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Aquaculture Outlook

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Higher Aquaculture Use, but Domestic Production Pressured by Imports

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The percentage of total U.S. seafood consumption coming from aquaculture has continued to rise over the last several years, but the bulk of the increase has come from higher imports of farm-raised products. In most cases, the rising level of imports has also been accompanied by declining prices. Some of the imports are products that compete with our wild seafood harvest, but over the last several years there have been a number of occasions when rising levels of imports have helped to drive down prices for domestic aquaculture producers. With greater international trade in food products, domestic aquaculture producers are expected to more often come into direct competition with aquacultural producers around the globe. As has been the case for many other agricultural commodities, the worldwide increases in production are likely to be accompanied by declining real prices.

With wild harvest seafood landings showing little or no growth in most areas, many countries are looking at aquaculture as a means to increase their seafood production. For a number of countries, aquacultural production has also become a major part of their economies and a growing source of foreign exchange earnings. Most of the aquacultural industries that have expanded the fastest have not been aimed at producing for the domestic market, but have been aimed at the export market. The U.S. alone imports several billion dollars of aquaculture products every year, and the markets in Japan and the European Union are equally as large.

The outlook for domestic aquacultural production, and trade in aquaculture products in 2003 is based on a number of factors. First, U.S. economic growth in 2003 is expected to be relatively slow. Second, how much of this economic growth will translate into higher demand in the foodservice sector and ultimately into higher demand for seafood products. Third, the dollar is expected to remain relatively strong against most other currencies, making U.S. imports less expensive and exports less competitive. Fourth, domestic grain prices are only expected to increase slightly in 2003, benefiting those aquacultural producers who use a high level of grains in their feeds. Fifth, the uncertain impacts of an enlarged conflict in the Middle East.

U.S. production of beef and pork are all expected to decline in 2003. In addition, domestic broiler production is expected to be lower for the first three-quarters of the year. These declines in production are expected to lead to increased prices and provide a boost to the demand for seafood products. Higher demand for seafood might push prices for domestic farm-raised products higher, but would also increase the demand for imported seafood.

Domestic Outlook

Catfish Sales and Prices Higher in 2003

Catfish sales by processors are expected to increase in 2003 and reach between 328 million and 334 million pounds, up 3 to 5 percent from 2002. Based on grower estimates of inventories at the beginning of January 2003, grower sales are expected to show increases during first-half 2003 compared with the previous year. The strongest sales period for catfish growers and processors is normally from January through Easter. With Easter being relatively late this year, this prime sales period is a little longer.

Catfish sales in 2002 were mixed with higher volumes and lower prices. Grower sales totaled 630.6 million pounds, 5.6 percent higher than the previous year, and sales by processors rose to 317.6 million pounds, an increase of 7.1 percent. Sales by growers and processors were above their year earlier levels for almost the entire year. The increase in processor sales caused inventories to decline through most of the year. Processors' holdings of finished products at the end of January 2003 were 11.6 million pounds, down over 2 million pounds from the previous year.

Although there were strong gains in both grower and processor sales, they were more than offset by continuing declines in prices. Farm prices remained depressed throughout all of 2002. After starting the year in the mid-50-cents-a-pound range they showed a little upward movement in the third quarter, but then declined to 53 cents a pound in December. The average for 2002 was 56.8 cents a pound, down 12 percent from a year earlier and down 24 percent from 2001. Processor prices were also depressed throughout 2002. The weighted average price for all catfish products was $2.07 a pound, down 8 percent from 2001 and 13 percent lower than in 2000.

Entering 2003, growers still have relatively large holdings of small food-size fish. The reported grower holdings of small food-size fish are down 11 percent from 2002, but they are still 6 percent higher than they were at the beginning of 2001. The holdings of the small food-size fish along with medium food-size fish will make up the bulk of the fish sold by growers during the first 3 to 4 months of 2003. Most of the decrease in grower inventory of small food-size fish is from reductions in Mississippi. The estimated inventory of small food-size fish in Mississippi at the beginning of 2003 was 140 million. This is 22 percent lower than at the start of 2002 and 7 percent lower than at the beginning of 2001. The considerable decrease in small food-size fish in Mississippi was partially offset by increased inventory in Alabama. The reduction in inventory of small food-size fish held by growers is expected to allow for some upward movement in grower prices towards the end of the second quarter and into the third quarter.

Grower sales in the first half of 2003 will be affected not only by grower supplies but also by the general domestic economic performance and red meat and poultry supplies. Overall supplies of red meat and poultry are expected to be lower through most of 2003. Higher prices for these items may allow some upward price movement for catfish prices in grocery stores. Farm prices for catfish are expected to slowly gain strength, but remain below the previous year, during the first third of 2003. In the second half of 2003, if meat and poultry prices strengthen and catfish imports remain low, grower prices are expected to show additional strength. However average grower prices for 2003 are expected to remain well below the levels seen in the late 1990s and early 2000s.

In 2003, prices for both corn and soybeans are again expected to remain relatively low by historical standards. Over the last several years catfish farmers, along with red meat and poultry producers, have benefited from low feed prices. Record low interest rates and relatively low feed costs are expected to be two bright spots for catfish producers and processors. Cutting into any gains in these two areas will be higher prices for fuel and power. The latest forecasts indicate that corn prices are expected to only increase slightly in 2003 and prices for soybean products are expected to be about even with the previous year.

Catfish Production Expected Higher in 2003

Grower inventories at the beginning of 2003 showed a mix of increases and decreases. Catfish growers indicated that at the start of 2003 the numbers of broodfish, stockers, and medium and large food-size fish had all increased relative to the previous year. However, the numbers of fingerlings and small food-size fish were down. The National Agricultural Statistics Service (NASS) Catfish Production report contains grower inventory estimates as of January 1 and is the only report that includes data from States

other than the four largest producing States (Mississippi, Alabama, Arkansas, and Louisiana).

After increasing for four consecutive years, the estimated inventory of food-size fish decreased for 2003. At the beginning of 2003, the total number of food-size fish held by growers was estimated at 393 million, down 3 percent from the previous year. The estimates of growers holdings of medium and large food-size fish were up from the previous year, but the increases in these categories were offset by a decline in holdings of small food-size fish. The January 1 inventory of large food-size fish was estimated at 11.1 million fish, 3 percent higher than a year earlier and 61 percent higher than at the start of 2001. The strong increases in inventory numbers in this size class came from growers in Mississippi and Louisiana, while the estimates for Alabama and Arkansas were only slightly changed from the previous year. The number of medium food-size fish held by growers was estimated at 128 million, up 20 percent from the previous year and 45 percent higher than on January 1, 2001. In this size class, large increases in holdings by growers in Alabama and Mississippi accounted for almost all of the increase. The bulk of food-size fish holdings are normally made up of small food-size fish. These fish average around 1 pound and will account for most of the fish processed and sold to consumers during the first third of 2003. At the beginning of 2003, growers estimated they had 255 million small food-size fish on their farms. This is a decrease of about 33 million (11 percent) from the small food-size fish inventory at the beginning of 2002. However, this level of inventory is still 6 percent higher than at the start of 2001. The decrease in the number of small food-size fish in inventory is expected to help slowly reduce the downward pressure on prices that has been a major driving factor in the decline of farm prices over the last 2 years.

