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Aquaculture Outlook

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Imports Provide Competition for Domestic Production

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Over the last 5 years the amount of seafood imported into the United States has grown considerably. Much of the increase has come from aquacultural production in other countries specifically targeted to high-value markets, like the United States. In many cases, the governments in these countries have looked on the growth of the aquaculture sector as a valuable source of foreign exchange earnings. A good example is the growth of the global shrimp farming industry. In 2000, U.S. shrimp imports were valued at \$3.8 billion and those from Thailand alone were valued at \$1.5 billion. For 2000, the value of imported shrimp, Atlantic salmon, and tilapia totaled \$4.6 billion. To put this in perspective, imports of these three aquacultural products in 2000 were worth as much as the combined exports of the U.S. broiler and hog industries.

With the size of the seafood market, the strength of the dollar, and a sluggish economy in Japan, traditionally the world's largest seafood importer, more and more foreign aquacultural producers are expected to target the United States seafood market in the coming years. They can do this through the introduction of products that they have an economic advantage in producing or they can produce products that have an existing market in the United States. Two examples of the latter strategy are imports of crawfish meat from China and frozen catfish fillets from Vietnam. While the domestic aquaculture industry is expected to face strong competition for the remainder of 2001 and into 2002 from imports of foreign aquacultural products, it will also face competition from the domestic poultry and livestock industries. The domestic poultry and livestock industries are continually developing new products and pushing for new methods to reduce their production, processing, and distribution costs. Also, with their size, the poultry and livestock industries have an advantage in wide scale promotional efforts and joint promotional efforts with the foodservice industry and grocery store chains.

Catfish Sales Expected Down Slightly in 2001

Sales of catfish by growers to processors are expected to total between 585 million and 590 million pounds in 2001, down less than 1 percent to 2 percent from a year earlier. Over the first 8 months of 2001, sales have totaled 406 million pounds, about even with the previous year. Based on the grower inventories reported at the beginning of July for small foodsize fish and stockers, the volume of catfish sales by growers is expected to be close to those of the previous year through the remainder of 2001 and into the first half of 2002. Farm prices for catfish are expected to remain depressed the remainder of 2001, and the annual average for 2001 is likely to be close to 65 cents a pound, down about a dime from 2000.

While a slowing economy and growing imports are expected to place downward pressure on catfish prices through most of 2002, catfish farmers can anticipate continued low prices for both corn and soybeans in the coming year. These low prices will help to hold down the price of catfish feed to growers. Feed is the largest single variable cost in the growout phase. The farm price of corn in 2002 is now expected to average about \$2.15 a bushel, up about 23 cents a bushel from 2001, but still relatively low on an historical basis. The average price for 48 percent protein soybean meal in 2002 is forecast to average around \$167 a ton, down a small amount from 2001's expected average of \$173 a ton. This is very low on a historical basis, as the average during 1996 and 1997 was around \$257 a ton.

Catfish Inventories Higher than Previous Year

Catfish growers indicated that their stocks of foodsize fish and fingerlings were higher than the previous year. The July 1 National Agricultural Statistics Service (NASS) survey reported fish holdings by growers in the four largest producing States, Mississippi, Alabama, Arkansas, and Louisiana. In the previous year (July 2000), growers had reported decreased inventories for stockers and small foodsize fish, while stocks of fingerlings marginally lower. As of July 1, 2001, growers reported a strong increase in fingerling inventories and holdings of small foodsize fish. The four States covered in this report are the

largest catfish producers and account for over 90 percent of U.S. production.

In the NASS report, catfish growers stated that as of July 1, 2001, the number of foodsize fish in inventory was estimated at 370 million, up almost 30 percent from a year earlier. The increases in inventory occurred in all three-sized categories. This is the exact opposite of the previous year when inventory holdings, as of July 1, 2000, had all declined from the previous year. The jump in the number of small foodsize fish in inventory (up 56 million or 24 percent) accounted for the vast majority of the increase in foodsize fish inventories. For small foodsize fish, slightly lower inventories in Louisiana were more than offset by greater holdings in Alabama and Arkansas and especially in the large increase in inventories in Mississippi, up 28 percent. For medium foodsize fish, (46 percent higher) only Louisiana showed a decrease in estimated inventories. The grower's estimates of foodsize fish inventory as of July 1 were a measure of the supply of marketsize available to process through the third quarter and into the fourth quarter of 2001.

The large increase in the total supplies of foodsize fish held in inventory means that catfish processors are likely to have a large supply of fish available to be processed in the third quarter of 2001 and into the fourth quarter. In 2001, large supplies going into the second half of the year are expected to result in a total processing volume close to that of the previous year, and the price paid to growers and the average price received by processors is likely to remain depressed. In 2000, even with smaller amounts of foodsize fish available, farm prices fell in the second half of the year. The forecast for continued low prices for the remainder of 2001 is due to the combination of higher supplies, weaker foodservice demand, and a strong increase in imports of frozen fillets.

The July 1, 2001, grower inventory report estimated the number of stockers at 734 million, down 4 percent from the previous year, and fingerlings were estimated at 1.8 billion, up 3 percent from 2000. The stockers and fingerlings in inventory on July 1 form the body of fish that will achieve market size by the end of 2001 and during the first portion of 2002. The inventory numbers were lower for stockers for the

second year in a row. These fish are the ones that will likely form the bulk of market size fish during the fourth quarter of 2001. However, the decrease in the number of stockers held by growers is likely to be offset by the considerable increase in the number of fingerlings. As always, a number of factors will impact the number of fish available for processing. The first is any changes in mortality rates. The second is if there are any disease outbreaks or a greater occurrence of off-flavor problems. The third factor is the control growers have over growth rates through the amount of feed they make available to the fish. The combined level of stockers plus fingerlings that growers had on hand going into the second half of 2001 points toward a future level of supply close to that seen in the latter part of 2000 and the beginning of 2001.

