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Aquaculture Outlook

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U.S. Aquacultural Production Higher in 2005

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Domestic aquacultural production is expected to increase in 2005 due to a relatively strong domestic economy, a weaker dollar relative to some other currencies which is expected to help exports, and higher livestock and poultry prices, especially in the first half of the year. Imports of farm-raised seafood are expected to expand in 2005. However, the rate of growth should be much slower than in the past several years, and a weaker dollar will make imported products more expensive.

Grain prices are expected to be considerably lower in 2005, which will provide lower feed prices to those aquacultural species that utilize grains in their feed formulations. For many species, such as catfish, feed costs are one of the largest components of total production costs, so lower feed costs are expected to help lower production costs. Other species such as trout, tilapia, and shrimp also use grain products to make up a significant proportion of their feed. Farmed production of mollusk species, such as mussels, clams, and oysters, do not utilize feeds, but rely on naturally occurring foods in the bodies of water at the production site.

While a number of different grain products are used in aquacultural feeds, the primary ones are corn and soybean meal. In 2004 the average prices for these products rose considerably, especially in the first half of the year. The forecast for corn and soybean meal in 2005 is for much lower prices through the first three quarters, with the gap in year-over-year change narrowing in the fourth quarter. While lower prices will reduce production costs for many aquacultural producers, they will also reduce production costs for livestock and poultry producers that provide competing products.

The outlook for domestic aquacultural production and trade in aquaculture products in 2005 is based on a number of factors. First, U.S. economic growth in 2005 is expected to be relatively strong, boosting restaurant sales. Restaurant sales are especially important for seafood as a higher percentage of seafood consumption comes from away-from-home consumption. Second, the dollar is expected to be relatively soft against a number of currencies, making U.S. imports more expensive and making exports more competitive. Third, higher prices for a number of aquacultural products in 2004 are expected to provide an incentive to increase production in 2005.

U.S. production of pork is expected to be up less than 1 percent in 2005, and prices for pork products are forecast to be higher during the first half of 2005 than they were a year earlier. After falling in 2004, U.S. beef production is expected to increase about 4 percent in 2005, bringing it almost back to the production level of 2003. Beef prices through most of 2005 are expected to be below those of 2004. Broiler production is expected to increase by 3 percent in 2005. Wholesale broiler prices are expected to gradually strengthen during the year, with prices in the second half of the year being higher than in the same period in 2004. Somewhat higher pork and broiler prices are expected to provide some additional demand for seafood products.

Domestic Outlook

Catfish Sales and Prices Higher in 2005

Catfish sales by farmers to processors are expected to increase only slightly in 2005, staying between 630 million and 640 million pounds. Based on grower estimates of inventories at the beginning of January 2005, grower sales are expected to be slightly lower during first-half 2005 compared with a year earlier, with stronger growth in the second half of the year. Although the quantity of grower sales is expected to increase only a small amount, grower prices in the first quarter are expected to be higher than in first-quarter 2004.

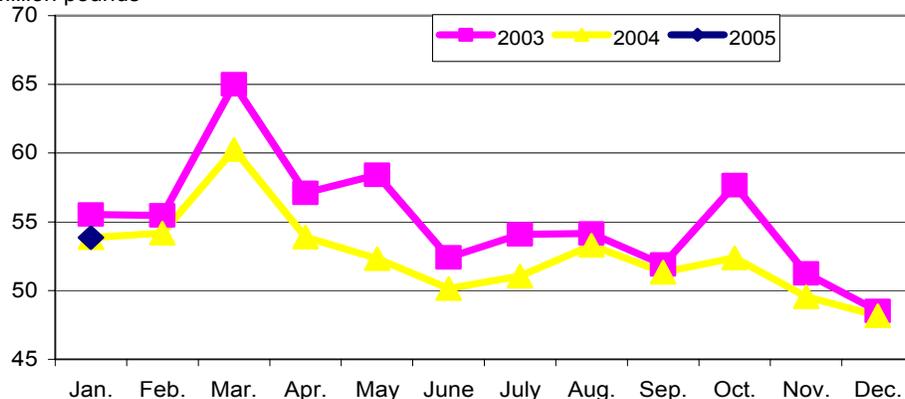
Grower sales of catfish in 2004 were down 5 percent, but prices increased 20 percent to almost 70 cents per pound. Prices started 2004 well above the depressed levels of a year earlier and continued to be strong through the remainder of the year. Grower sales to processors totaled 630.5 million pounds in 2004, down about 30 million pounds from 2003 and about even with the amount sold in 2002. Processor sales fell by about 13 million pounds to 307 million pounds, which is 4 percent lower than in 2003. Sales by processors were below those of the previous year throughout most of the year. Processor-held inventories of finished products at the end of January 2005 were 14.6 million pounds, about 1.9 million pounds higher than the same time a year earlier.

Although there were declines in both grower and processor sales, the fall in sales at the processor level was somewhat offset by an increase in average price. Farm prices began 2004 above those of 2003 for the same period. However, farm prices remained relatively strong throughout the year, never dropping below 68 cents per pound. The average for 2004 was 69.6 cents per pound, up 11.5 cents from the previous year. This price strength has carried over to January 2005, where farm prices were 72.5 cents per pound, 5.7 cents a pound higher than a year earlier and the second highest they have been since October 2000. Processor prices were also higher throughout 2004. The weighted average price for all processed catfish products in 2004 was \$2.23 per pound, up 18.3 cents per pound from 2003.

Figure 1

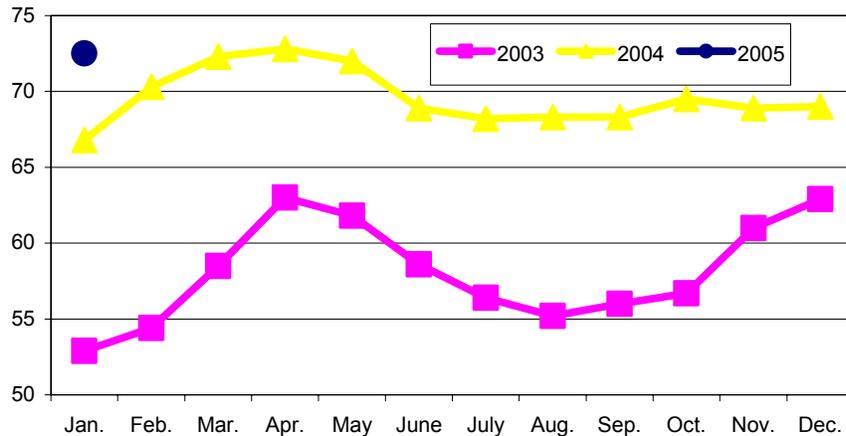
Catfish farm sales

Million pounds



Source: NASS, USDA.

Figure 2
Catfish farm prices
 Cents per pound



Source: NASS, USDA.

Grower sales in the first half of 2005 are expected to be influenced by grower inventory levels, the overall domestic economic performance, and prices for competing red meat and poultry products. Prices of red meat and poultry are expected to be mixed in 2005. Cattle and hog prices are expected to average higher than a year earlier in the first quarter, but then be lower for the rest of 2005. Poultry prices are expected to be slightly higher throughout the year. The higher broiler prices are expected to help catfish prices move upward. Farm prices for catfish are expected to remain slightly higher than their year-earlier level through most of 2005. If meat and poultry prices start to weaken towards the end of 2005, catfish prices are likely to move closer to their year-earlier levels. Average grower prices for 2005 are expected to be up from the previous year, but remain below the mid-70-cents-per-pound levels seen in 1999 and 2000.

In 2004 corn and soybean meal prices were considerably higher than in previous years. Corn prices rose about 20 cents per bushel and soybean meal increased by \$38 per ton. Prices for corn and soybean meal are expected to drop sharply in 2005. Corn prices are forecast at less than \$2 per bushel which would be the lowest it has been since 2001. Soybean meal prices are forecast in the low \$160s per ton, down over \$70 per ton from the previous year. With these lower prices, catfish feed prices are expected to decline, which should reduce pressure on grower margins.

Catfish Production Expected Slightly Higher in 2005

Grower inventories at the beginning of 2005 showed a lower number of fish in all of the different size categories. 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). Catfish growers indicated that at the start of 2005, the number of broodfish, fingerlings, stockers, and small, medium, and large food-size fish had all decreased relative to the previous year. This reduction is a response to the low farm prices in 2002 and 2003. While the number of fish held by growers was down in all the categories, most of the declines

were much smaller than in the previous year, reflecting the stronger farm prices in 2004.