The inventory of all food-size fish held by growers at the beginning of each year represents the bulk of readily available catfish for processing plants to utilize during the first 3 to 4 months of the year. With a decrease in the overall inventory of food-size fish, higher prices for red meats and poultry, and an expected decrease in competition from imports, catfish prices are expected to slowly gain strength. Prices are not expected to move much at the beginning of the year even though the period up to Easter is the strongest demand period of the year, but they are expected to increase later in the year, especially if processor inventories remain low.

The January 1, 2003, inventory estimate for stockers showed a 15-percent increase from 2002, however this is an 8-percent decrease from the estimate at the beginning of 2001. The number of fingerlings in inventory at the start of 2003 was 990 million, 7 percent lower than the previous year. The number of stockers and fingerlings in inventory at the beginning of the year will provide the bulk of the fish that will be sold to processors in the second half of the year. With an increase in stocker inventory but a decrease in fingerling inventory, the supply of catfish of market size for processing is expected to tighten more in the later part of 2003 as catfish in the fingerling class at the beginning of the year reach market size. With current prices for market-size fish at such low levels, many growers are likely to lower the number of fish they restock in their ponds through the middle of 2003. The smaller supply of market-size catfish later in 2003 is expected to combine with lower supplies of competing meat and poultry supplies to have a positive impact on catfish prices.

Farm Prices To Start Lower in 2003

Farm prices for catfish going to processors were as high as 76 cents a pound in July 2000. Since then prices have been on an almost continual downward slide, hitting 52.9 cents a pound in January 2003. Going into 2003, reduced inventory holdings by farmers, lower stocks of fish held by processors, and an expected reduction in the amount of imported fish, all point to the beginnings of price recovery during 2003. Over the first half of 2002, farm prices averaged 56.5 cents a pound, down 18 percent from the previous year and 28 percent lower than in the first half of 2000. As uncertainties about the economy and the international situation increased towards the end of 2002 and into 2003, farm prices fell even lower, averaging only 52.9 cents a pound. The expectation for 2003 is for continued low prices during the first several months as increased supplies of medium and large food-size fish are utilized. Prices after this period are expected to show some upward movement as the smaller supplies of small food-size fish and those fish in the stocker class at the beginning of the year become the major source of supply for processors. Processor prices throughout the year will be influenced by the impact of the domestic economic and international situations on sales in the foodservice sector.

During 2002, farm sales to processors totaled 630.6 million pounds, an increase of 6 percent from 2001. Combined with an average price of 56.8 cents per pound, this implies catfish farmers had gross sales of $358 million, down almost $27 million (7 percent) from the previous year. This is the second consecutive year of significant declines in gross sales of domestically produced food-size catfish. Including sales of other products (broodfish, stockers, and fingerlings) and sales to outlets besides processors, catfish growers reported total sales of $409.8 million in 2002, down 8 percent from 2001. Total sales by catfish growers in 2000 were over $500 million. For 2003, even with an expected small increase in sales and some growth in farm prices, grower sales of catfish to processing plants are expected to generate only between $372 million and $380 million.

Pond Acreage Down

The NASS Catfish Production report indicated that during the first half of 2003 growers would have approximately 182,000 acres of ponds in catfish production. This is down about 8,000 acres from the same period in 2002. Pond acreage is lower for foodfish, fingerlings, and broodfish, but the bulk of the reduction has come from reduced acreage in foodfish ponds. The large farm price reductions for catfish over the last 2 years have not yet resulted in a large decrease in pond acreage because of the fixed nature of catfish ponds. Catfish ponds have relatively high construction costs and are not suited for alternative uses, if a grower has ponds, they will likely keep them in production if they can at least cover variable costs. Most of the decrease in foodfish pond acreage came in Arkansas, Louisiana, and Mississippi. Even with the low farm prices, growers in Alabama, California, and North Carolina reported increases in pond acreage for foodfish production. In addition, growers indicated that they had 5,443 acres of pond currently scheduled for renovation during the first half of 2003 and they expected to construct 1,225 acres of new ponds in the same period. This is a much slower pace of new construction than the last several years and this reduced construction pace is expected to continue through at least the second half of 2003 and probably well into 2004. Over half of the new pond construction is in Mississippi, but the new acreage is only a fraction of the 4,400 acres taken out of production during the second half of 2002.

Processor Revenues Down 1 Percent

With a 7-percent increase in sales volume and an 8-percent drop in average price, gross processor revenues from catfish sales fell to $658 million in 2002, 1 percent lower than in 2001. During 2002, catfish processors sold 317.6 million pounds of product, an increase of 7 percent from the previous year. For 2002, the weighted average price for processed catfish products was $2.07 per pound, down 8 percent from 2001 and 13 percent lower than in 2000. The decrease in the average price for catfish products was due to lower prices for both fresh and frozen products. The weighted average price for fresh products declined by 10 percent to $1.97 a pound, while the weighted average price for frozen products fell by 7 percent to $2.14 a pound. With the expectation of slightly higher sales levels and some increase in processor prices, processor revenues are forecast to reach between $684 million and $695 million in 2003.

Processor sales levels were generally higher on a year-over-year basis for most of 2002. Overall sales of catfish products were up 7 percent, with most of the increase coming from a 10-percent jump in the sales of frozen products. The majority of the increase frozen products sales was due to a 17-percent increase in whole fish and a 14-percent increase in frozen fillet sales. Sales of other frozen products (strips, nuggets, etc.) were about even with the previous year. The jump in sales of frozen products was partially the result of lower catfish imports from Vietnam. It was the strong increase in frozen catfish imports from Vietnam in 2001 that had put downward pressure on catfish prices and reduced sales causing inventories to build. While a final ruling on an anti-dumping case filed against imports of catfish products from Vietnam is not due until later this year, the current tariff rate of 31 percent has reduced the import volume of catfish products. Overall sales of fresh fish also rose, but since they are not greatly influenced by imports, the increase was only a modest 2 percent.

While the sales volume of catfish products rose, the average price for almost all catfish products declined. The weighted average price for fresh catfish products fell 10 percent, with prices for fresh whole fish down 16 percent and prices for fresh fillets 8 percent lower. Part of the reason the average price for fresh products declined so much was due to decreasing sales of fillet products. The average price of frozen catfish products was $2.14 a pound in 2002, 7 percent lower than the

previous year and down 14 percent from 2000. The largest decline was for frozen fillets, down 9 percent compared with 2001. Sales of other frozen products rose slightly in 2002 to set a new record of 48 million pounds. The volume of other frozen products has risen in each of the last 6 years. However, the average price of other frozen products was $1.55 a pound in 2002, down 5 percent from the previous year, and was the seventh consecutive year of a falling average price for these products.