Farm Prices Expected To Remain Depressed in 2002

In 2002, average farm prices for catfish are expected to show little change from 2001's forecast 65 cents per pound. Based on forecasts of larger stocks of available market size fish at the beginning of 2002, farm prices are expected to average below the 69.5-cents-a-pound seen in the first quarter of 2001. This situation may begin to reverse itself in the second half of 2002, if growers respond to the falling prices of 2001 and scale back production. On a positive note, over the last several months processors have reported gradually declining total inventories. While inventory levels are still above those of the same time in 2001, at least they are falling, whereas at this time last year they had been increasing rapidly. Processor inventories normally increase in the second half of the year, but if they continue to fall below those of the previous year, there may be some gains in prices. Going into 2002, catfish processors are expected to face strong competition from broiler products, but unlike the last several years prices for many broiler parts are expected to be stronger in 2002.

Over the first 8 months of 2001, farm sales to processors totaled 407 million pounds, with an average price of 67.3 cents a pound. This implies gross sales of \$274 million for catfish growers, down 12 percent from a year ago, as volume was about the same but prices were much lower. Over the last 4

months of 2001, farm prices for catfish are expected to average in the low 60-cents-a-pound range, considerably lower than in the same period in 2000. For 2001, grower sales of catfish to processing plants are expected to generate only around \$380 million, down strongly from \$445 million in 2000.

Acreage Expected To Be Higher in the Second Half of 2001

Favorable feed prices and relatively strong farm prices for catfish through most of 2000 gave growers an incentive to expand their operations through additional pond acreage. In the July 2001 Catfish Production report, growers reported they expected to have 185,700 acres of ponds in use between July 1 and December 31, 2001, 3.6 percent higher than the previous year. The growth in acreage was from gains in Alabama, Arkansas, and Mississippi, as acreage declined slightly in Louisiana. Mississippi and Alabama accounted for most of the increase, as their acreage rose by 5,700 acres. The total acreage use breakout for the four States is 151,700 acres for foodsize fish production, 26,100 for fingerling production, and 4,910 for broodfish production. During the second half of 2000, growers reported they expected to have 2,910 acres of catfish ponds under construction.

Processor Revenues Fall

Over the first 8 months of 2001, catfish processors sold 204 million pounds of product. This is down slightly from the previous year, as higher sales of fresh product partially offset falling sales of frozen product. For all of 2001, processor sales are forecast at between 290 and 295 million pounds or a reduction of 1 to 2 percent from the previous year. Between January and August 2001, prices for catfish sold by processors averaged \$2.31 a pound, down 4 percent from the same period in 2000. The decrease in average price was due to a decrease in the price of all the categories of catfish products. With both falling sales volume and lower average prices, gross processor revenues from catfish products over the first 8 months of 2001 were \$468 million, 6 percent lower than in the same period in 2000. Processor revenues are expected to total between \$660 million and \$675 million in 2001.

During the first 8 months of 2001, processor sales have fallen in a number of categories. Sales were especially weaker in whole products, with fresh sales down 4 percent and frozen sales down 8.3 percent. As in many recent years, changes in the sales of filleted products have been the major factor driving overall catfish sales. Fresh filleted sales were up 11.3 percent to 45 million pounds, but sales of frozen

filleted product dropped 6.7 percent to 78 million pounds. Together, filleted sales accounted for 60 percent of all catfish product sales over the first 8 months of 2001. Part of the decline in sales of frozen fillet products has been the result of a growing competition with imports of frozen fillets, especially those from Vietnam.

U.S. Tilapia Imports Increase

U.S. imports of tilapia were considerably higher over the first half of 2001 than in the previous year. Over the last 3 years U.S. tilapia imports have almost doubled, going from just under 30 million pounds in 1998 to 57 million pounds in 2001. Although the bulk of these imports were whole fish, 33 percent of the imports were fresh or frozen fillets, and on a liveweight basis these imports were equal to 98 million pounds. Tilapia imports in the first 6 months of 2001 totaled 57 million pounds, 43 percent higher than the previous year. After falling slightly in 2000, imports of frozen whole tilapia rose by 41 percent in first-half 2001, compared with a year earlier. While imports of frozen whole fish, at 38.4 million pounds continue to dominate, a good percentage of the growth in imports is now coming from higher shipments of fresh and frozen fillets. Total imports of fresh fillets increased 50 percent to 11.8 million pounds, and imports of frozen fillets rose 38 percent to 6.9 million pounds.

While tilapia shipments have continued to grow year-by-year, the amount imported by specific countries has shifted. Taiwan has been the dominate supplier of tilapia to the United States, especially in the frozen whole fish category where up until the first half of 2000 it accounted for virtually 100 percent of imports. However, in the first half of 2000, total shipments of frozen whole tilapia were 27.2 million pounds, down slightly from 27.8 million pounds in the same period in 1999. While there was basically no change in the total quantity of fish imported, the distribution by country changed dramatically, as imports from Taiwan went from 91 percent of the total in 1999 to 54 percent of the total in 2000. The smaller exports from Taiwan were countered by a steep increase in shipments from China. Although frozen whole tilapia shipments from China over the first half of 2001 were down somewhat from the previous year, it is expected to remain a major supplier of tilapia to the United States. As the world's largest aquaculture producer, China could increase tilapia production tremendously by just converting a small percentage of the pond acreage it currently has in production. Over the last 2 years imports of fresh tilapia fillets have grown by 111 percent, going from 5.6 million

pounds to 11.8 million. Most of the increase has come from larger shipments from Ecuador. Over the first 6 months of 2001, Ecuador shipped 5.9 million pounds, 50 percent of all fresh fillets and up 73 percent over the same period in 2000. Ecuador is also a large aquaculture producer, with most of its production previously being in shrimp. With the uncertainties caused by outbreaks of a number of shrimp diseases and the changing ocean conditions caused by the El Nino phenomenon, the aquaculture industry in Ecuador is diversifying into tilapia production. By concentrating on the fresh fillet market, producers in Ecuador do not have to compete directly with either Taiwan or China.