This is the third consecutive year where the estimated grower inventory of all food-size fish has declined. At the start of 2005, the total number of food-size fish held by growers was estimated at 344 million, down 4 percent from the previous year. The reported grower holdings of small food-size fish were 240 million fish and are 1 percent less than at the start of 2004. The number of medium food-size fish at the start of 2005 was estimated at 94 million fish, down about 11 million from the start of 2004. Holdings of large food-size fish were also lower, but the large food-size category accounts for only a small percentage of food-size fish in inventory. The lower inventory numbers of all food-size fish was chiefly due to cutbacks in the four major producing States. The number of small, medium, and large food-size fish have all fallen for two consecutive years. Grower holdings of the small food-size fish and medium food-size fish will make up the bulk of the fish sold by growers during the first 3 to 4 months of 2005. This means that catfish processors will likely have a smaller number of fish available for processing during this time period, which is expected to put some upward pressure on prices. For small food-size fish, most of the decrease in grower inventory are from drops in the number of fish held by growers in Alabama and Arkansas. Over the last 2 years the estimated inventory of small food-size fish in Alabama has declined by 10 million fish or 19 percent. Inventory numbers for small food-size fish had increased in Arkansas in 2004, but in 2005 inventory holdings were down 18 percent. Inventory estimates rose for Louisiana and Mississippi at the beginning of 2005. The reduction in inventory of small food-size fish held by growers is expected to result in continued price strength on a year-over-year basis during the second quarter and into the third quarter.

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 during the first half of the year. With a decrease in the overall inventory of food-size fish, higher expected prices for poultry, and expected higher prices for a number of imported seafood products, farm prices for catfish are expected to slowly move higher, although there is likely to be some fall off in prices after the first quarter.

The January 1, 2005, inventory estimate for stockers showed a 23-percent decrease following a 10-percent increase the previous year. At 655 million fish, the estimate for the beginning of 2005 is down 200 million from the previous year and 120 million from the estimate at the start of 2003. The number of fingerlings in inventory at the start of 2005 was 704 million, about 23 million less fish than at the start of 2004. 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 decreases in both the stocker and fingerling inventories, the supply of catfish of market size for processing is expected to remain relatively tight throughout 2005. With farm prices in January 2005 almost 6 cents per pound higher than a year earlier, growers will likely push as many fish to market as soon as possible. This may reduce price increases during the first and into the second quarter, but later in the year prices are expected to be pressured as a smaller number of fish are available for processing.

Farm Prices Higher in 2005

Lower inventory holdings by farmers, lower stocks of fish held by processors, and a reduction in imported catfish over the first half of 2004, all combined to place upward pressure on prices. Over the first half of 2004, farm prices averaged 70.5 cents per pound, 21 percent higher than the previous year. Prices then remained strong through the second half of 2004, although the price difference between 2003 and 2004 narrowed somewhat in the fourth quarter. Expectations for 2005 are for continued strong prices during most of the year due to tighter supplies of fish. However, the high stocks of processed catfish products held by processors at the start of the year is expected to place downward pressure on processor prices until inventories can be worked down to a lower level.

During 2004, farm sales to processors totaled 630.4 million pounds, a decrease of 5 percent from 2003. With this level of sales and an average price of 69.6 cents per pound, the implied gross sales by catfish farmers was \$439 million, up \$54 million (14 percent) from the previous year. Gross revenue had fallen in both 2002 and 2003. Including sales of other products (broodfish, stockers, and fingerlings) and sales to outlets besides processors, catfish growers reported total sales of \$480 million in 2004, up 13 percent from 2003's \$425 million. A combination of a small increase in the volume of farm sales and a small increase in farm prices are expected to increase gross revenues from farm sales of catfish to processing plants in 2005.

Pond Acreage Down

The NASS *Catfish Production* report indicated that during the first half of 2005 growers would have approximately 170,000 acres of ponds in catfish production. This is down about 5,000 acres from the previous year and is the third consecutive year that acreage has decreased. Acreage has fallen with some smaller growers exiting the business in response to low farm prices in 2002 and 2003. Estimated pond acreage for the first half of 2005 is lower for food-size fish, fingerlings, and broodfish, but lower acreage for food-size fish accounts for most of the reduction. Almost all the decrease in food-size fish pond acreage came in Arkansas and Louisiana, as acreage was only down slightly in Alabama and acreage actually increased a small amount in Mississippi. In addition, growers indicated that the amount of pond acreage they expect to rebuild and new pond acreage to be constructed were both higher than in the previous year. The slightly higher pace of renovation and new construction is likely the result of stronger prices in 2004 and the forecasts for lower grain prices in 2005.

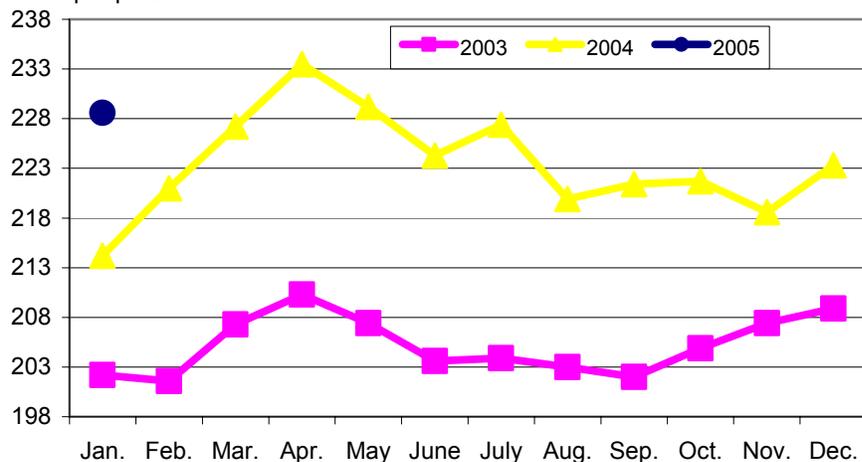
Processor Revenues Up 5 Percent

With a 4-percent decrease in sales volume and a 9-percent increase in the average price, gross processor revenues from catfish sales in 2004 totaled \$686 million, up about 5 percent from 2003. During 2004, catfish processors sold 306.8 million pounds of product, down 4 percent from the previous year. For 2004, the weighted average price for processed catfish products was \$2.24 per pound, up 18 cents per pound or 9 percent from 2003. While up from a year earlier, the weighted average price of catfish products in 2004 was about even with the average from 2001 and

Figure 3

Catfish processor prices

Cents per pound



Source: NASS, USDA.

much lower than in 1999 and 2000, when average prices were \$2.34 and \$2.38 per pound. The increase in the average price for catfish products was due to increases in the prices for both fresh and frozen products. With the expectation of a small increase in sales and relatively strong processor prices, total gross processor revenues are expected to reach close to \$700 million in 2005.

Processor sales levels were generally lower on a year-over-year basis for almost all of 2004. Frozen catfish fillet sales are the most important product for the catfish processing industry. Overall sales of fresh fish products totaled 117 million pounds in 2004, down 7 percent from the previous year, but frozen whole catfish sales were down only 2 percent in 2004. Frozen fillet sales declined 2 percent in 2004 and sales of these products have declined in 4 of the last 5 years. Over the last several years, processors have claimed that frozen fillet sales have been hurt by imports. The majority of the decrease in frozen product sales was due to lower fillet sales, but sales of whole frozen fish also were lower. However, sales of other frozen catfish products were up 3 percent and have risen for the last 8 years.

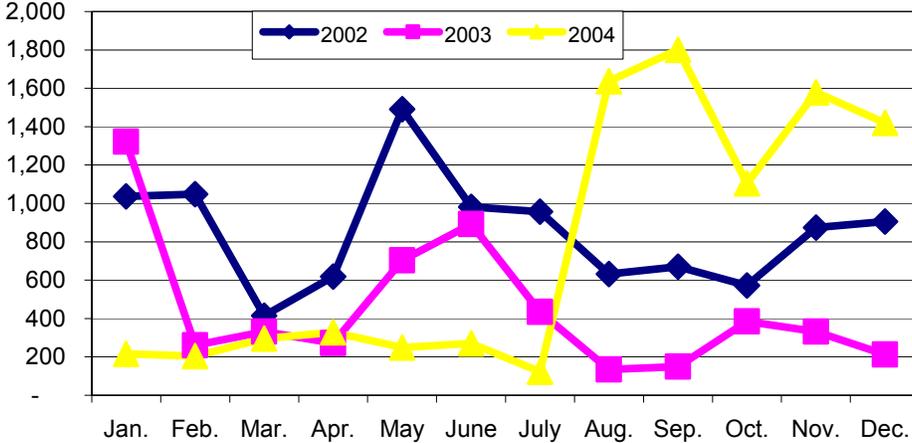
While the overall sales volume for catfish products fell in 2004, prices for most all catfish products increased. The weighted-average price for fresh catfish products rose 12 percent to \$2.23 per pound and is the highest since 2000. Prices for fresh whole fish were \$1.56 per pound, up 15 percent. Prices were also higher for frozen catfish products. Frozen whole fish averaged \$1.95 per pound, up 6 percent from the previous year. Prices for frozen filleted catfish averaged \$2.62 per pound, up 9 percent. Prices for frozen other catfish products reached \$1.46 per pound in 2004, an increase of 2 percent. Prices for frozen other catfish products had fallen during the previous seven consecutive years.