Commercial Trout Sales Fall to $70 Million in 2002

The most recent survey of the domestic trout industry by NASS showed total sales of trout at $70 million, down 9 percent from 2001. In addition to the commercial trout farms surveyed, 258 operations that distributed trout in 2002 were also included in the survey. These other operations distributing trout are doing so for restoration, conservation, or recreational fishing purposes and many are State or Federal hatcheries. The estimated value of the fish distributed from these operations was $60.3 million in 2002 and is separate from the figures given for the value of trout sold from commercial operations.

Most of the decrease in overall trout sales came from lower sales of food-size fish. In terms of the trout farmer's survey, food-size fish are those 12 inches or more in length. Sales of food-size fish totaled $58.3 million, down almost $6 million from the previous year. The decrease in the value of food-size fish sold in 2002 was the result of declines in both the total weight of fish sold and the average price per pound. Trout prices over the last several years have been impacted by falling prices for competing fish products, especially imported salmon products. In 2002, trout farmers in the Western States were also hurt by drought, which reduced water flows. In 2002, 69 percent of food-size fish sold went to processors, with another 20 percent going for recreational purposes. About the only State where production increased was Washington, where production went from 2.6 million pounds in 2001 to 4.6 million pounds in 2002. The trout farmers in Washington State operate in a slightly different market, one that specializes in large fish. In 2002, the average food-size fish sold in Washington was 7 pounds, compared with slightly over 1 pound in most other States.

Sales of stockers (fish 6 to 12 inches) totaled 2.2 million pounds with a value of $5.4 million in 2002. The value of stocker sales were about even with the previous year as a decrease in the total weight of stockers sold was offset by a increase in the average price per pound. Many stockers are sold from one trout farmer to another for further growout or sold to private groups for placement in specific lakes or rivers.

In 2002, the sales of fingerling, fish under 6 inches, rose 8 percent as a decline in the total liveweight of fingerlings sold was offset by an increase in the value of fish. Fingerlings are normally sold in 1,000 fish lots so the increase in the average price for fingerlings occurred even as the average live weight per 1,000 fish was falling. After increasing in 2001, sales of trout eggs fell to $4.4 million in 2002, down 13 percent. The market for trout eggs was much weaker in 2002, with the price for a 1,000 eggs falling to $14.90 even as the total number of eggs sold was down 12 percent to 298 million.

Quantity and Value of Tilapia Imports Higher

Unlike salmon and shrimp imports, the average prices for tilapia increase in 2002. Tilapia import quanities jumped 19 percent in 2002, reaching 148 million pounds, while the total value of imports rose 36 percent. The volume of tilapia imports increased in all product categories, however, much of the increase can be attributed to a 66-percent increase in imports of frozen fillets. Frozen whole fish rose by 5 percent and accounted for 61 percent of all tilapia imports. Imports of fresh fillets totaled 31 million pounds, 39 percent higher than in the previous year.

The value of tilapia imports increased 36 percent in 2002, to $174 million. The increase in value was due chiefly to imports of fresh and frozen fillets accounting for a greater percentage of all tilapia imports, as prices for fresh fillets declined and prices for frozen fillets remained at about the same level as the previous year. Although frozen whole tilapia dominates imports on a quantity basis, imports of fresh and frozen fillets have been growing rapidly and, on a value basis, accounted for 75 percent of all tilapia imports. The poundage of tilapia production required to supply the U.S. market was 274 million pounds of live fish.

After increasing in 2001, imports from Taiwan fell by 13 million pounds, a decline of 21 percent. All of the decrease in Taiwanese tilapia shipments came in the frozen whole fish segment of the market. Until 2000, the imports of frozen whole tilapia had been dominated by shipments from Taiwan. However, in 2002, shipments from China increased by 80 percent, more that offsetting the decline in imports from Taiwan. Together, Taiwan and China supplied about 99 percent of all the frozen whole fish to the United States. Even though the quantity of imported frozen whole fish has risen by 47 percent over the last 2 years, prices have managed to remain relatively steady. Prices in 2002 for imported frozen whole tilapia averaged 49 cents a pound. While that is 6-cents-a-pound less than in 2000, it is a 4-cent increase from the previous year.

The fresh fillet market had big increases in both the total quantity of shipments and their total value. Even though the quantity of imports rose by 6 million pounds (36 percent), the average price remained strong at $2.61 a pound, down only 8 cents from 2000. Fresh tilapia fillets coming into the United States are produced primarily in Honduras, Costa Rica, and Ecuador. The increase in volume and continued price strength have made fresh fillets a major component of the tilapia market, accounting for 21 percent of all imports, on a quantity basis, and 47 percent on a value basis. Shipments from Ecuador continue to be the fastest growing part of this segment of the tilapia market. In 2002, shipments from Ecuador were 14.6 million pounds, up 34 percent from 2001 and more than double those of 2000. Producers in Ecuador have switched to tilapia production as a way to diversify from their heavy reliance on shrimp production. If the demand for fresh fillets remains strong, keeping prices near current levels, Ecuador is likely to continue to expand production over the next several years.

In the frozen fillet segment, almost all suppliers increased shipments to the United States in 2002. Imports from Taiwan and Indonesia have both grown rapidly over the last 2 years (up 112 and 60 percent). While these have been substantial increases, the majority of the growth in frozen tilapia fillet imports has been from China. Imports from China over the last 2 years have grown by 232 percent to 13.3 million pounds. In 2002, imports from China accounted for 49 percent of frozen fillets. While imports from the three main suppliers of frozen fillets have continued to expand, there are significant differences in the products from these three countries. In 2002, the average price of frozen fillets from Indonesia was $2.30 a pound, well above the average value of frozen fillets from China or Taiwan (around $1.65 a pound). So while all frozen tilapia fillets are placed together under the same trade code, there are characteristics to the Indonesian fillets, (color, flavor, etc.) making them 40 percent more valuable. With the large difference in price, the competition in the frozen fillet section of the tilapia imports is really between Chinese and Taiwanese products. The price for Indonesian frozen fillets places them more in competition with fresh tilapia fillets.

Although the U.S. economy is expected to be somewhat sluggish in 2003, tilapia imports are expected to increase to between 160 million and 165 million pounds on a product-weight basis and 292 million to 300 million pounds on a live-weight basis. The value of imports is expected to reach between $185 and $190 million in 2003. The average import price is expected to increase slightly in 2003 as imports

of fresh and frozen fillets continue to become a larger percentage of the total imports. However, prices for the individual types of tilapia imports are not expected to show much increase due to strong competition among producers and from other seafood products. In most categories, expanding production in Ecuador and China is expected to keep prices from increasing much as these countries try to expand their shares of the U.S. market.

Atlantic Salmon Imports up 15 percent in 2002

U.S. Atlantic salmon imports in 2002 totaled 413 million pounds with value of $818 million. These are increases of 15 percent in quantity of 6 percent in value over a year earlier. The lower increase in value of Atlantic salmon imports was due to an 18-cent-a-pound decrease in the average price to $1.98 a pound. Over the last 2 years, the average price for Atlantic salmon imports has fallen 58 cents or 23 percent. With the continued reductions in prices, salmon products, especially salmon fillets, are now in direct competition with higher value beef and pork products. With lower production and higher prices forecast for beef and pork products in 2003, restaurants will have an incentive to expand their use or selection of salmon dishes.