The large increase in the amount of frozen whole tilapia imported in over the first half of 2001 caused the average value of all tilapia imports to decline somewhat during the first half of 2001, going from \$1.16 a pound the previous year to \$1.07 a pound this year. The value of all tilapia imports rose to \$61.3 million in the first half of 2001. The average price for frozen whole tilapia and frozen fillets both decreased, while prices for fresh fillets were basically flat. Tilapia imports usually increase seasonally in the second half of the year. However, this may not be true in the second half of 2001 due to impacts from a slowing economy and lower sales at restaurants. Total shipments for 2001 are expected to reach between 110 and 120 million pounds on a product-weight basis and 210 to 225 million pounds on a live-weight basis. Overall prices for imported tilapia products are expected to remain slightly below year-earlier levels in the second half of 2001. This is due to larger increases in the volume of tilapia products being imported, slower demand growth, and a stronger U.S. dollar against most foreign currencies. The overall value of tilapia imports for 2001 is expected to top \$120 million.

Atlantic Salmon Imports Jump 24 Percent

U.S. imports of Atlantic salmon in first-half 2001 totaled 170.2 million pounds and \$404 million, up 24 and 13 percent from the first half of 2000. In the first half of 2000, all three Atlantic salmon product categories (fresh whole fish, frozen whole fish, and filleted products) showed increases from the previous year. However in 2001, imports of frozen Atlantic

salmon products fell relative to the same time in 2000. With almost no growth over the last 3 years, imports of frozen Atlantic salmon are only a small factor in the overall import picture, accounting for only 2 percent of total imports over the first 6 months of 2001.

Once again, most of the growth in total imports came from larger shipments of fresh and frozen fillets. Imports of filleted products in first-half 2001 were 101 million pounds or almost 60 percent of total imports on a quantity basis. Over the last 4 years, most of the growth in total Atlantic salmon imports has come from higher shipments of filleted product, either fresh or frozen. This is a considerable change from earlier years. As recently as the first half of 1999, imports of fresh whole product were just about even with those of filleted products. Since then, shipments of filleted products have risen 39 percent to 101 million pounds. While the quantity of Atlantic salmon imports rose 24 percent, the total value of Atlantic salmon imports during the first 6 months of 2001 was only up 13 percent to \$404 million. The value of filleted products totaled \$248 million in the first half of 2001, accounting for 61 percent of the value of all Atlantic salmon imports.

During the first 6 months of 2001, all the growth in imports came from Canada and Chile. This is the same pattern seen in 2000, where all but a very small percentage of the growth came from Canada and Chile. The two countries dominate different sectors of the market. Canada uses its proximity to the United States market to dominate imports in the fresh market. In the first 6 months of 2001 Canada exported 53 million pounds of fresh Atlantic salmon to the United States. This is a 16-percent increase from the previous year and accounts for 82 percent of all fresh Atlantic salmon imports. In the fresh and frozen fillet market Chile is the dominant supplier. Because of its distance from its major markets (Japan, the United States, and the Economic Union) Chile uses exports of filleted products to reduce transportation costs and to garner the economic benefits of shipping a value-added product.

As a relatively expensive fish that moves a large percentage of its total imports through the restaurant sector, the growth in imports of Atlantic salmon is expected to slow considerably in the second half of 2001. While the U.S. dollar is expected to remain

strong relative to both the Canadian dollar and Chilean peso the increase that this would normally encourage is likely to be overshadowed by the weakening domestic economy and falling restaurant sales. Over the longer term, shipments of Atlantic salmon are expected to continue to expand, with the fresh and frozen filleted segment of the market likely to expand more rapidly.

Salmon imports do not show a pronounced seasonal pattern, but do have a somewhat stronger period of shipments in November and December. For all of 2001, total shipments of Atlantic salmon products are expected to reach between 315 and 325 million pounds with a value between \$770 million and \$780 million. While the short-term outlook for shipping Atlantic salmon products to the United States has weakened since last year, the longer term outlook continues to be good. The U.S. dollar is expected to remain strong relative to most major currencies and the Japanese market, the world's largest salmon market, is expected to remain weak. Restaurant sales are likely to be depressed for the second half of 2001 and into 2002, but away-from-home food purchases continue to be a growing percentage of overall food consumption, and the restaurant sector is a prime outlet for salmon products.

Shrimp Imports at Record Levels

After falling during the last two years, U.S. shrimp imports in the first 6 months of 2001 were at record levels for both quantity and value. U.S. shrimp imports totaled 327 million pounds, up 13 percent from the same period in 2000. The value of these imports increased by 10 percent to \$1.4 billion. This strong level of imports during the first half of the year is not expected to continue into the second half of 2001. The weakening domestic economy is expected to hold down the quantity of imports, and the average prices are likely to decline as demand falls off in most of the major shrimp markets around the world.

The average per-unit value of shrimp imports fell in the first half of 2001, down 9 cents to \$4.34 a pound. The decline was not attributable to any one product category or country, as average prices fell for frozen shrimp and processed products in almost all countries.

While imports of shell-on or peeled frozen shrimp are still the largest import category, at over 270 million pounds in the first 6 months of 2001, imports of prepared shrimp products (canned, cooked, etc.) continue to grow at a faster pace. The faster growth in processed products is the result of a number of forces. On the demand side, consumers want products that can be ready for eating with only a minimum amount of preparation. This is not only true for the consumers at home, many restaurants want products delivered to them with the more labor-intensive preparations already done. This way they minimize the amount of labor needed in their kitchens to prepare items. On the production side, shrimp farming companies or shrimp processors can maximize their returns by increasing the amount of value-added processing they perform for their customers. Most shrimp production is in countries with relatively low labor costs, and the processing, while adding value also decreases shipping costs by lowering the weight of the product. The shift to more highly processed shrimp imports is one that has been mirrored in imports of Atlantic salmon and tilapia.