The overall outlook for catfish producers in 2005 is positive, and there are a number of factors that should be positive for catfish prices and returns. With lower inventories at the start of the year, farm supplies of catfish are expected to be

Figure 4

Catfish imports

Thousand lb



Source: NASS, USDA.

relatively tight through most of the year. On the input side, feed costs are expected to be considerably lower than in 2004 and are expected to lower production costs. Also, the domestic economic growth is forecast to be relatively strong, which should in turn boost sales at restaurants. Partly offsetting these positive factors will be higher prices for energy and maybe continued strong imports. Gas and diesel prices have already risen during 2005, and prices for natural gas and electricity will also increase. Fuel and electrical prices impact growers through higher costs for general machinery operations and running aeration and pumping equipment. One unknown factor is what will happen to imports of catfish products. Over the first half of 2004 import quantities were low, but during the second half of the year they jumped up considerably. Continued strong imports would put downward pressure on prices.

Trout Production Higher in 2004

The NASS *Trout Production* report had sales of domestic trout products, including eggs, in 2004 estimated at \$68.7 million, up 7 percent from the revised estimate of \$64 million the previous year. This is the first year that overall trout sales have increased after falling the last four consecutive years. The NASS survey covered 365 commercial firms that sold trout products. In addition to the commercial trout farms surveyed, the survey also got data from 271 operations that distributed trout in 2004. The operations distributing trout are doing so for restoration, conservation, or recreational fishing, and many are State or Federal hatcheries. The estimated value of the fish distributed from these operations was \$64.8 million in 2004 and is separate from the figures given for the value of trout sold from commercial operations.

Sales of trout increased in three of the four segments of the commercial trout industry. Sales of food-size trout totaled \$57.1 million in 2004, up 8 percent from the previous year. The increase in sales was the result of a greater amount of food-size trout being sold, as the average price remained the same at \$1.04 per pound. In terms of the trout farmers' survey, food-size fish are those 12 inches or more in

length. Trout prices are influenced by other farm-raised fish such as catfish, and they are also impacted by overall tilapia and salmon supplies. Most of the increase in 2004 came from higher production in Idaho, the largest producing State. Trout production in the other major producing States (California, North Carolina, Pennsylvania, and Washington) was all lower in 2004.

Sales of stockers (fish 6 to 12 inches) totaled 2.2 million pounds with a value of \$5.8 million in 2004. This is a slight decrease in the total weight of fish sold, but average prices were up 13 cents per pound to \$2.63. Stockers are sold to both other trout farmers (for further growout) or private groups, or State governments for recreational purposes. Many of the trout distributed by State and Federal hatcheries are stocker fish being placed in public waters.

Sales of trout fingerlings, fish less than 6 inches, are normally in units of a thousand fish. In 2004 the total number of fingerlings fell to 5.6 million fish, down 25 percent from 2003. Not only have the number of fish sold decreased, but the total live weight of fingerlings sold also fell as the average weight of a thousand fish decreased by 18 percent. Overall sales of fingerlings by commercial trout producers totaled less than \$1 million, down from \$1.2 million the previous year. Sales of trout eggs rose by almost \$650,000 to \$4.8 million in 2004, an increase of 16 percent from a year earlier. The sales increase was due to both an increase in the number of eggs sold (up 10 percent) and higher prices (up 6 percent). Almost all the egg production is concentrated in Washington State, with only a very small amount being produced in the rest of the United States.

For a number of trout producers water availability will continue to be a major problem. This is especially true of producers in Western areas that have now seen drought conditions for several years. Over the last several years lower prices for imported farm-raised fish and domestic catfish products have placed downward pressure on trout prices. However in 2005, trout producers are expected to benefit from stronger catfish prices. Salmon prices are also expected to increase due to a weaker dollar relative to the euro. The trout industry is also expected to benefit from a relatively stronger domestic economy and higher prices for a number of competing meat products, especially during the first half of 2005.

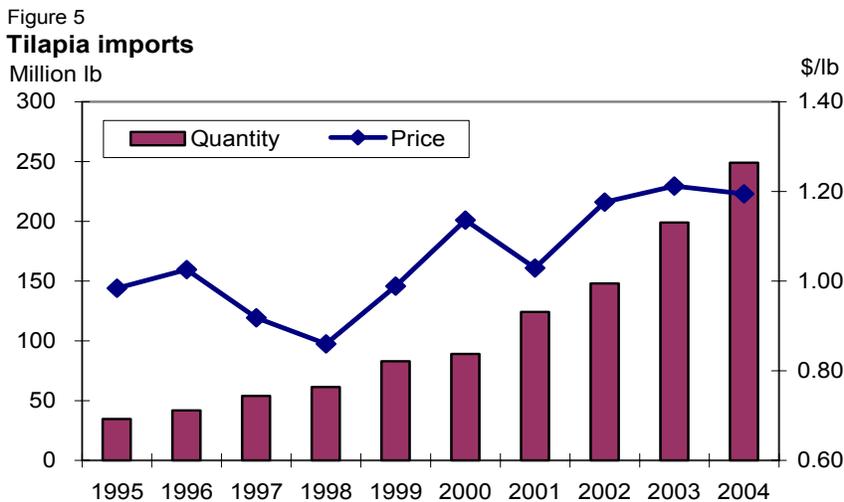
International Outlook

Tilapia Imports Continue To Surge

U.S. tilapia imports surged to 249 million pounds in 2004, up 25 percent from 2003 and 68 percent higher than in 2002. The value of tilapia imports rose almost as fast, climbing to \$297 million in 2004, 23 percent higher than the previous year and 71 percent higher than in 2002. Tilapia imports have increased as the demand for a relatively low-priced white-fleshed fish to include on menus at food service establishments and restaurants has expanded and people have become more familiar with the species.

Once again the volume of imported tilapia products increased in all three major product segments. Over the last 2 years imports of tilapia have grown by 100 million pounds with about half of that increase coming from higher imports of frozen fillets. The remaining 50 million pounds of additional imports were divided between whole frozen products (35 million pounds) and fresh fillets (15 million pounds). In 2004, imports of filleted tilapia products accounted for about 50 percent of total tilapia imports. Since fillets are only a relatively small percentage of a fish's total weight, the amount of foreign tilapia production required to supply the U.S. market in 2004 was about 500 million pounds of live fish.

Since 1993, the first full year that tilapia imports were reported separately, the value of tilapia imports has grown from \$18 million to almost \$300 million in 2004. Most of the increase in value over this time span has been due to a higher quantity of imports, but in 2004 for the first time imports of fillets (fresh and frozen) accounted for about 50 percent of the imports. Just like the Atlantic salmon market, the fastest growing segment of tilapia imports has been frozen fillets. Over just the last 2 years, the quantity of frozen fillet imported rose by 183 percent. In 2004, filleted products accounted for almost 80 percent of all tilapia imports on a value basis.



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

Almost all tilapia imports come from aquaculture operations, with different countries being major suppliers in the different segments of the tilapia market. With the continuing growth in demand for tilapia in the United States, imports from most countries have grown over the last several years. However, the majority of the growth has come from a small number of countries that are large suppliers of a number of aquaculture products. China now supplies over half of all tilapia products imported into the United States. While it has always been a supplier of frozen whole product, over the last several years it has become by far the largest supplier of frozen tilapia fillets, accounting for 77 percent of the imports in 2004. Ecuador has been a large shrimp producer for years, but has built up its capacity to supply tilapia products as a mean to diversify its aquaculture production. It concentrates its sales to the United States in the fresh fillet segment of the market where it has a transportation advantage over China. Exports from these two producers are expected to expand in the future as the market for tilapia products grows. While shipments from China account for a large percentage of frozen whole tilapia imports, most of its future expansion is expected to come in the frozen fillet segment of the tilapia market.