In 2002, imports of fresh whole Atlantic salmon products increased by 13 percent and imports of frozen whole products declined 20 percent. This is the second year in a row that imports of frozen whole Atlantic salmon declined, and they now are only a very minor part of the imported Atlantic salmon market. Thus the majority of the increase was in the fresh or frozen filleted portion of the market. Between 2000 and 2002, imports of filleted products have increase by almost 100 million pounds. This rapid growth has propelled imports of filleted products into by far the largest of the three-product categories. In 2002, the quantity of imported filleted products accounted for 62 percent of all imported Atlantic salmon products. The impact of this strong increase in the quantity imported has been a decline in average prices for fillets. In 2000, the average price for imported fillets was $2.78 a pound, 47 cents a pound more than the average price for fresh whole salmon. By 2002, the average price for fresh whole salmon and salmon fillets had both declined, but the price for fillets was actually 5-cents-a-pound lower. The average prices for fresh whole fish and filleted products are expected to decline again in 2003. With only a small, or no price differential, between whole and fillet products, importers will have every incentive to use fillets whenever possible. However, the lack of price differential between whole and fillet products has greatly reduced any margins for the salmon producers.

Chilean producers continued to expand their dominance of filleted product shipments to the U.S. market, accounting for 81 percent of total filleted imports in 2002. Imports of fillets from Canada grew by 20 percent in 2002, but they account for only about 14 percent of all fillet imports. With the returns likely to be better on whole fish, Canadian producers are likely to push shipments of whole fish in the coming year. Even in the fillet market, there is a considerable price difference between the filleted products shipped by the Canadians and Chileans. The average price for filleted Canadian product in 2002 was $2.91 a pound, while the average price for Chilean product was only $1.77 a pound. The difference between the two prices arises from the fact that a much larger percentage of Canada's fillets enter the U.S. market as fresh product, while almost all Chilean imports are frozen.

Even though economic growth in the United States in 2003 is forecast to be relatively weak, imports of Atlantic salmon are expected to continue expanding. Shipments in 2003 are expected to be near 440 million pounds and $845 million in value. Demand for salmon products is expected to remain strong during 2003, especially by the restaurant industry. Salmon imports will also be boosted by rising prices for beef and pork. Additionally, the U.S. dollar is expected to remain strong against both the Canadian and Chilean currencies. Over the long term, the falling prices for most salmon products are expected to result in a slowdown in production growth as producer margins are reduced.

Shrimp Imports: Volume Rises, Value Declines

The volume of U.S. shrimp imports continued to grow in 2002, rising 7 percent to 946 million pounds. However, for the second consecutive year the value of shrimp imports declined. In 2002, total shrimp imports were valued at $3.4 billion, down 6 percent from the previous year and 9 percent lower than in 2000. With an increase in volume and declining total value, the average price per pound of imported shrimp declined by 12 percent to $3.62. This is down 49 cents from a year earlier and $1.32 from 2000.

Shrimp imports are reported in 17 different 10-digit trade categories, but for this report they have been

aggregated into three categories, frozen, fresh, and prepared shrimp. In 2002, the volume of shrimp imports rose in all three categories. However, the majority of the increase came from larger imports of prepared shrimp products. The increase in imports in this category accounted for 75 percent of the total growth in import volume. Shipments of prepared shrimp rose by 48 million pounds or 29 percent, while the imports of frozen shrimp was up 16 million pounds or 2 percent, and imports of fresh shrimp increased by 4 percent, or less than 1 million pounds. Imports of prepared shrimp products have been the fastest growing portion of shrimp imports over the last several years.

Of the eight largest countries exporting shrimp to the United States, three showed increases in volume in 2002. After falling heavily in 2000 due to disease problems, imports from Ecuador have risen by 56 percent over the last 2 years. However, the 65.5 million pounds that Ecuador exported to the United States in 2002 was still 30 percent lower than the amount shipped in 1999. Another major exporter to the United States that showed an increase in 2002 was India. Indian exports to the United States are mostly large frozen shrimp. In 2002, 92 percent of its imports were frozen shrimp and 33 percent of all the frozen shrimp imported from India were in the two largest size categories (25 or fewer shrimp per kilogram).

In 2002, frozen shrimp imports accounted for 730 million pounds, up 6 percent from the previous year. Of the top eight exporters, only three showed increases (India, China, and Ecuador). Therefore, much of the growth in frozen shrimp imports came from the countries included in the "other" category. This is the second consecutive year that "other" countries have accounted for a large percentage of import growth. This is moving in the opposite direction from most other seafood imports. For most seafood products, imports have been growing more concentrated, with a higher percentage of imports coming from a smaller number of countries. The major "other" country imports are smaller Asian producers and a number of countries in Central America such as Panama, Costa Rica, and Honduras.

In 2002, there was again a strong decline in the average price for imported shrimp. With the total quantity of imports rising by 7 percent and the total value falling by 6 percent, average prices fell to $3.62 a pound. Again the largest portion of this decline was due to falling prices for Thai shrimp. In 2000, the average price of frozen shrimp imports from Thailand was $5.37 a pound, by 2002 that had fallen to $3.85 a pound. There are three major factors that can influence the average price of imports from a specific country. First, a larger supply of shrimp from either farmed production of wild harvest. Second, detrimental economic conditions or falling prices for competing products can lower prices for shrimp as the demand falls. Third, in the frozen shrimp category a shift in the average size of the shrimp produced can lower average prices. A decline in average shrimp size can impact the average price because of the much higher prices received for large shrimp. In 2002, the average price for the largest class of frozen shrimp (under 12 shrimp per kilo) was $5.92 a pound. The average price for the smallest class of shrimp (over 200 shrimp per kilo) was $2.08 a pound.

The average price for imported prepared shrimp declined even more sharply than the frozen price. Average prices for prepared shrimp products in 2000 were over $5 a pound. In 2002, prices fell to $3.60 pound, a 29-percent decline from the previous year. Imports from Thailand make up 59 percent of the imports in this category. Imports of prepared shrimp products from Thailand fell by over a $100 million in 2001, but in 2002 the volume of other prepared shrimp imports from Thailand was about even with the previous year. With the quantity of Thai prepared shrimp imports rising by 10 percent, the average price of prepared shrimp imports from Thailand fell by 9 percent to $3.33 a pound.

Thailand continues to be the largest single source of imported shrimp to the United States, but over the last several years, the countries contributing the most to the growing imports has been those in the "other" category. Overall imports of shrimp between 1999 and 2002 increased by 215 million pounds. In the same period, shrimp shipments from the countries in the "other" category rose by 141 million pounds. Imports from China have also increase strongly over the last several years. Shipments from China in 2002 totaled 109 million pounds, up 77 percent from the previous year, making it the second largest single source of shrimp imports to United States. The unit value for China's shrimp exports is not high, only $2.73 a pound compared to the overall average of $3.62 a pound, as most of China's exports are smaller farm-raised shrimp. China is by far the world's largest aquacultural producer and is a major force in the production of a

wide range of aquacultural products. With the emphasis that has been placed on expanding aquaculture production, China's shrimp imports are expected to be a major factor in the United States market in the future.