Most of the increase in imports was due to larger shipments from Ecuador and Thailand. Shrimp imports from Ecuador had dropped dramatically in the previous year as problems with diseases lowered production. In the first half of 2001, shrimp imports from Ecuador totaled almost 40 million pounds and had a value of \$148 million. This is an increase of 51 percent in quantity and 32 percent in value compared with the same period in 2000. The El Nino and La Nina weather patterns had disrupted the normal upwelling of cold water along the West coast of South America. This upwelling is the basis for a highly productive marine environment that shrimp farmers use to acquire many of the female shrimp used in their hatcheries.

Imports were also boosted by greater shipments from Thailand, China, and a number of other countries. Thailand is the leading supplier to the United States of both frozen shrimp and prepared shrimp products. Over the first half of 2001, frozen shrimp imports from Thailand were 74 million pounds valued at \$358 million. This is over a quarter of all the frozen shrimp imported, on a quantity basis, and 30 percent of the value. Thailand is even more prominent in the processed shrimp market. In this category, Thailand shipped 38 million pounds to the United States in the

first half of 2001, up 28 percent from the same period in 2000 and 68 percent of all shipments in that category. In total Thailand shipped 113 million pounds of shrimp to the United States, with a value of \$528 million.

Although there are a number of large suppliers, imports of shrimp are not as concentrated as Tilapia or Atlantic salmon. Smaller exporters accounted for 41 percent of total shrimp imports. The more prominent countries among the large number of suppliers are India and Bangladesh in Asia and a number of the Central American countries in the Western Hemisphere. Shipments from China continue to expand rapidly, increasing 8 percent from the previous year. Currently almost all of the shipments from China are frozen shrimp. However, as China's production increases, more of the exports are expected to be processed products rather than frozen shrimp.

Shrimp imports for all of 2001 are expected to reach between 775 and 785 million pounds and be valued at between \$3.5 and \$3.6 billion. These would be record levels, but would represent a less pronounced seasonal increase than is normally the case. This is due to the expected effects of a slowing economy reducing demand in the second half of the year. However, with other major shrimp consuming countries or regions also experiencing difficult economic conditions, further weakening in average shrimp prices could moderate the decline in the quantity of shrimp imported.

While the changes in the quantities of shrimp imported in the first half of 2001 varied depending on the type of product, the average per-unit value of shrimp products decreased. On the quantity side, imports of frozen shrimp rose by 9 percent, as imports from Ecuador and Thailand accounted for most of the increase. While the quantity imported was increasing, the average price for frozen shrimp was declining by 9 cents a pound to \$4.36. This is a decrease from the average price in the first half of 2000, but is still considerably higher than the \$4.05 a pound it was in the first 6 months of 1999.

In total, imports of prepared shrimp products rose 31 percent compared with the same period in 2000, reaching 55.5 million pounds. U.S. imports of prepared shrimp products are dominated by supplies

from Thailand, and during the first 6 months of 2001, prepared shrimp imports from Thailand accounted for 68 percent of all the prepared shrimp shipments to the United States. Although the amount of prepared shrimp products imported has rapidly increased in the last 2 years, going from 30.9 to 55.5 million pounds (up 80 percent), the average price has remained relatively strong. Average prices over the first 6 months of 2001 were \$4.18 a pound, down about 8 cents a pound from the same period in 2000, but still somewhat higher than in 1999. The average price for prepared shrimp products is lower than that for frozen products, which might seem odd. The price averages tend to hide a number of things. The prices for prepared shrimp products can be lower than frozen shrimp products because most of the prepared shrimp products are made using relatively small shrimp. There is a large price range in the frozen market between the largest and smallest shrimp. For example the average price for shrimp in the largest size category (under 33 shrimp per kilo) was \$7.99 a pound. In the smallest size category of frozen shrimp imports (over 155 shrimp per kilo), the average price was only \$2.76 a pound.

Mollusk Imports Down, Exports Increase

Over the first 6 months of 2001, U.S. exports of oysters, mussels, and clams totaled 4.7 million pounds, up 17 percent from first-half 2000. Oyster exports increased the most, rising 30 percent to 1.9 million pounds. This is the third year in a row that oyster exports have grown. The increase in mollusk exports is somewhat surprising in that the strength of the dollar has made exported products more expensive relative to other currencies. Another factor is that countries in Asia, especially Japan, have traditionally been our largest market and the economies in these countries have not been especially strong. Clam exports rose 7 percent to just over 2 million pounds. Even with this increase, clam exports are still well below the levels achieved in the late 1990s. Mussel exports totaled 830,000 pounds over the first 6 months of 2001. This is a 17-percent increase from the previous year, but exports are less than 5 percent of mussels that are imported into the United States. While the quantity exported of all three mollusks species increased, the average prices for them decreased. Overall, the market outlook is not very strong for U.S. mollusk products. First, a strong U.S. dollar is expected to make mollusk

exports relatively more expensive for the remainder of 2001 and into 2002. Second, the Japanese economy is forecast to be relatively stagnant over the next several quarters. Japan and Korea are normally the two largest markets for our mollusk products after Canada.

Over the last several years a strong dollar combined with a growing economy had led to rising demand for imported mollusk products. This seems to have peaked in 2000, as the quantity of oyster, clam, and mussel imports in the first half of 2001 were all lower than in the same period in 2000.

Imports of mussels had been growing probably the fastest of any mollusk product. They had risen in each of the previous 4 years, and between 1997 and 2000 they had more than doubled in quantity and value. In the first half of 2001, mussel imports were \$24.3 million and 21 million pounds. This is a 7-percent decrease in the quantity of mussels imported, but only a 5-percent decrease in the overall value. The majority of the mussels shipped to the United States come from either Canada or New Zealand. These countries are both large producers of farmed mussels. The products produced by the two countries are not the same species of mussels, but they are used inter-changeably. While some mussels are harvested in the wild, a growing percentage have some value-added processing done to them. Wild harvest mussels are often placed in purged tanks where they lose most of the sand in their shells. Some mussels are farmed in rope culture so that they never sit on the ocean bottom and have little sand in their shells to start with.