After falling for the last 2 years, imports of tilapia from Taiwan rose to 61 million pounds in 2004, up 23 percent from the previous year. Shipments from Taiwan were higher in the whole frozen segment and the frozen fillet segment of the market. For a number of years Taiwan had been the largest supplier of whole frozen tilapia. However, in 2004, while Taiwan was still the second largest supplier to the United States of tilapia products, its shipments were less than half as large as those from China. While Taiwan is not expected to regain its former position as the largest supplier to the United States, it has been lowering its frozen fillet prices to stay competitive with China. Over the last 2 years average prices for imported frozen fillets from Taiwan have fallen from \$1.82 a pound in 2002 to \$1.49 a pound in 2004.

The volume of imported fresh tilapia fillets rose to 47.2 million pounds in 2004, up 19 percent from 2003. The value of this segment has also been expanding, with shipments in 2004 valued at \$121 million, up almost \$20 million from the previous year. Average prices for fresh fillets have been decreasing gradually, but considering the expansion in the amount of product imported, prices have stayed relatively strong. Ecuador accounted for 48 percent of the imports in this segment of the tilapia market in 2004. Imports from Honduras and Costa Rica accounted for 38 percent of fresh tilapia imports. With shrimp prices continuing to decline, aquaculture producers in these countries will have an incentive to switch to tilapia production, which is likely to boost production and lower prices.

The frozen fillet segment of tilapia imports has been the fastest growing one. In 2004, imports of frozen tilapia fillets totaled 76.5 million pounds, up about 25 million pounds (49 percent) from 2003. These imports were valued at \$114 million, 36 percent higher than the previous year. As with a number of farm-raised seafood products, the price for frozen fillets has been gradually falling, even though imports have been rising very rapidly. The frozen fillet segment is dominated by Asian countries, with imports from Thailand, Indonesia, China, and Taiwan accounting for almost all of the shipments. Most of the growth in the last several years has come from China. Over the last 2 years, shipments from China have risen from 13 million pounds to over 59 million pounds. Chinese frozen tilapia fillets averaged

\$1.37 per pound, down 10 cents per pound from the previous year and 20 cents per pound from 2002. In 2005, shipments from Asian countries are expected to grow as producers have an incentive to switch acreage away from shrimp production. While China is the dominant supplier, exports from Thailand and Indonesia have increased, and there must be some quality or species difference in their products as imports from these two countries cost considerable more per pound than imports from either Taiwan or China.

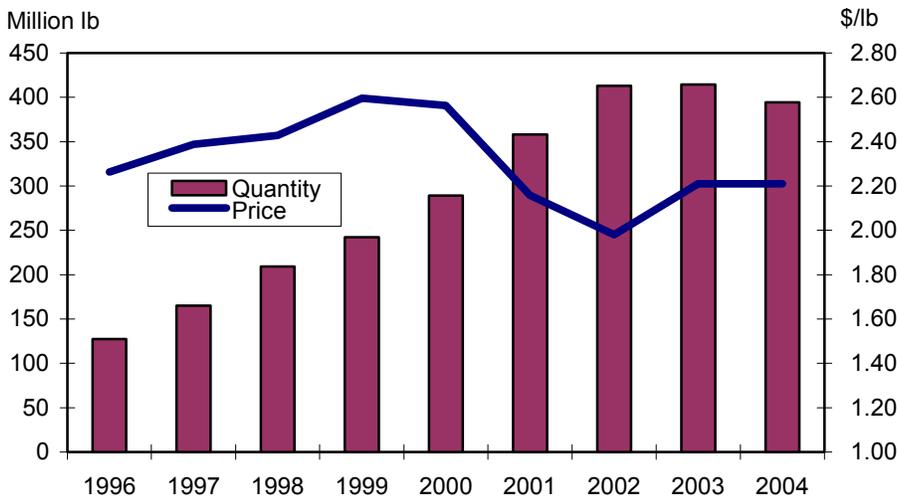
With the U.S. economy expected to be stronger in 2005, higher demand for tilapia imports in the food service and restaurant markets is expected to bring about an additional increase in imports, but the increase is expected to be less than in past years. Total tilapia imports are expected to reach between 275 million and 290 million pounds on a product-weight basis, or about 550 million pounds on a live-weight basis. The value of imports is expected to reach between \$320 and \$340 million. The average import price is expected to decrease slightly in 2005. Prices for the individual segments of the tilapia market are not expected to increase due to strong competition among producers. In the fresh and frozen fillet segments, higher production is expected to put downward pressure on prices as countries try to capture a larger share of the market.

Atlantic Salmon Imports Fall in 2004

U.S. Atlantic salmon imports in 2004 totaled 394 million pounds with a value of \$871 million. This is a 5-percent decrease in quantity and value from 2003. After increasing 253 percent from 1996 to 2003 (fig. 6), shipments were lower due primarily to declines in imports from Norway and the United Kingdom. After rising by 23-cents-a-pound in 2003, the average import price of all Atlantic salmon products remained at \$2.21 per pound in 2004.

Figure 6

Imported Atlantic salmon



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

The decrease in the amount of salmon imported showed up in all three segments of the Atlantic salmon market. Over the last several years prices for most farmed salmon products have fallen, lowering any incentive for farmers to expand production. Import quantities were also held down by the dollar falling in value relative to the euro. Most of the decline in shipments came from producing countries that could divert sales to a stronger European market. However, U.S. salmon imports were helped by high prices for most livestock products during the first half of 2004. With the dollar continuing to be lower relative to the euro, salmon imports in 2005 are expected to increase only modestly in quantity. Salmon prices are expected to stay steady or increase slightly as importers have to increase prices to bid product away from the European market.

Domestic production accounts for only a small percentage of the total salmon supply in the United States. Most domestic salmon in the United States comes from wild harvest salmon supplied by Alaska or Canada or from imports of farm-raised salmon. The only two States with any significant production of farmed salmon are Maine and Washington.

In 2004, imports of fresh whole Atlantic salmon fell 8 percent to 121.7 million pounds, the second consecutive year these imports have fallen. Imports of frozen whole Atlantic salmon also fell in 2004, but imports of frozen whole products are only a small portion of total Atlantic salmon imports. In 2003, declines in imports of fresh whole salmon were offset by increases in the amounts of fresh and frozen fillets being imported. However, after increasing rapidly in the previous 2 years, imports of filleted products declined in 2004 by 3 percent to 264.6 million pounds. While this is down from the previous year it is still the second largest yearly imports of fresh and frozen fillets. With the declines in imports of fresh and frozen whole salmon, filleted imports are now even a larger proportion of total Atlantic salmon imports. In 2004, imports of filleted products accounted for 67 percent of all imported Atlantic salmon products on a quantity basis and 70 percent on a value basis. The average import price for filleted products in 2004 rose to \$2.30 per pound. Over the last 2 years, the average import price for fresh and frozen fillets has risen by 33 cents per pound. The increase in the average price for filleted Atlantic salmon product was helped in the first half of 2004 by strong prices for competing meat products.

Canada and Chile are the dominant suppliers of Atlantic salmon to the U.S. market, but Chile is continuing to gain market share. In 2004, imports from Chile accounted for 60 percent of all Atlantic salmon shipments to the United States. While total shipments of fresh and frozen fillets declined in 2004, exports from Chile rose 1 percent to 230 million pounds. The average import price for fresh and frozen fillets from Chile averaged \$2.17 per pound, an increase of 40 cents per pound over the last 2 years. So while the total value of imported fresh or frozen Atlantic salmon fillets fell 2 percent in 2004, the value of Chilean product rose 3 percent to \$498 million.

With its advantage in proximity to the U.S. market, Canada dominates shipments of fresh whole fish, its exports in this segment of the market rose 6 percent in 2004, to 94.6 million pounds or 78 percent of the total. However, the average price for Canadian products fell 21 cents per pound, so the total value of fresh whole salmon imports from Canada declined 4 percent from 2003, and was 25 percent lower than

in 2002. With Canadian imports only falling slightly and imports from Chile rising, the decrease in overall Atlantic salmon imports was due primarily to lower shipments from Norway, the Faroe Islands, and the United Kingdom. With a weaker dollar relative to the euro, producers in these countries had more of an incentive to market their products in Europe rather than ship them to the United States. For each of the countries the average price of their shipments to the United States rose strongly in 2004, with average prices for products from Norway up 34 cents per pound and average prices from the United Kingdom up 26 cents per pound.