Although shrimp imports continue to expand, domestic shrimp production is still a vital part of overall U.S. shrimp supplies. In 2001, the last year that data are available, the domestic shrimp harvest was 324.5 million pounds, down 8 million pounds from the previous year. Most of this harvest comes from the Gulf States. U.S. farm-raised shrimp production accounts for only a small percentage of total domestic supply. The ability to expand farm-raised shrimp production in the United States is severely limited by the high value of ocean front property.

In 2003, shrimp imports are again expected to increase in volume, but at a slower rate than in the past several years. After falling over the last two years, the average price of shrimp is expected to remain flat, leaving the value of shrimp imports slightly higher than in 2002. The U.S. economy in 2003 is not expected to be robust enough to provide a large incentive for higher shrimp imports. On the other hand the U.S. economy may be a relative bright spot worldwide, so a growing share of world shrimp production may be marketed in the United States. With the two largest shrimp markets, the United States and Japan, both expected to have relatively weak economies in 2003, shrimp prices are likely to continue to be under some downward pressure.

Mollusk Exports Fall in 2002

In 2002, the quantity of the major mollusk exports (oysters, clams, and mussels) all declined. Oyster and clam exports had both registered double-digit increases in 2001, and the small decreases (1 and 2 percent) still left imports well above their 2000 levels. The value of oyster exports rose 5 percent in 2002, to $8.7 million, and the value of clam exports fell only a very small amount. With the quantity of exports falling and values rising or remaining stable, the average prices for both oysters and clams increased in 2002. The quantity of oyster exports had risen for three consecutive years and had gone up 39 percent during this period. While there is a large market for oysters, especially in Asia, long-term disease problems in the Chesapeake Bay have depressed wild oyster harvests. Mussel exports declined on a quantity and value basis in 2002 for the third consecutive year as the domestic market has expanded. The outlook for 2003 is for continued slow growth for mollusks exports as a strong dollar continues to make domestic products relatively more expensive. Mussel exports are expected to decline again in 2003 as the strengthening U.S. market keeps most domestic production at home.

Oyster and Mussel Imports Expand As Clam Imports Fall

Over the last several years imports of oysters and clams have shown very little in the way of a clear market direction. For oysters, during the last 5 years, imports have ranged between 18 and 20.8 million pounds, bouncing up and down from year to year. The same can be said for clam imports. Since 1998, clam imports have ranged between 6.5 and 8.1 million pounds, going up one year and then down the next. The exception to this pattern has been mussels. Mussel imports have increase in 9 of the last 10 years, going from 7.0 million pounds in 1992 to 45.7 million pounds in 2002, an increase of 553 percent. The steady increase in U.S. mussel imports is due to a combination of increased demand in the at-home market and strong demand from restaurants looking for low-cost seafood items for their menus. Mussel imports have also benefited from the weakness of the Canadian dollar against U.S. dollar, as Canada is the largest supplier of mussels to the United States. In 2003, a weaker U.S. economy and general uncertainty over world conditions is expected to hold down restaurant sales, the main outlet for mollusk sales. However, if the domestic economy begins to improve in the second half of 2003, and foodservice expenditures expand, then oyster and clam imports may again increase. Mussel imports are expected to again increase in 2003, as their relatively low cost gives them an advantage over other mollusk products.

Ornamental Fish Exports Increase

After falling in 5 of the last 6 years, U.S. exports of ornamental fish increased by 18 percent to $8.2 million in 2002. Domestic producers had been hampered by a strong dollar, making their products less competitive on world markets. In 2002, most of the increase in exports was due to higher shipments to Mexico and the United Kingdom (UK). Exports to Mexico more than doubled, rising by 118 percent to $1.7 million and shipments to the UK totaled $895,000, an increase of 145 percent. Canada remains the largest market for ornamental fish exports, but shipments to Canada fell for the second

year in a row. The shipments to Canada, Mexico and the UK accounted for 78 percent of all ornamental fish exports.

The largest impact of economic uncertainty and a strong dollar has been on U.S. exports to Japan. Japan had been our second largest market after Canada, but shipments there continue to spiral downward. Shipments of ornamental fish to Japan stood at $3.9 million in 1997. In 2002, shipments had fallen to $507,000.

While a strong dollar has hurt ornamental fish exports, it normally helps countries exporting ornamental fish to the United States. However, a slowing economy in 2002 depressed imports, and the value of ornamental fish imports fell by 3 percent to $39.7 million. The majority of our imports of ornamental fish are from Asia, with a small number of countries accounting for the majority of imports. Thailand is the largest supplier to the United States, and together with Singapore, Indonesia, the Philippines, and Hong Kong, account for 73 percent of the total shipments. Brazil and Peru are the largest suppliers of ornamental fish to the United States in the Western Hemisphere, but shipments from these countries have fallen over the last several years. Over the long-term, imports of ornamental fish have been declining for some time, with imports peaking at $54.3 million in 1995. Between 1995 and 2002, imports from almost all the major exporting countries have declined.

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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/fus/fus01/index.html

Table 1--Catfish: Inventory as of January 1, in thousands

State	Broodfish			Fingerlings/fry			Stockers		
	2001	2002	2003	2001	2002	2003	2001	2002	2003
Alabama	155	70	380	57,000	53,000	50,800	60,000	72,800	142,100
Arkansas	210	170	120	167,000	197,000	131,000	141,200	115,300	120,200
California	15	15	14	4,350	7,350	6,100	2,820	1/	1/
Florida	1/	5	3	240	5,000	3,300	1/	1/	1/
Georgia	20	20	10	4,250	2,650	1,550	2,050	1,640	340
Illinois	2	2	1/	1/	230	1/	633	363	1/
Kentucky	1	1	2	750	780	600	1/	1/	1/
Louisiana	1/	1/	26	39,400	55,800	30,800	27,700	29,200	32,410
Mississippi	860	800	700	737,000	727,000	753,000	601,400	447,400	464,000
Missouri 3/	10	1/	15	7,400	1/	4,040	4,500	3,850	1/
North Carolina	9	10	13	1,850	8,420	7,540	2,920	2,070	6,960
Oklahoma 3/	0	0	0	0	0	0	0	0	0
South Carolina	7	6	1/	1/	1/	1/	1/	1/	1/
Tennessee 3/	0	0	0	0	0	0	0	0	0
Texas	7	6	14	570	670	800	1,025	360	365
Other 2/	31	66	6	3,723	8,500	633	1,039	3,395	8,851
Total	1,327	1,171	1,303	1,023,533	1,066,400	990,163	845,287	676,378	775,226