As the U.S. economy weakens, one impact expected is falling sales at foodservice establishments and restaurants. This could lower demand for imported mollusk products, including mussels over the second half of 2001 and into 2002. Some of this reduced demand may be offset by the strength of the U.S. dollar versus the Canadian dollar, making imports of mollusk products from Canada relatively less expensive.

The demand for oyster and clam products was also weaker in the first half of 2001. Clam imports fell by 23 percent and totaled 3.5 million pounds. Oyster imports totaled 7.8 million pounds, down 10 percent from the same period in 2000. As was the case for

mussels, the average price for clam and oyster imports was higher in the first half of 2001, as the value of imports of these products fell less than the quantity. Future imports of clams and oysters are expected to be influenced by the same general factors as mussel imports, a weaker domestic economy, a strong dollar, and a falling demand at restaurants.

Ornamental Fish Imports Rise, Exports Fall

The same economic factors that are expected to depress mollusk exports and encourage imports over the next several quarters will also be at work in the ornamental fish market. U.S. exports fell in the first half of 2001 to \$3.7 million, down 13 percent from the previous year and down 43 percent from the first half of 1999. Traditionally, the largest markets for U.S. ornamental fish have been in Hong Kong and other Asian countries. With the economies of most Asian countries relatively weak and the value of the dollar strong against most currencies, U.S. ornamental fish exports to Asia are expected to remain depressed. Since 1997, the value of U.S. ornamental fish exports has fallen by 56 percent. The value of ornamental fish imports totaled \$21.7 million in the first half of 2001, up 6 percent from the previous year. This stops a series of declines in the

value of ornamental fish imports that began in 1996. Over the second half of 2001 and into 2002 the demand for imported ornamental fish is expected to increase, as the relative price of imported fish declines due to a weakening of foreign currencies versus the dollar.

Shipments of ornamental fish to the United States come from a number of countries and cover a large number of species. Ornamental fish are sold in a number of ways, with some common ornamental fish being sold by the pound, given a certain minimum size. Other fish, especially the more exotic species, are sold on a per-fish basis. Because of the different ways of pricing ornamental fish and the large number of species involved, trade statistics do not show the numbers of fish imported or exported, nor is there a breakout of sales by species. This makes it impossible to determine if the prices for ornamental fish are rising or falling and if changes in imports or exports are related to shipments of particular species.

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Electronic Outlook Report from the Economic Research Service

This online-only report is the first of the semi-annual *Aquaculture Outlook* reports presented in a new format. This supplements the monthly report, *Livestock, Dairy, and Poultry Outlook* (<http://www.ers.usda.gov/publications/so/view.asp?f=livestock/ldp-mbb>), and provides timely analysis on specific topics.

For several months, a wide range of ideas have emerged in the farm bill debate on how best to address the needs of farmers and other constituencies. A recently released ERS report, *Feed Grains: Background and Issues for Farm Legislation* (<http://www.ers.usda.gov/publications/fds-0701-01>), provides information on topics important to the debate, including market conditions, policy proposals, WTO considerations, and the interactions between policy and markets.

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Tables

The following pages contain tables on:

Catfish Sales and Prices (1995-2001 current month)

Catfish: Inventory numbers, in thousands, as of July 1 (1998-2001)

Catfish: Supply, sales, prices, and inventory (2001 by month)

U.S. Atlantic Salmon Imports, Volume by Country, January to June (1998-2001)

Quantity and Value of U.S. Imports and Exports of Selected Seafood Products, January to June (1997-2001)

U.S. Shrimp Imports in Pounds, January to June (1999-2001)

U.S. Tilapia Imports, Volume by Country, January to June (1998-2001)

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 pounds 1/						
1995	38,807	38,515	42,200	36,588	37,030	36,047	35,800	38,827	37,634	39,456	34,119	31,863	446,886
1996	38,475	38,004	46,376	38,557	39,517	36,752	39,025	40,463	38,807	42,070	37,203	36,874	472,123
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					406,638
Average price paid by processors for farm-raised catfish							Cents per pound 1/						
1995	78.0	79.0	79.0	79.0	79.0	79.0	79.0	79.0	78.0	78.0	78.0	78.0	78.6
1996	77.0	78.0	78.0	78.0	79.0	79.0	79.0	78.0	77.0	76.0	75.0	73.0	77.3
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					67.7
Catfish Sold by Processors							1,000 pounds						
1995	19,191	20,008	21,702	18,649	19,169	18,631	18,157	20,187	18,660	19,920	16,680	16,018	226,972
1996	20,322	20,613	22,704	20,276	20,669	18,074	18,719	20,217	19,642	20,842	18,204	16,898	237,180
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					203,632
Average price received by processors for all catfish							Cents per pound						
1995	235.0	239.7	241.8	243.7	244.5	240.7	241.6	241.9	241.2	237.8	236.4	234.7	239.9
1996	232.5	235.7	236.1	237.3	237.4	244.5	243.1	238.8	236.1	233.8	233.2	228.7	236.4
1997	227.8	229.8	230.4	226.7	228.4	226.5	225.4	225.8	225.3	220.4	220.6	223.6	225.9
1998	219.5	227.7	237.1	237.5	239.4	234.4	234.8	232.2	229.5	226.4	226.4	224.1	230.8
1999	225.6	225.9	231.8	236.1	239.8	239.5	239.4	234.7	236.9	235.8	235.3	230.9	234.3
2000	235.1	240.0	244.4	244.7	245.0	237.5	238.8	239.1	237.0	232.5	232.9	227.2	237.9
2001	232.0	236.3	233.4	233.5	232.5	227.6	226.2	223.9					230.7

1/ Live weight.