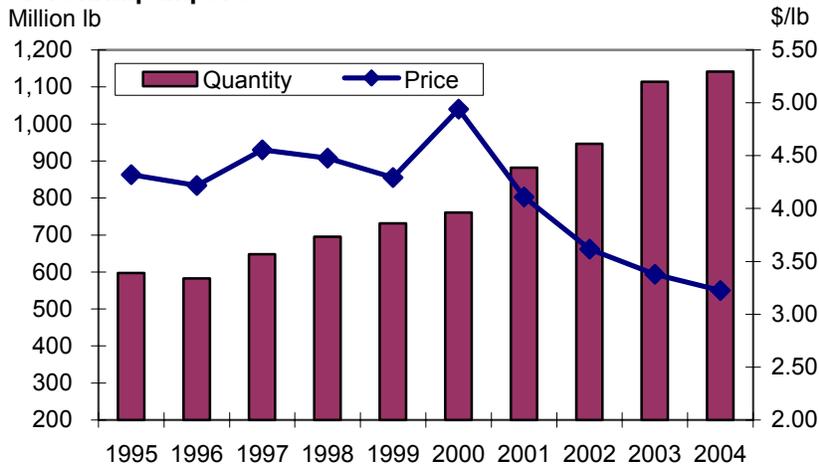
Even with U.S. economic growth in 2005 forecast to be relatively strong, imports of Atlantic salmon are not expected to expand greatly. Shipments in 2005 are expected to be near the 400-million-pound level and value is expected to remain close to where it was in 2004. Higher demand for salmon products due to health and dietary factors is expected to be offset by the continued weakness of the dollar relative to the euro, which makes imports into the U.S. market more expensive. Also, lower prices for a number of meat products are expected, especially in the second half of 2005.

Shrimp Imports: Value and Volume Higher

The volume of imported shrimp continues to set records. In 2004, total shrimp imports were 1.1 billion pounds, up 2 percent from 2003 and 21 percent higher than in 2002. However, with an additional decrease in the average price, the value of imported shrimp declined to \$3.7 billion in 2004. This is down 2 percent from the record \$3.8 billion set in 2003. The average price for imported shrimp products has fallen for four consecutive years, going from \$4.94 per pound in 2000 to \$3.23 per pound in 2004. With an import value of \$3.7 billion, the United States spends over \$12 per person annually on shrimp imports at the import level. At the retail level, the average per capita amount spent on imported shrimp is at least twice that amount.

Figure 7

U.S. shrimp imports



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

In 2004, the increase in shrimp imports was due to larger shipments of processed shrimp products, which rose 15 percent. Increased shipments in this segment of the shrimp market offset slight declines in imports of frozen and fresh shrimp. The increase in shipments in the prepared segment of the shrimp market offset a decline in price so that the value of imports in this segment rose 7 percent to \$821 million. Over the last 2 years the average price of imports in the prepared shrimp market segment have declined 52 cents per pound to \$3.08 in 2004. Prices also declined in the other two segments of the shrimp import market.

Of the eight largest countries exporting shrimp to the United States in 2004, three showed strong increases in volume which helped to partially offset declines in shipments from other countries. Although it is hard to measure the impact of the tariffs that have been placed on frozen shrimp imports from a number of countries, several of the countries that increased their shipments to the United States in 2004 were countries where tariffs had not been placed on their exports.

Although total shrimp imports to the United States increased slightly in 2004, imports from Mexico, Bangladesh, and Indonesia all rose substantially. Imports from Mexico are almost exclusively in the frozen segment of the shrimp market and tend to be heavily weighted towards larger shrimp. As a result, imports from Mexico in 2004 averaged \$5.12 per pound, by far the highest average price for any of the major shrimp suppliers, but down 11 cents per pound from the previous year. While Mexico does have a shrimp farming industry, a large percentage of its production comes from wild harvest. Bangladesh is somewhat like Mexico in that almost all its shipments to the United States are in the frozen shrimp segment, and imports from Bangladesh are weighted towards larger shrimp. In the case of Bangladesh much of their imports come from shipments of fresh water prawns, most of which are farm raised. In 2004, shipments from Bangladesh were 38.3 million pounds, which was up over 100 percent from 2003. Even with a 2-percent decrease in the average import price, the total value of shipments from Bangladesh rose from \$82.8 million in 2003 to \$173 million in 2004. Shrimp imports from Indonesia are also mostly in the frozen segment, but unlike Mexico and Bangladesh, imports from Indonesia are not large shrimp so that the average price is considerably lower. Average prices for shrimp imports from Mexico were over \$5 per pound, the average price for imports from Bangladesh were \$4.50 per pound, but shrimp exports from Indonesia were only \$3.28 per pound, and this was down 24 cents per pound from 2003. A fairly large percentage of Indonesia's production is farm raised.

In 2003, Thailand, China, and Vietnam were the three largest shrimp suppliers to the United States, accounting for 54 percent of total shipments on a quantity basis. In 2004, shipments from all three of these countries declined as a weaker dollar made other markets more attractive. In addition, the average price for shipments from Thailand and China also declined, further lowering the value of their shipments to the United States. Exports from Thailand declined to 291 million pounds in 2004, this is only a slight decline from the previous year, but the average price fell by 41 cents per pound in 2004, and this follows a 45-cent-per-pound decline in 2003 versus 2002. The decline in shipments in 2004 was due to falling exports of frozen shrimp, as Thailand's exports of prepared shrimp rose.

Imports from China had been the fastest growing of the major suppliers. After growing by over 70 million pounds in 2003, China's shipments fell in 2004 to 145

million pounds, a decrease of 34 million pounds. The average import price of shrimp from China has also dropped significantly. In 2004, the average price was \$2.32 per pound, down 15 cents per pound from 2003 and 41 cents per pound from 2002. Producers in Vietnam also saw their shipments to the United States fall in 2004. The quantity of shipments declined by 35 percent and was only offset slightly by a 2-cent-per-pound increase in the average price to \$4.72 per pound.

In the shrimp market there are a number of factors at work. Since 2000, the average price of shrimp being imported into the United States has fallen by \$1.71 per pound or 35 percent. While improvements in shrimp farming technology are expected to gradually lower production costs, with strong price declines such as these, there may be a point at which growers will either cut back production or at least stop expanding. There was a similar strong drop in the price of imported Atlantic salmon products and it quickly reduced the incentive for producers to expand production. As a result, over the last 2 years import quantities and prices for Atlantic salmon have begun to stabilize. The shrimp industry may be at or rapidly approaching a similar turning point. Complicating the situation is the large number of nations producing shrimp products through wild harvest or farming. In many of these countries the government has backed shrimp production as a means of boosting foreign exchange earnings and it may be hard politically to cut production. In addition, a weaker dollar and tariffs on imports from a number of the major suppliers will make imports generally more expensive.

In 2005 the quantity and value of shrimp imports are expected to change very little. While a number of factors may work towards higher prices, they are expected to be partially offset by a relatively strong domestic economy. This is expected to boost food service sales, which serves as the prime outlet for shrimp consumption.

Clam and Oyster Exports Higher Again in 2004, Mussel Exports Down

The quantity of clam and oyster exports rose strongly in 2004, the second consecutive year of strong increases. Oyster exports led the way with an increase of 29 percent to 7.5 million pounds. Prices for oyster exports were slightly higher than in the previous year, which led to a 33-percent increase in the value of oyster exports to \$17.2 million. Canada is the largest market for U.S. oyster products and in 2004 was the destination for 66 percent of U.S. oyster exports on a value basis. U.S. clam exports also increased strongly to 5.8 million pounds, up 44 percent from the previous year. The average price of clam exports fell somewhat in 2004, but the value of clam exports rose 35 percent to \$10.9 million. Canada is also the largest market for U.S. clam exports, accounting for 81 percent of total exports on a value basis.

U.S. mussel exports dropped to less than 1 million pounds, 32 percent lower than the previous year. The decrease in exports is not as much a result of lower foreign demand as it is of rapidly increasing domestic demand and the fact that domestic production falls far short of meeting domestic demand. Over the last several years domestic mussel production (2004 production is not yet available) has been increasing, and prices have also been rising due to strong demand. Maine is the largest domestic mussel producer, and output from Maine has increased by over 50 percent between 2000 and 2003, however the value of Maine's mussel production has risen by 326 percent during the same time period. With total production of less

than 5 million pounds, domestic mussel production is only about one-tenth of the amount imported.

The outlook for 2005 is for continued growth in clam and oyster exports as the dollar is forecast to be slightly weaker against a number of foreign currencies, making U.S. exports relatively less expensive. Possibly offsetting this advantage due to exchange rates will be growth in the domestic economy that may keep more domestic production in the United States. With strong domestic demand, U.S. mussel exports are expected to remain small in 2005.

Mussel and Oyster Exports Expand, Clam Imports Fall

The quantity of mussel and oyster imports both increased in 2004, up 18 and 4 percent. The quantity of clam imports has risen for the last 4 years. The largest category of oyster imports is prepared oyster products, which accounted for 67 percent of all oyster imports on a quantity basis in 2004. The quantity of mussel imports had fallen in 2003, but the longer term pattern has been for strong growth, and imports in 2004 reached a record 50.9 million pounds. Ten years earlier, imports of mussels had been averaging around 25 million pounds annually. This increase in import quantity has come without any decline in average value. Over the last 4 years the average import price for mussels has been between \$1.08 and \$1.10 per pound. The growth in mussel imports has come from products from Canada and New Zealand. Canada supplies most of the live imported mussels, and New Zealand is the chief supplier of prepared and frozen mussel products.

