	<b>472,306</b>	<b>427,709</b>

1/ Includes both fresh and frozen fillets.

Source: Bureau of the Census, U.S. Department of Commerce.