Source: Monthly Catfish Processing Report, NASS, USDA.

Catfish: Inventory numbers, in thousands, as of July 1 1/

State	Broodfish				Fingerling/fry				Stockers			
	1998	1999	2000	2001	1998	1999	2000	2001	1998	1999	2000	2001
Alabama	110	125	150	160	78,158	95,200	110,000	118,500	50,733	56,600	61,100	71,600
Arkansas	141	145	220	160	258,500	325,000	284,000	335,000	115,050	116,600	115,800	103,200
Louisiana	31	55	64	50	99,160	72,500	99,500	114,800	39,365	49,600	26,300	34,700
Mississippi	836	835	835	910	1,193,366	1,273,000	1,266,000	1,248,000	417,948	552,900	558,800	524,800
Total	1,118	1,160	1,269	1,280	1,629,184	1,765,700	1,759,500	1,816,300	623,096	775,700	762,000	734,300

State	Small foodsize				Medium foodsize				Large foodsize			
	1998	1999	2000	2001	1998	1999	2000	2001	1998	1999	2000	2001
Alabama	26,720	35,400	32,200	40,200	9,403	13,200	10,600	14,800	886	1,180	870	1,170
Arkansas	31,400	32,850	33,800	40,200	9,525	11,800	8,800	19,800	970	1,110	980	1,700
Louisiana	11,330	17,800	14,600	13,400	4,095	7,360	8,350	8,300	550	490	790	860
Mississippi	130,042	154,500	150,800	193,500	34,377	24,400	24,350	33,200	2,348	2,210	1,360	2,440
Total	199,492	240,550	231,400	287,300	57,400	56,760	52,100	76,100	4,754	4,990	4,000	6,170

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

Source: Catfish Growers Survey, NASS, USDA.

Catfish: Supply, sales, prices, and inventory

Item	2000					2001							
	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
Supply													
	1,000 lbs.												
Grower sales 1/	53,204	49,422	51,412	45,535	41,441	46,999	50,257	57,766	52,478	51,736	47,883	47,829	51,690
Processor sales	25,847	23,743	25,036	21,911	20,752	24,507	25,968	28,752	25,167	24,728	23,690	24,816	26,004
Fresh	9,882	9,228	10,260	8,597	8,290	9,843	10,646	13,167	10,662	10,140	9,586	9,799	9,953
Whole	3,545	3,246	3,504	2,971	2,993	3,516	3,242	4,260	3,644	3,271	3,166	3,233	3,204
Fillet	4,899	4,650	5,283	4,355	4,099	4,884	6,112	6,751	5,709	5,587	5,122	5,191	5,313
Other	1,438	1,332	1,473	1,271	1,198	1,443	1,292	2,156	1,309	1,282	1,298	1,375	1,436
Frozen	15,965	14,515	14,776	13,314	12,462	14,664	15,322	15,585	14,505	14,588	14,104	15,017	16,051
Whole	1,108	976	1,032	944	877	1,156	1,253	1,289	1,088	1,128	1,111	967	1,154
Fillet	10,830	9,674	9,410	8,563	7,970	9,831	9,678	9,990	9,479	9,511	9,077	9,973	10,890
Other	4,027	3,865	4,334	3,807	3,615	3,677	4,391	4,306	3,938	3,949	3,916	4,077	4,007
Processor inventory 2/	10,264	11,588	12,450	13,920	13,598	11,855	10,754	11,229	11,730	12,126	12,261	11,794	11,581
Fresh	892	757	932	718	538	916	856	700	855	710	742	773	734
Whole	187	151	188	188	116	222	215	146	229	170	154	169	169
Fillet	578	495	591	449	336	586	536	470	520	453	493	516	458
Other	127	111	153	81	86	108	105	84	106	87	95	88	107
Frozen	9,372	10,831	11,518	13,202	13,060	10,939	9,898	10,529	10,875	11,416	11,519	11,021	10,847
Whole	714	527	484	521	661	727	842	867	888	819	633	439	495
Fillet	6,200	7,605	8,340	9,624	9,617	7,787	6,672	7,197	7,248	7,999	8,349	8,374	8,254
Other	2,458	2,699	2,694	3,057	2,782	2,425	2,384	2,465	2,739	2,598	2,537	2,208	2,098
Prices													
Farm price 3/	0.74	0.73	0.71	0.70	0.68	0.69	0.70	0.70	0.69	0.69	0.67	0.66	0.62
Processor prices	2.40	2.37	2.33	2.32	2.27	2.32	2.37	2.33	2.34	2.33	2.28	2.26	2.24
Fresh	2.28	2.26	2.26	2.25	2.20	2.20	2.32	2.22	2.26	2.29	2.24	2.22	2.19
Whole	1.70	1.67	1.64	1.62	1.58	1.59	1.68	1.63	1.65	1.65	1.62	1.59	1.55
Fillet	2.88	2.85	2.83	2.83	2.81	2.80	2.79	2.80	2.80	2.80	2.78	2.77	2.75
Other	1.69	1.62	1.68	1.71	1.68	1.64	1.68	1.57	1.64	1.69	1.64	1.61	1.57
Frozen	2.47	2.44	2.38	2.37	2.32	2.40	2.41	2.43	2.40	2.35	2.30	2.29	2.27
Whole	2.01	2.01	1.98	2.02	1.99	1.98	2.01	1.98	2.01	2.00	1.94	1.95	1.97
Fillet	2.82	2.80	2.78	2.74	2.70	2.72	2.74	2.75	2.73	2.70	2.67	2.61	2.55
Other	1.64	1.66	1.59	1.64	1.55	1.67	1.78	1.81	1.70	1.62	1.54	1.59	1.58