Clam imports have gone up and down over the past several years with no clear pattern of growth or decline. In 2004, clam imports totaled 7.9 million pounds, down from the previous year but higher than in 2002. Canada is the largest supplier of clams to the United States, accounting for 24 percent of the total in 2004.

Oyster and clam imports in 2005 are expected to remain relatively stable, with any increase in demand being offset by a weaker dollar, making the United States a less attractive market. Mussel imports in 2005 are expected to increase due to a continuation of demand growth, especially through restaurants.

Ornamental Fish Imports and Exports Increase

U.S. exports of ornamental fish increased 2 percent to \$8.7 million in 2004. This is the third consecutive increase in exports after several years of decline. During 2004, domestic producers were helped by the fact that a weaker dollar made U.S. exports more price-competitive. Canada remains the largest market for U.S. ornament fish sales. In 2004, sales to Canada were up 5 percent to just over \$4 million. However sales to Mexico fell by almost \$1.3 million after increasing strongly in 2003. Offsetting the decline in shipments to Mexico were higher exports to the European Union-25 (EU) and Asia. With a stronger euro relative to the dollar, ornamental fish exports were up to most EU-25 countries. Most of the shipments to the EU-25 were to the United Kingdom, the Netherlands, France, and Germany. Shipments to the largest Asian markets (Hong Kong, Taiwan, and Japan) were all up strongly in 2004.

Normally a weaker dollar would result in an increase in exports and would depress imports, however, the value of imported fish rose 6 percent to \$43.8 million. This is the second year of relatively strong import increases. Since imports of ornamental fish are lumped together in one category and are only reported by value, it is unknown if the quantity of ornamental fish imported increased or if the higher total import figure is just the result of higher prices. Also it is impossible to know if there have been large changes in the types of ornamental fish being imported. Most of the increases came from Asia, with imports from Thailand, Singapore, Indonesia, China, and Taiwan increasing the most. In 2005, the continued weakness of the dollar relative to the euro is expected to boost sales of ornamental fish to EU-25 countries, and exports to Mexico are expected to improve. Normally a weaker dollar would be expected to lower imports, but the value of imports may not decline if the major Asian suppliers are the only sources for specific types of ornamental fish.

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

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

State	Broodfish			Fingerlings/fry			Stockers		
	2003	2004	2005	2003	2004	2005	2003	2004	2005
Alabama	380	80	100	50,800	52,800	101,000	142,100	258,100	155,400
Arkansas	120	125	110	131,000	121,000	131,000	120,200	132,600	95,400
California	14	11	10	6,100	4,700	3,950	1/	1,290	1,940
Florida	3	15	16	3,300	1,120	720	1/	0	1/
Georgia	10	6	15	1,550	5,150	7,320	340	1/	1/
Illinois	1/	1/	2/	1/	1/	2/	1/	1/	2/
Kentucky	2	6	5	600	550	970	1/	1/	1/
Louisiana	26	22	1/	30,800	18,900	6,870	32,410	21,340	10,040
Mississippi	700	750	680	753,000	508,000	439,000	464,000	428,000	382,000
Missouri 3/	15	1/	1/	4,040	4,460	1,780	1/	1/	1/
North Carolina	13	40	30	7,540	6,800	7,800	6,960	4,700	2,400
Oklahoma 3/	0	0	0	0	0	0	0	0	0
South Carolina	1/	1/	2/	1/	1/	2/	1/	0	0
Tennessee 3/	0	0	0	0	0	0	0	0	0
Texas	14	9	38	800	1,280	3,750	365	1,440	1,170
Other 2/	6	34	30	633	2,311	0	8,851	8,052	6,730
Total	1,303	1,098	1,034	990,163	727,071	704,160	775,226	855,522	655,080

State	Small food-size			Medium food-size			Large food-size		
	2003	2004	2005	2003	2004	2005	2003	2004	2005
Alabama	53,500	46,100	43,300	26,100	23,300	20,300	2,700	2,240	2,400
Arkansas	44,800	49,300	40,600	27,500	22,600	19,300	2,530	1,540	2,030
California	1,420	1,840	1,820	1,450	700	670	175	165	150
Florida	810	630	330	660	470	335	115	130	80
Georgia	780	200	200	410	350	510	80	15	175
Illinois	1/	1/	1/	1/	1/	1/	1/	1/	1/
Kentucky	630	1,080	460	540	330	700	1/	45	1/
Louisiana	10,100	6,960	10,200	8,500	6,200	4,880	1,200	1,620	830
Mississippi	140,000	131,000	137,000	60,300	46,600	43,800	3,950	4,200	4,200
Missouri	660	720	900	410	420	425	1/	1/	1/
North Carolina	1,800	3,000	3,500	1,550	3,300	1,900	150	200	300
Oklahoma 3/	0	0	0	0	0	0	0	0	0
South Carolina	1/	1/	2/	1/	1/	2/	1/	1/	2/
Tennessee 3/	0	0	0	0	0	0	0	0	0
Texas	290	320	1,670	430	480	880	160	170	140
Other 2/	130	315	0	58	176	0	135	123	100
Total	254,920	241,465	239,980	127,908	104,926	93,700	11,195	10,448	10,405

1/ Data not published separately to avoid disclosing individual operations.

2/ Discontinued after 2004.

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

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

Item	2004							2004					2005
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
Supply	1,000 lb												
Grower sales 1/	53,849	54,173	60,272	53,896	52,324	50,155	51,055	53,295	51,329	52,396	49,536	48,170	53,856
Processor sales	27,140	28,526	28,845	25,033	24,764	24,896	24,623	26,538	24,674	25,863	23,156	22,721	26,204
Fresh	10,604	11,239	12,190	10,314	9,840	9,455	9,615	9,658	8,954	9,331	8,438	7,961	9,685
Whole	3,205	3,266	3,808	3,001	2,853	2,707	2,875	3,002	2,861	3,076	2,950	2,704	3,111
Fillets	5,964	6,455	6,815	5,887	5,688	5,500	5,559	5,483	4,865	4,992	4,336	4,162	5,274
Other	1,435	1,518	1,567	1,426	1,299	1,248	1,181	1,173	1,228	1,263	1,152	1,095	1,300
Frozen	16,536	17,287	16,655	14,719	14,924	15,441	15,008	16,880	15,720	16,532	14,718	14,760	16,519
Whole	1,185	1,349	1,302	1,008	991	1,024	1,100	1,164	935	1,128	1,010	979	1,116
Fillets	10,843	11,232	10,572	9,871	9,762	9,579	9,836	10,352	10,191	10,717	9,300	9,545	10,618
Other	4,508	4,706	4,781	3,840	4,171	4,838	4,072	5,364	4,594	4,687	4,408	4,236	4,785
Processor inventory 2/	12,705	10,788	10,958	12,061	11,992	11,391	11,879	11,657	12,661	12,769	14,221	15,172	14,642
Fresh	836	866	1,027	799	825	950	832	798	941	750	702	575	858
Whole	191	188	316	184	211	237	162	146	168	151	127	120	209
Fillets	507	550	552	487	512	579	540	530	624	490	473	357	512
Other	138	128	159	128	102	134	130	122	149	109	102	98	137
Frozen	11,869	9,922	9,931	11,262	11,167	10,441	11,047	10,859	11,720	12,019	13,519	14,597	13,784
Whole	1,401	1,438	1,415	1,363	1,327	1,133	1,060	806	704	577	553	685	724
Fillets	7,438	5,674	5,539	6,032	6,120	6,232	6,610	7,319	8,496	9,239	10,533	11,243	10,368
Other	3,030	2,810	2,977	3,867	3,720	3,076	3,377	2,734	2,520	2,203	2,433	2,669	2,692
Prices	Dollars per pound												
Farm price 3/	0.67	0.70	0.72	0.73	0.72	0.69	0.68	0.68	0.68	0.70	0.69	0.69	0.73
Processor prices	2.14	2.21	2.27	2.33	2.29	2.24	2.27	2.20	2.21	2.22	2.19	2.23	2.29
Fresh	2.13	2.18	2.23	2.27	2.28	2.28	2.25	2.25	2.22	2.23	2.18	2.22	2.28
Whole	1.49	1.53	1.57	1.60	1.60	1.57	1.57	1.58	1.56	1.59	1.51	1.57	1.63
Fillets	2.59	2.62	2.71	2.73	2.74	2.74	2.73	2.73	2.74	2.76	2.77	2.77	2.81
Other	1.63	1.70	1.71	1.78	1.78	1.78	1.62	1.76	1.69	1.72	1.70	1.71	1.67
Frozen	2.15	2.23	2.31	2.37	2.30	2.22	2.29	2.17	2.21	2.20	2.19	2.24	2.29
Whole	1.90	1.93	1.97	2.03	2.01	1.96	1.95	1.97	1.94	1.88	1.93	1.96	1.97
Fillets	2.47	2.57	2.67	2.70	2.68	2.65	2.65	2.63	2.61	2.60	2.60	2.62	2.66
Other	1.46	1.52	1.61	1.63	1.48	1.41	1.50	1.33	1.37	1.38	1.40	1.44	1.55