State	Small food-size			Medium food-size			Large food-size		
	2001	2002	2003	2001	2002	2003	2001	2002	2003
Alabama	32,800	42,800	53,500	13,100	20,800	26,100	1,090	2,850	2,700
Arkansas	34,200	45,300	44,800	17,800	26,600	27,500	1,600	2,540	2,530
California	1,900	1,510	1,420	860	1,640	1,450	380	270	175
Florida	820	2,000	810	480	1,150	660	1/	70	115
Georgia	930	930	780	400	560	410	80	80	80
Illinois	68	70	1/	1/	49	1/	1/	54	1/
Kentucky	192	86	630	93	93	540	49	52	1/
Louisiana	13,900	11,400	10,100	6,500	8,700	8,500	640	640	1,200
Mississippi	150,200	179,800	140,000	46,900	44,700	60,300	2,420	3,850	3,950
Missouri	1,750	1,460	660	580	490	410	165	175	1/
North Carolina	2,570	1,600	1,800	900	960	1,550	140	100	150
Oklahoma 3/	0	0	0	0	0	0	0	0	0
South Carolina	170	530	1/	1/	330	1/	200	40	1/
Tennessee 3/	0	0	0	0	0	0	0	0	0
Texas	155	105	105	105	45	55	24	25	29
Other 2/	0	0	130	208	0	58	84	0	135
Total	239,655	287,591	254,735	87,926	106,117	127,533	6,872	10,746	11,064

1/ Data not published separately to avoid disclosing individual operations. 2/ Included Kansas in 1999. 3/ Discontinued after 1999.

Source: Catfish and Trout Production Report, NASS, USDA.

Table 2--Catfish: Supply, sales, prices, and inventory

Item	2002 Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	2003 Jan.
Supply						1,000 lb							
Grower sales 1/	52,551	52,856	58,340	50,694	52,902	49,450	52,363	54,383	53,366	56,576	50,072	47,048	55,523
Processor sales	27,173	29,308	28,645	25,023	27,261	24,670	26,441	27,961	26,498	27,800	23,939	22,930	27,584
Fresh	10,923	11,234	11,247	9,965	11,058	9,933	10,380	10,744	10,176	10,838	8,643	8,310	10,863
Whole	3,713	3,656	3,826	3,373	3,644	3,313	3,477	3,733	3,418	3,822	3,031	2,986	3,833
Fillets	5,684	6,132	6,010	5,236	5,682	5,093	5,327	5,442	5,317	5,420	4,447	4,119	5,362
Other	1,526	1,446	1,375	1,356	1,732	1,527	1,576	1,569	1,441	1,596	1,165	1,205	1,668
Frozen	16,250	18,074	17,398	15,058	16,203	14,737	16,061	17,217	16,322	16,962	15,296	14,620	16,721
Whole	1,146	1,377	1,472	1,383	1,246	1,194	1,174	1,285	1,420	1,328	1,101	967	1,266
Fillets	10,977	12,362	11,783	10,337	11,405	10,134	10,768	11,436	10,842	11,622	9,800	9,799	11,428
Other	4,127	4,335	4,143	3,338	3,552	3,409	4,119	4,496	4,060	4,012	4,395	3,854	4,027
Processor inventory 2/	13,644	10,830	11,234	10,324	9,964	9,793	9,601	9,588	10,056	10,986	11,673	12,283	11,604
Fresh	893	849	782	647	635	714	858	802	685	799	695	651	994
Whole	210	199	225	131	167	195	236	191	185	196	183	152	274
Fillets	551	530	474	411	355	407	488	477	405	498	407	411	561
Other	132	120	83	105	113	112	134	134	95	105	105	88	159
Frozen	12,751	9,981	10,452	9,677	9,329	9,079	8,743	8,786	9,371	10,187	10,978	11,632	10,610
Whole	814	779	997	999	878	819	807	767	766	769	902	1,015	1,265
Fillets	9,750	7,462	7,317	6,735	6,174	5,864	5,661	5,873	6,528	6,659	7,228	7,348	6,545
Other	2,187	1,740	2,138	1,943	2,277	2,396	2,275	2,146	2,077	2,759	2,848	3,269	2,800
Prices						Dollars per pound							
Farm price 3/	0.55	0.56	0.57	0.56	0.57	0.59	0.59	0.58	0.58	0.57	0.56	0.54	0.53
Processor prices	2.08	2.10	2.07	2.08	2.09	2.09	2.07	2.06	2.08	2.05	2.04	2.03	2.02
Fresh	1.99	2.00	1.97	1.98	1.98	2.00	1.99	1.96	1.99	1.93	1.92	1.89	1.87
Whole	1.36	1.35	1.30	1.34	1.36	1.37	1.35	1.32	1.32	1.28	1.24	1.25	1.28
Fillets	2.52	2.49	2.49	2.51	2.53	2.55	2.55	2.54	2.54	2.52	2.49	2.47	2.44
Other	1.53	1.57	1.54	1.51	1.45	1.51	1.51	1.50	1.54	1.48	1.55	1.46	1.40
Frozen	2.15	2.16	2.13	2.15	2.17	2.16	2.13	2.12	2.13	2.13	2.10	2.10	2.12
Whole	1.90	1.88	1.81	1.80	1.80	1.87	1.86	1.84	1.82	1.85	1.87	1.85	1.81
Fillets	2.40	2.39	2.37	2.37	2.38	2.40	2.39	2.40	2.41	2.38	2.38	2.36	2.39
Other	1.55	1.61	1.56	1.62	1.62	1.55	1.51	1.48	1.49	1.50	1.54	1.52	1.45

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

Source: NASS, USDA

Table 3--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 1/						
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												
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												
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												
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	210.1	206.6	208.2	209.0	209.4	207.2	205.9	207.6	205.2	203.8	202.5	207.0
2003	202.2												

1/ Live weight.

Source: Monthly Catfish Processing Report, NASS, USDA.

Table 4--U.S. trout sales, weight, and value of foodsize fish 1/

State	Total pounds sold 2001	Total pounds sold 2002	Total value of sales 2001	Total value of sales 2002
	-- 1,000 --		-- $1,000 --	
California	2,500	2,300	5,125	4,416
Colorado	665	475	1,995	1,330
Connecticut	2/	2/	2/	2/
Georgia	265	215	527	529
Idaho	39,500	37,400	34,365	29,920
Maine	2/	2/	2/	2/
Massachusetts	83	40	282	190
Michigan	330	215	660	553
Missouri	2/	2/	2/	2/
New York	83	90	354	327
North Carolina	4,550	4,600	5,915	6,348
Oregon	1,477	395	1,905	691
Pennsylvania	1,640	1,410	4,100	3,722
Tennessee	113	148	293	297
Utah	705	496	1,114	893
Virginia	630	578	1,215	1,168
Washington	2,590	4,550	2,590	4,505
West Virginia	467	349	785	559
Wisconsin	618	554	1,644	1,490
Other	662	636	1,527	1,396
Total	56,878	54,451	64,396	58,334