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

Source: NASS, USDA

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

Country	Fresh				Frozen				Fillets 1/				Total			
	1998	1999	2000	2001	1998	1999	2000	2001	1998	1999	2000	2001	1998	1999	2000	2001
1,000 Pounds																
Canada	45,631	43,575	46,110	53,440	5	5	8	0	4,413	6,110	8,352	14,607	50,049	49,690	54,470	68,047
Chile	7,973	3,309	2,826	3,478	1,121	791	1,161	707	37,359	38,234	56,134	80,657	46,453	42,334	60,121	84,843
Iceland	1,185	2,230	2,017	779	0	0	0	101	40	722	76	101	1,225	2,951	2,094	980
Norway	22	623	302	379	1,555	2,358	3,362	2,586	1,465	8,652	6,134	5,305	3,042	11,633	9,798	8,270
Faroe Islands	0	830	2,130	546	598	1,120	251	177	0	89	82	58	598	2,040	2,463	782
United Kingdom	1,195	5,747	6,025	6,383	1	0	39	39	412	2,075	1,850	321	1,608	7,822	7,914	6,743
Other	37	137	171	41	853	617	408	454	144	263	122	76	1,034	1,017	702	570
Total	56,044	56,451	59,581	65,046	4,133	4,891	5,230	4,065	43,834	56,145	72,751	101,125	104,010	117,486	137,562	170,236

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

Country	Fresh				Frozen				Fillets 1/				Total			
	1998	1999	2000	2001	1998	1999	2000	2001	1998	1999	2000	2001	1998	1999	2000	2001
1,000 Dollars																
Canada	111,451	114,674	113,289	130,841	17	27	21	0	15,560	23,335	30,566	50,015	127,028	138,036	143,877	180,856
Chile	13,798	6,800	5,401	6,285	2,549	1,589	2,847	1,196	89,723	103,786	150,922	181,029	106,070	112,175	159,171	188,510
Iceland	2,004	3,348	3,804	1,236	0	0	0	620	126	1,586	264	281	2,129	4,934	4,068	2,136
Norway	44	1,083	576	708	3,065	4,527	6,611	4,677	4,669	25,944	20,909	15,613	7,778	31,553	28,096	20,998
Faroe Islands	0	1,440	4,216	693	1,049	1,876	468	265	0	316	247	115	1,049	3,632	4,931	1,073
United Kingdom	2,131	11,972	11,907	8,736	10	0	40	69	906	5,457	5,321	678	3,047	17,429	17,268	9,483
Other	145	980	357	81	1,528	1,296	787	896	203	667	322	197	1,876	2,944	1,466	1,174
Total	129,571	140,296	139,550	148,581	8,218	9,315	10,774	7,722	111,188	161,092	208,552	247,927	248,978	310,704	358,876	404,231

1/ Includes both fresh and frozen fillets.

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

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

Commodity	1997	1998	1999	2000	2001	1997	1998	1999	2000	2001
Exports			\$1,000					1,000 lb.		
Ornamental fish	8,368	5,756	6,393	4,224	3,672	0	0	0	0	0
Trout, live	697	278	293	148	219	0	0	0	0	0
Trout, fresh & frozen	1,184	1,254	1,841	1,827	917	756	831	1,006	1,082	662
Atlantic salmon, fresh	8,979	8,107	14,175	19,127	19,954	3,642	3,428	6,402	8,899	9,388
Pacific salmon, fresh 1/	6,524	6,459	20,254	7,529	6,189	3,748	4,189	8,967	4,792	4,019
Atlantic salmon, frozen	429	261	119	304	47	157	154	50	154	26
Pacific salmon, frozen 1/	42,951	22,341	37,838	55,541	35,057	29,162	16,025	25,597	34,287	26,965
Canned & pre. salmon 2/	58,992	59,484	46,176	60,537	62,294	35,889	30,049	26,975	34,599	38,015
Shrimp, frozen	21,744	22,012	23,552	28,866	33,194	5,670	5,392	6,715	7,563	8,512
Shrimp, fresh & pre. 3/	27,674	21,313	19,317	24,593	30,591	7,754	5,732	5,735	6,027	7,562
Oysters 4/	2,844	2,554	2,546	3,116	3,576	1,466	1,133	1,158	1,442	1,868
Mussels 5/	386	658	939	835	898	333	617	803	708	830
Clams 6/	4,509	4,167	3,608	3,223	3,289	2,390	2,575	2,235	1,880	2,014
Imports			\$1,000					1,000 lb.		
Ornamental fish	25,893	23,943	20,516	20,469	21,655	0	0	0	0	0
Trout, live	65	39	78	21	9	0	0	0	0	0
Trout, fresh & frozen	3,366	4,869	4,228	3,804	5,992	2,566	2,872	2,546	2,339	3,702
Atlantic salmon, fresh	165,118	228,759	282,112	319,410	366,803	69,207	95,388	105,722	122,956	154,470
Pacific salmon, fresh 1/	40,132	35,252	22,470	22,786	16,424	15,818	16,681	9,688	9,550	7,825
Atlantic salmon, frozen	14,451	20,219	28,592	39,466	37,428	6,312	8,622	11,764	14,606	15,766
Pacific salmon, frozen 1/	9,906	10,835	10,840	9,170	7,530	7,855	8,502	8,695	5,420	4,585
Canned & pre. salmon 2/	7,567	6,463	9,245	13,937	16,731	1,442	1,280	2,426	4,713	5,245
Shrimp, frozen	976,291	1,207,528	1,079,753	1,084,143	1,176,838	226,959	269,071	266,823	246,906	270,193
Shrimp, fresh & pre. 3/	121,246	178,535	133,052	189,252	252,516	24,932	35,478	32,116	43,838	57,090
Oysters 4/	13,665	15,280	14,309	16,792	16,126	5,207	6,942	7,097	8,642	7,760
Mussels 5/	12,252	14,916	18,232	25,472	24,318	13,523	16,538	19,136	22,979	21,420
Clams 6/	3,395	2,817	3,180	3,995	3,653	2,826	3,152	3,837	4,553	3,510
Tilapia 7/	24,622	25,388	35,421	46,421	61,304	24,912	29,907	37,644	39,962	57,043