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
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	51,329	52,396	49,536	48,170	630,450
2005	53,856												
Average price paid by processors for farm-raised catfish													Cents per pound 1/
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	68.3	69.5	68.9	69.0	69.6
2005	72.5												
Catfish sold by processors													1,000 lb
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	24,674	25,863	23,156	22,721	306,779
2005	26,204												
Average price received by processors for all catfish													Cents per pound
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	221.2	221.5	219.1	223.0	223.5
2005	228.7												

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		Total value of sales	
	2003	2004	2003	2004
	-- 1,000 --		-- \$1,000 --	
California	2,400	2,200	4,560	4,312
Colorado	470	235	1,410	576
Connecticut	2/	2/	2/	2/
Georgia	125	260	363	512
Idaho	34,600	40,400	26,642	32,320
Maine	2/	2/	2/	2/
Massachusetts	31	33	153	158
Michigan	275	305	564	601
Missouri	2/	2/	2/	2/
New York	169	87	487	262
North Carolina	4,110	3,940	5,014	5,437
Oregon	210	200	418	486
Pennsylvania	1,460	1,150	3,796	3,335
Tennessee	55	54	139	134
Utah	190	165	469	421
Virginia	560	400	1,310	808
Washington	4,700	4,050	4,418	3,969
West Virginia	333	378	450	658
Wisconsin	441	387	1,147	1,072
Other	717	732	1,558	2,021
Total	50,846	54,976	52,898	57,082

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

State	Total pounds sold		Total value of sales	
	2003	2004	2003	2004
	-- 1,000 --		-- \$1,000 --	
California	230	250	577	680
Colorado	2/	2/	2/	2/
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	2/	65	2/	167
Missouri	2/	2/	2/	2/
New York	53	38	289	179
North Carolina	225	140	351	217
Oregon	30	110	74	310
Pennsylvania	211	216	802	821
Tennessee	2/	2/	2/	2/
Utah	2/	2/	2/	2/
Virginia	40	2/	108	2/
Washington	170	277	386	693
West Virginia	2/	2/	2/	2/
Wisconsin	71	123	191	332
Other	1,265	999	2,954	2,439
Total	2,295	2,218	5,732	5,838

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

State	Total pounds sold		Total value of sales	
	2003	2004	2003	2004
	-- 1,000 --		-- \$1,000 --	
California	3	5	48	138
Colorado	2/	2/	2/	2/
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	2/	3	2/	22
Missouri	2/	2/	2/	2/
New York	2	3	21	37
North Carolina	65	45	305	255
Oregon	1	1	14	11
Pennsylvania	8	5	80	67
Tennessee	2/	2/	2/	2/
Utah	2/	2/	2/	2/
Virginia	3	2/	30	2/
Washington	45	13	387	130
West Virginia	2/	2/	2/	2/
Wisconsin	2	4	31	61
Other	54	34	324	245
Total	183	113	1,240	966

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

Region 6/	Number of eggs		Total value of sales	
	2003	2004	2003	2004
	-- 1,000 --		-- \$1,000 --	
Northeast	605	940	10	26
South and Central	620	1,080	13	24
West	262,320	287,600	4,153	4,780
Total	263,545	289,620	4,176	4,830

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	2001	2002	2003	2004	2001	2002	2003	2004
Exports	\$1,000				1,000 lb			
Ornamental fish	6,934	8,159	8,413	8,664	0	0	0	0
Trout, live	271	227	326	1,240	0	0	0	0
Trout, fresh & frozen	1,577	1,632	5,047	2,091	1,077	1,163	2,592	1,118
Atlantic salmon, fresh	37,945	16,167	22,592	24,295	18,417	8,456	11,337	13,606
Pacific salmon, fresh 1/	22,166	45,961	45,299	48,761	20,651	29,672	38,902	33,863
Atlantic salmon, frozen	139	160	205	393	84	84	99	197
Pacific salmon, frozen 1/	236,604	180,724	193,846	230,511	167,933	132,646	150,766	172,476
Canned & pre. salmon 2/	167,825	137,902	147,250	176,582	109,109	95,955	94,338	117,570
Shrimp, frozen	54,553	52,753	52,489	40,454	13,905	13,890	16,466	12,711
Shrimp, fresh & pre. 3/	51,481	50,252	52,652	43,566	13,640	13,148	14,307	12,719
Oysters 4/	8,238	8,659	12,909	17,157	3,915	3,896	5,827	7,505
Mussels 5/	1,595	1,406	1,665	1,088	1,485	1,178	1,337	911
Clams 6/	6,593	6,585	8,022	10,856	3,939	3,861	4,003	5,761
Imports	\$1,000				1,000 lb			
Ornamental fish	40,910	39,686	41,308	43,762	0	0	0	0
Trout, live	99	167	172	575	0	0	0	0
Trout, fresh & frozen	11,507	14,514	14,969	14,153	7,382	9,887	9,023	8,573
Atlantic salmon, fresh	685,289	713,169	760,916	699,366	316,837	356,164	349,474	324,358
Pacific salmon, fresh 1/	30,462	36,008	43,315	47,521	17,472	23,210	22,462	22,387
Atlantic salmon, frozen	87,483	104,525	154,718	170,689	41,176	56,883	64,999	69,894
Pacific salmon, frozen 1/	14,940	19,934	33,612	55,609	10,515	18,317	26,658	40,767
Canned & pre. salmon 2/	36,199	45,632	67,581	70,501	11,298	16,378	25,177	24,418
Shrimp, frozen	2,957,944	2,633,278	2,975,346	2,843,898	714,706	730,002	878,124	871,638
Shrimp, fresh & pre. 3/	678,853	788,811	785,112	836,777	167,877	216,439	234,084	269,502
Oysters 4/	36,914	36,867	42,420	47,008	18,438	19,084	22,257	23,121
Mussels 5/	43,610	52,135	45,705	56,076	39,973	45,695	43,236	50,855
Clams 6/	8,296	7,019	7,875	7,020	8,007	7,457	8,752	7,875
Tilapia 7/	127,797	174,215	241,206	297,414	124,202	148,122	198,957	248,986

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 pounds

Country	Whole, frozen			Fillets, fresh			Fillets, frozen			Total		
	2002	2003	2004	2002	2003	2004	2002	2003	2004	2002	2003	2004
Belize	0	0	0	0	0	286,214	0	0	0	0	0	286,214
Honduras	0	0	0	6,335,086	6,285,566	8,910,281	0	0	0	6,335,086	6,285,566	8,910,281
Nicaragua	0	0	0	1,920	6,369	148,872	54,275	18,558	23,918	56,195	24,927	172,790
Costa Rica	0	3,519	29,943	7,068,003	8,809,851	9,017,740	5,022	5,401	5,642	7,073,025	8,818,770	9,053,324
Jamaica	0	0	0	36,021	0	18,982	42,383	39,950	9,242	78,404	39,950	28,223
Colombia	17,403	6,614	1,109	0	0	0	8,730	0	0	26,133	6,614	1,109
Ecuador	35,895	315,816	167,137	14,584,622	20,716,443	22,407,169	598,809	411,043	379,403	15,219,326	21,443,302	22,953,709
Thailand	550,182	267,449	317,350	59,251	14,497	0	724,191	2,071,790	1,618,015	1,333,624	2,353,737	1,935,365
Indonesia	5,589	11,960	5,999	0	0	0	5,671,230	7,898,462	9,370,438	5,676,819	7,910,422	9,376,437
China	43,244,408	63,410,886	69,042,713	1,860,788	1,888,531	4,207,420	13,285,133	34,965,897	58,734,746	58,390,330	100,265,314	131,984,878
Taiwan	45,546,289	43,350,370	54,970,711	543,458	620,527	198,665	6,086,629	5,444,623	5,877,494	52,176,376	49,415,520	61,046,871
Other	433,105	758,808	763,294	787,626	1,222,138	1,958,064	542,080	407,456	515,213	1,762,811	2,388,402	3,236,571
Total	89,832,871	108,125,420	125,298,256	31,276,775	39,563,921	47,153,407	27,018,484	51,263,182	76,534,111	148,128,130	198,952,524	248,985,774