U.S. trout sales, weight, and value of stockers 3/

	Total pounds sold 2001	Total pounds sold 2002	Total value of sales 2001	Total value of sales 2002
	-- 1,000 --		-- $1,000 --	
California	290	2/	766	2/
Colorado	225	450	720	1,125
Connecticut	2/	2/	2/	2/
Georgia	2/	2/	2/	2/
Idaho	2/	2/	2/	2/
Maine	2/	2/	2/	2/
Massachusetts	2/	2/	2/	2/
Michigan	42	30	116	83
Missouri	2/	2/	2/	2/
New York	66	48	312	198
North Carolina	170	90	214	158
Oregon	113	39	277	99
Pennsylvania	232	221	742	774
Tennessee	2/	2/	2/	2/
Utah	85	74	178	181
Virginia	2/	2/	2/	2/
Washington	275	200	729	492
West Virginia	2/	2/	2/	2/
Wisconsin	54	80	155	212
Other	711	935	1,233	2,098
Total	2,263	2,167	5,442	5,420

U.S. trout sales, weight, and value of fingerlings 4/

State	Total pounds sold 2001	Total pounds sold 2002	Total value of sales 2001	Total value of sales 2002
	-- 1,000 --		-- $1,000 --	
California	8	2/	129	2/
Colorado	10	5	79	48
Connecticut	2/	2/	2/	2/
Georgia	2/	2/	2/	2/
Idaho	2/	2/	2/	2/
Maine	2/	2/	2/	2/
Massachusetts	2/	2/	2/	2/
Michigan	4	3	47	27
Missouri	2/	2/	2/	2/
New York	3	6	41	42
North Carolina	43	55	346	323
Oregon	1	1	23	11
Pennsylvania	6	7	52	66
Tennessee	2/	2/	2/	2/
Utah	10	1	32	7
Virginia	2/	2/	2/	2/
Washington	16	39	197	388
West Virginia	2/	2/	2/	2/
Wisconsin	3	3	34	58
Other	101	43	310	427
Total	205	163	1,290	1,397

U.S. trout sales, number, and value of eggs 5/

Region 6/	Number of eggs 2001	Number of eggs 2002	Total value of sales 2001	Total value of sales 2002
	-- 1,000 --		-- $1,000 --	
Northeast	1,100	1,210	25	27
South and Central	595	715	11	15
West	336,530	296,300	5,077	4,404
Total	338,225	298,225	5,113	4,446

1/ Foodsize refers to fish 12 inches or greater.
2/ Included in "Other" to avoid disclosure of individual operations.
3/ Fish between 6 and 12 inches long.
4/ Fish between 1 and 6 inches long.
5/ Data published at a regional level to avoid disclosure of individual operations.
6/ Regions: Northeast - CT, MA, ME, NY, PA, WV. South - GA, NC, TN, VA. Central - MI, MO, WI. West - CA, CO, ID, OR, UT, WA

Source: Catfish and Trout Production report, NASS, USDA.

Table 5--Quantity and value of U.S. exports of selected seafood products

Commodity	1999	2000	2001	2002	1999	2000	2001	2002
Exports	$1,000				1,000 lb			
Ornamental fish	10,834	8,189	6,914	7,719	0	0	0	0
Trout, live	340	185	271	227	0	0	0	0
Trout, fresh & frozen	2,855	2,893	1,577	1,632	1,697	1,816	1,077	1,163
Atlantic salmon, fresh	23,557	34,471	37,945	16,167	10,717	15,942	18,417	8,456
Pacific salmon, fresh 1/	47,989	37,048	22,166	45,961	40,683	38,750	20,651	29,672
Atlantic salmon, frozen	458	583	139	160	182	299	84	84
Pacific salmon, frozen 1/	296,391	273,271	236,604	180,724	157,278	161,515	167,933	132,646
Canned & pre. salmon 2/	198,518	147,127	167,825	137,902	113,556	81,098	109,109	95,955
Shrimp, frozen	60,794	62,891	54,553	52,753	13,607	15,162	13,905	13,890
Shrimp, fresh & pre. 3/	44,444	52,738	51,481	50,252	13,153	14,229	13,640	13,148
Oysters 4/	6,563	7,227	8,238	8,659	2,727	3,229	3,915	3,896
Mussels 5/	2,228	1,681	1,595	1,406	1,861	1,513	1,485	1,178
Clams 6/	8,169	5,649	6,593	6,585	5,240	3,413	3,939	3,861
Imports	$1,000				1,000 lb			
Ornamental fish	38,462	40,761	40,863	39,686	0	0	0	0
Trout, live	109	131	99	167	0	0	0	0
Trout, fresh & frozen	8,504	11,291	11,507	14,514	5,259	7,083	7,382	9,887
Atlantic salmon, fresh	567,977	654,725	685,289	713,169	217,948	257,218	316,837	356,164
Pacific salmon, fresh 1/	51,556	42,633	30,462	36,008	26,467	19,908	17,472	23,210
Atlantic salmon, frozen	60,883	85,658	87,483	104,525	24,222	32,089	41,176	56,883
Pacific salmon, frozen 1/	22,590	20,527	14,940	19,934	16,596	12,866	10,515	18,317
Canned & pre. salmon 2/	23,582	32,021	36,199	45,632	5,627	8,893	11,298	16,378
Shrimp, frozen	2,612,811	3,035,173	2,957,944	2,633,278	617,089	621,231	714,706	730,002
Shrimp, fresh & pre. 3/	524,566	707,565	678,853	788,811	114,191	139,526	167,877	216,439
Oysters 4/	38,350	40,763	36,914	36,867	18,325	20,810	18,438	19,084
Mussels 5/	33,629	47,359	43,610	52,135	34,969	43,141	39,973	45,695
Clams 6/	6,167	7,504	8,296	7,019	7,537	8,074	8,007	7,457
Tilapia 7/	81,897	101,378	127,797	174,215	82,837	89,218	124,202	148,122

1/ Also contains 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/ Tilapia, frozen whole fish plus fresh and frozen fillets.

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

Table 6--Quantity of U.S. tilapia imports by country, in 1,000 pounds

Country	Whole, frozen			Fillets, fresh			Fillets, frozen			Total		
	2000	2001	2002	2000	2001	2002	2000	2001	2002	2000	2001	2002
Belize	0	0	0	0	0	0	0	0	0	0	0	0
Honduras	19	0	0	2,288	3,170	6,335	0	0	0	2,306	3,170	6,335
Nicaragua	0	0	0	0	8	2	1	37	54	1	46	56
Costa Rica	0	0	0	5,917	6,854	7,068	0	0	5	5,917	6,854	7,073
Jamaica	0	0	0	389	202	36	47	61	42	436	263	78
Colombia	0	0	17	65	71	0	0	0	9	65	71	26
Ecuador	53	210	36	7,170	10,856	14,585	376	308	599	7,600	11,374	15,219
Thailand	43	108	550	0	4	59	393	461	724	437	572	1,334
Indonesia	6	86	6	0	0	0	2,685	4,803	5,671	2,691	4,889	5,677
China	25,622	23,964	43,244	131	421	1,861	3,991	5,575	13,285	29,744	29,960	58,390
Taiwan	35,089	60,845	45,546	182	168	543	3,815	4,703	6,087	39,086	65,716	52,176
Other	415	171	433	396	813	788	125	303	542	936	1,287	1,763
Total	61,247	85,383	89,833	16,539	22,566	31,277	11,433	16,252	27,018	89,218	124,202	148,128