Value of U.S. tilapia imports by country

Country	Whole, frozen			Fillets, fresh			Fillets, frozen			Total		
	2002	2003	2004	2002	2003	2004	2002	2003	2004	2002	2003	2004
Belize	0	0	0	0	0	483,410	0	0	0	0	0	483,410
Honduras	0	0	0	17,350,505	16,875,334	23,683,322	0	0	0	17,350,505	16,875,334	23,683,322
Nicaragua	0	0	0	4,800	17,333	382,822	99,826	29,062	46,900	104,626	46,395	429,722
Costa Rica	0	8,310	25,021	18,389,069	22,608,592	22,780,243	15,196	13,921	14,305	18,404,265	22,630,823	22,819,569
Jamaica	0	0	0	103,565	0	46,334	75,561	77,952	21,832	179,126	77,952	68,166
Colombia	17,068	5,940	2,553	0	0	0	7,405	0	0	24,473	5,940	2,553
Ecuador	38,677	277,286	169,010	40,240,895	55,937,569	64,054,144	1,246,006	877,003	938,126	41,525,578	57,091,858	65,161,280
Thailand	341,854	177,645	181,308	124,481	38,876	0	1,286,047	3,759,683	3,032,795	1,752,382	3,976,204	3,214,103
Indonesia	2,751	0	3,163	0	0	0	13,043,456	17,698,924	20,026,210	13,046,207	17,698,924	20,029,373
China	20,238,538	30,496,667	33,863,016	2,978,696	2,509,576	5,155,008	20,898,107	51,501,163	80,482,342	44,115,341	84,507,406	119,500,366
Taiwan	23,175,287	23,748,663	27,234,921	698,640	1,148,778	248,120	11,048,081	9,623,082	8,753,656	34,922,008	34,520,523	36,236,697
Other	217,110	449,569	459,941	1,803,238	2,818,694	4,378,665	770,306	470,263	946,094	2,790,654	3,738,526	5,784,700
Total	44,031,285	55,164,080	61,938,933	81,693,889	101,954,752	121,212,068	48,489,991	84,051,053	114,262,260	174,215,165	241,169,885	297,413,261

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

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

Country	Fresh			Frozen			Fillets 1/			Total		
	2002	2003	2004	2002	2003	2004	2002	2003	2004	2002	2003	2004
Canada	124,214,825	89,442,031	94,625,810	119,399	145,563	129,743	36,759,419	29,499,940	20,880,476	161,093,643	119,087,534	115,636,030
Chile	7,651,620	7,631,377	4,718,250	2,012,701	3,641,977	3,629,779	209,102,130	226,700,204	229,755,936	218,766,451	237,973,558	238,103,965
Iceland	668,084	2,120,276	1,918,319	302,989	45,443	0	147,064	392,544	769,875	1,118,138	2,558,264	2,688,194
Norway	1,691,283	1,823,698	469,342	3,963,152	4,683,644	3,206,483	10,377,901	12,586,747	8,293,873	16,032,336	19,094,089	11,969,697
Faroe Islands	1,664,096	4,861,430	1,746,250	85,415	41,378	199,673	86,076	1,984	6,486	1,835,587	4,904,792	1,952,409
United Kingdom	12,814,650	25,771,631	17,989,975	0	582	2,209	546,214	1,922,160	2,018,662	13,360,864	27,694,373	20,010,846
Other	452,589	1,149,267	249,001	161,747	217,356	748,598	225,919	1,695,952	2,893,476	840,255	3,062,575	3,891,075
Total	149,157,147	132,799,709	121,716,947	6,645,403	8,775,944	7,916,485	257,244,723	272,799,532	264,618,784	413,047,273	414,375,185	394,252,216

Value of U.S. Atlantic salmon imports by country

Country	Fresh			Frozen			Fillets 1/			Total		
	2002	2003	2004	2002	2003	2004	2002	2003	2004	2002	2003	2004
Canada	266,366,162	207,165,583	199,377,785	167,045	256,519	260,265	106,900,108	94,884,142	72,431,573	373,433,315	302,306,244	272,069,623
Chile	10,548,918	12,179,661	8,039,530	2,908,569	6,769,724	6,919,289	370,960,460	485,403,028	497,630,390	384,417,947	504,352,413	512,589,209
Iceland	743,141	2,789,904	2,747,751	1,666,164	293,570	0	496,893	1,118,949	1,930,549	2,906,198	4,202,423	4,678,300
Norway	3,249,628	3,198,871	961,318	6,400,876	8,588,135	6,460,794	25,687,017	34,502,299	25,587,981	35,337,521	46,289,305	33,010,093
Faroe Islands	1,936,445	6,231,249	2,672,912	65,672	72,037	361,591	115,769	6,471	9,689	2,117,886	6,309,757	3,044,192
United Kingdom	16,958,053	42,604,860	33,152,002	0	9,768	8,129	1,101,381	5,126,777	6,521,051	18,059,434	47,741,405	39,681,182
Other	857,124	1,854,483	727,692	233,288	423,015	1,638,594	391,419	2,070,501	3,616,068	1,481,831	4,347,999	5,982,354
Total	300,659,471	276,024,611	247,678,990	11,441,614	16,412,768	15,648,662	505,653,047	623,112,167	607,727,301	817,754,132	915,549,546	871,054,953

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

Country	Frozen			Fresh			Other			Total		
	2002	2003	2004	2002	2003	2004	2002	2003	2004	2002	2003	2004
Mexico	53,113	55,847	63,665	315	101	6	134	258	238	53,562	56,206	63,909
Ecuador	62,654	72,806	78,911	4	21	82	2,852	2,329	3,699	65,509	75,156	82,691
Brazil	39,121	48,054	20,343	20	1	0	0	0	0	39,141	48,055	20,343
India	89,888	90,774	81,786	783	670	462	6,871	8,833	8,150	97,542	100,276	90,397
Bangladesh	18,816	17,706	37,464	0	0	34	0	247	815	18,816	17,953	38,313
Thailand	128,300	165,281	156,846	206	302	539	124,971	128,351	133,932	253,477	293,935	291,317
Vietnam	72,746	99,614	55,958	97	175	289	25,688	26,689	25,540	98,530	126,478	81,788
Indonesia	34,562	44,132	92,950	60	61	145	3,819	3,606	10,447	38,441	47,798	103,542
Philippines	2,021	2,140	3,351	4	2	2	876	563	829	2,900	2,705	4,181
China	80,510	133,203	93,852	916	824	504	27,757	45,451	51,094	109,183	179,479	145,450
Others	148,167	150,358	186,512	1,115	618	612	19,934	14,927	32,082	169,216	165,904	219,207
Total	729,896	879,915	871,638	3,520	2,775	2,675	212,901	231,254	266,827	946,318	1,113,944	1,141,139

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

Country	Frozen			Fresh			Other			Total		
	2002	2003	2004	2002	2003	2004	2002	2003	2004	2002	2003	2004
Mexico	262,665	292,382	326,227	626	288	26	779	1,425	1,085	264,070	294,095	327,338
Ecuador	190,155	205,182	203,035	18	74	263	8,937	6,264	9,574	199,110	211,521	212,872
Brazil	87,763	96,770	40,724	40	2	0	0	0	0	87,803	96,772	40,724
India	343,454	382,869	335,078	8,120	6,931	4,505	11,984	19,313	19,980	363,558	409,113	359,562
Bangladesh	87,626	81,708	168,567	0	0	138	0	1,128	3,863	87,626	82,836	172,567
Thailand	508,805	556,159	443,670	1,067	1,861	3,414	466,315	440,067	424,865	976,186	998,086	871,948
Vietnam	359,230	464,692	269,240	249	353	525	121,990	129,935	116,278	481,469	594,980	386,044
Indonesia	137,222	157,040	305,465	383	305	324	15,487	10,777	34,205	153,093	168,121	339,994
Philippines	10,137	10,269	14,407	16	9	8	952	651	1,251	11,105	10,929	15,666
China	201,891	321,537	219,127	7,343	7,420	4,128	88,415	114,756	114,311	297,649	443,713	337,566
Others	444,913	410,322	518,359	3,962	2,613	2,856	52,043	40,823	95,178	500,919	453,759	616,393
Total	2,633,861	2,978,929	2,843,898	21,825	19,856	16,188	766,902	765,140	820,590	3,422,588	3,763,926	3,680,675

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