Value of U.S. tilapia imports by country, in $1,000

Country	Whole, frozen			Fillets, fresh			Fillets, frozen			Total		
	2000	2001	2002	2000	2001	2002	2000	2001	2002	2000	2001	2002
Belize	0	0	0	0	0	0	0	0	0	0	0	0
Honduras	41	0	0	5,915	8,635	17,351	0	0	0	5,956	8,635	17,351
Nicaragua	0	0	0	0	21	5	2	80	100	2	101	105
Costa Rica	0	0	0	13,583	16,485	18,389	0	0	15	13,583	16,485	18,404
Jamaica	0	0	0	1,206	647	104	87	119	76	1,292	766	179
Colombia	0	0	17	155	188	0	0	0	7	155	188	24
Ecuador	121	262	39	21,831	31,806	40,241	850	653	1,246	22,802	32,720	41,526
Thailand	31	112	342	0	11	124	858	818	1,286	889	942	1,752
Indonesia	7	70	3	0	0	0	6,184	10,846	13,043	6,191	10,917	13,046
China	13,655	10,497	20,239	287	617	2,979	7,091	8,597	20,898	21,033	19,711	44,115
Taiwan	19,571	27,020	23,175	326	226	699	7,795	7,214	11,048	27,691	34,460	34,922
Other	275	91	217	1,152	2,204	1,803	356	578	770	1,784	2,873	2,791
Total	33,701	38,052	44,031	44,455	60,839	81,694	23,222	28,905	48,490	101,378	127,797	174,215

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

Table 7--Quantity of U.S. Atlantic salmon imports by country, in 1,000 pounds

	Fresh			Frozen			Fillets 1/			Total		
Country	2000	2001	2002	2000	2001	2002	2000	2001	2002	2000	2001	2002
Canada	89,326	107,395	124,215	45	45	119	17,391	30,589	36,759	106,762	138,028	161,094
Chile	8,923	7,974	7,652	2,971	2,166	2,013	127,398	176,381	209,102	139,292	186,522	218,766
Iceland	2,845	1,618	668	0	187	303	160	237	147	3,006	2,041	1,118
Norway	651	1,067	1,691	6,423	4,828	3,963	11,209	8,870	10,378	18,283	14,764	16,032
Faroe Islands	5,240	1,435	1,664	361	268	85	329	126	86	5,930	1,828	1,836
United Kingdom	12,054	12,988	12,815	58	112	0	2,563	821	546	14,675	13,921	13,361
Other	323	81	453	785	740	162	250	94	226	1,358	916	840
Total	119,363	132,557	149,157	10,643	8,346	6,645	159,300	217,117	257,245	289,307	358,020	413,047

Value of U.S. Atlantic salmon imports by country, in $1,000

	Fresh			Frozen			Fillets 1/			Total		
Country	2000	2001	2002	2000	2001	2002	2000	2001	2002	2000	2001	2002
Canada	219,322	248,894	266,366	71	83	167	64,058	100,474	106,900	283,451	349,450	373,433
Chile	17,089	11,661	10,549	7,266	3,466	2,909	332,855	346,456	370,960	357,209	361,583	384,418
Iceland	5,661	2,233	743	0	1,154	1,666	588	694	497	6,250	4,081	2,906
Norway	1,225	1,860	3,250	12,917	8,193	6,401	37,115	25,928	25,687	51,257	35,981	35,338
Faroe Islands	9,722	1,608	1,936	695	413	66	933	252	116	11,350	2,273	2,118
United Kingdom	22,047	15,594	16,958	68	303	0	6,942	1,397	1,101	29,057	17,294	18,059
Other	623	143	857	1,570	1,548	233	617	418	391	2,810	2,109	1,482
Total	275,689	281,992	300,659	22,587	15,160	11,442	443,107	475,620	505,653	741,383	772,772	817,754

1/ Includes both fresh and frozen fillets.

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

Table 8--Quantity of U.S. shrimp imports by country, in 1,000 pounds

	Frozen			Fresh			Other			Total		
Country	2000	2001	2002	2000	2001	2002	2000	2001	2002	2000	2001	2002
Mexico	63,752	65,654	53,113	302	454	309	44	67	144	64,097	66,175	53,565
Ecuador	40,939	56,285	62,654	0	2	4	1,162	2,474	2,852	42,101	58,760	65,509
India	56,739	63,584	89,888	374	665	783	5,443	8,232	6,871	62,556	72,482	97,542
Bangladesh	22,520	19,238	18,816	4	0	0	12	0	0	22,536	19,238	18,816
Thailand	178,089	186,460	128,564	373	208	206	100,305	113,348	124,989	278,767	300,017	253,759
Indonesia	34,240	32,202	34,562	222	73	60	2,480	2,662	3,819	36,942	34,938	38,441
Philippines	3,436	2,961	2,021	3	1	4	688	913	876	4,126	3,876	2,900
China	38,373	56,726	80,471	931	884	916	827	4,163	27,757	40,130	61,772	109,144
Others	183,143	231,223	259,914	1,061	1,102	1,233	25,297	32,669	45,617	209,501	264,994	306,763
Total	621,231	714,333	730,002	3,269	3,389	3,514	136,256	164,530	212,924	760,756	882,251	946,441

Value of U.S. shrimp imports by country, in $1,000

	Frozen			Fresh			Other			Total		
Country	2000	2001	2002	2000	2001	2002	2000	2001	2002	2000	2001	2002
Mexico	401,867	379,714	262,665	1,044	862	626	104	385	779	403,014	380,961	264,070
Ecuador	186,348	213,298	190,155	0	12	18	4,044	9,310	8,937	190,393	222,619	199,110
India	222,211	243,417	343,454	4,573	7,577	8,120	12,797	13,756	11,984	239,582	264,750	363,558
Bangladesh	145,211	92,244	87,626	5	0	0	92	0	0	145,307	92,244	87,626
Thailand	944,880	799,813	508,625	3,415	791	1,067	550,058	465,550	466,409	1,498,353	1,266,153	976,101
Indonesia	179,258	143,632	137,222	630	459	383	10,839	11,417	15,487	190,727	155,508	153,093
Philippines	22,286	16,506	10,137	12	6	16	593	840	952	22,891	17,352	11,105
China	127,837	171,102	201,807	6,974	7,708	7,343	1,641	12,771	88,415	136,451	191,581	297,566
Others	819,865	896,035	891,588	3,086	4,106	4,210	107,658	133,362	174,065	930,609	1,033,503	1,069,862
Total	3,049,763	2,955,762	2,633,278	19,738	21,520	21,783	687,827	647,391	767,028	3,757,328	3,624,672	3,422,089

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