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

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

U.S. Shrimp imports in pounds (January to June)

Country	Frozen			Fresh			Prepared			Total		
	1999	2000	2001	1999	2000	2001	1999	2000	2001	1999	2000	2001
Mexico	13,084,462	8,910,177	7,806,248	66,656	73,572	179,580	20,675	36,319	14,868	13,171,793	9,020,068	8,000,696
Ecuador	72,917,154	23,823,547	35,728,491	0	0	959	49,469	575,575	1,208,566	72,966,623	24,399,122	36,938,016
Thailand	67,108,013	71,552,553	74,471,619	185,444	196,752	100,188	22,016,906	29,753,588	38,004,575	89,310,363	101,502,892	112,576,382
Indonesia	15,703,273	16,440,110	15,537,459	15,756	143,916	36,138	661,832	1,117,684	843,295	16,380,861	17,701,710	16,416,891
Philippines	1,613,767	1,547,896	1,388,704	21,967	705	1,327	316,067	341,691	355,137	1,951,801	1,890,292	1,745,168
China	6,383,265	14,369,689	15,331,408	347,890	351,038	463,345	419,050	351,182	474,642	7,150,206	15,071,909	16,269,395
Others	90,013,214	110,262,260	119,929,204	583,081	658,979	778,579	7,411,636	10,237,261	14,628,711	98,007,931	121,158,500	135,336,494
Total	266,823,148	246,906,232	270,193,133	1,220,795	1,424,963	1,560,116	30,895,635	42,413,299	55,529,793	298,939,578	290,744,493	327,283,042

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

Country	Frozen			Fresh			Prepared			Total		
	1999	2000	2001	1999	2000	2001	1999	2000	2001	1999	2000	2001
Mexico	62,496,273	56,457,404	55,338,903	296,492	271,038	334,454	119,537	71,308	76,275	62,912,302	56,799,750	55,749,632
Ecuador	261,279,790	110,187,953	142,730,639	0	0	5,760	174,995	2,097,766	4,899,951	261,454,785	112,285,719	147,636,350
Thailand	302,706,509	348,533,671	358,333,179	1,784,184	1,881,573	332,038	99,885,946	139,697,554	169,663,801	404,376,639	490,112,798	528,329,018
Indonesia	77,993,949	82,993,532	75,091,658	112,309	224,070	269,146	3,144,702	4,325,887	3,554,380	81,250,960	87,543,489	78,915,184
Philippines	9,500,638	10,073,408	8,566,157	7,798	3,200	6,010	318,876	296,440	411,015	9,827,312	10,373,048	8,983,182
China	13,924,376	33,095,862	42,640,130	1,390,227	2,226,212	3,579,736	500,509	520,398	993,075	15,815,112	35,842,472	47,212,941
Others	351,851,676	457,391,398	457,391,398	2,389,122	3,927,643	5,848,312	22,927,655	33,709,222	52,542,117	377,168,453	495,028,263	552,527,560
Total	1,079,753,211	1,098,733,228	1,176,837,797	5,980,132	8,533,736	10,375,456	127,072,220	180,718,575	232,140,614	1,212,805,563	1,287,985,539	1,419,353,867

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

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

Country	Whole, frozen				Fillets, fresh				Fillets, frozen				Total			
	1998	1999	2000	2001	1998	1999	2000	2001	1998	1999	2000	2001	1998	1999	2000	2001
1,000 Pounds																
Mexico	0	0	0	0	0	2	0	0	0	14	0	0	0	16	0	0
Honduras	2	0	19	0	480	642	1,254	1,215	103	41	0	0	585	683	1,273	1,215
Nicaragua	1	0	0	0	1	17	0	8	25	12	0	11	27	29	0	19
Costa Rica	0	0	0	0	2,445	2,673	2,799	3,711	0	0	0	0	2,446	2,673	2,799	3,711
Jamaica	0	0	0	0	270	208	196	200	115	92	22	41	385	300	218	241
Colombia	0	0	0	0	0	0	5	71	0	0	0	0	0	0	5	71
Ecuador	6	221	19	155	665	1,879	3,399	5,882	109	48	177	175	781	2,148	3,595	6,211
Thailand	52	7	43	71	0	0	0	1	294	114	124	173	345	121	167	245
Indonesia	0	0	2	86	0	0	0	0	1,012	1,291	917	2,228	1,012	1,291	919	2,314
China	0	2,356	12,136	11,818	0	0	50	271	84	249	1,983	2,023	84	2,605	14,170	14,112
Taiwan	22,855	25,174	14,758	26,110	116	141	52	54	1,164	2,294	1,695	2,101	24,136	27,609	16,505	28,265
Other	0	13	183	118	59	13	92	346	48	144	38	173	108	170	312	637
Total	22,917	27,770	27,160	38,358	4,037	5,575	7,846	11,761	2,953	4,298	4,956	6,924	29,907	37,644	39,962	57,043

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

Country	Whole, frozen				Fillets, fresh				Fillets, frozen				Total			
	1998	1999	2000	2001	1998	1999	2000	2001	1998	1999	2000	2001	1998	1999	2000	2001
1,000 Dollars																
Mexico	0	0	0	0	1	5	0	0	0	12	0	0	1	17	0	0
Honduras	5	0	41	0	1,205	1,581	3,188	3,292	259	49	0	0	1,470	1,630	3,229	3,292
Nicaragua	2	0	0	0	3	48	0	21	54	20	0	24	59	67	0	45
Costa Rica	1	0	0	0	5,089	5,617	6,459	8,283	0	0	0	0	5,091	5,617	6,459	8,283
Jamaica	0	0	0	0	825	619	591	642	191	166	40	79	1,017	785	631	722
Colombia	0	0	0	0	0	0	17	188	0	0	0	0	0	0	17	188
Ecuador	11	282	57	157	1,202	3,490	10,207	17,397	148	92	386	364	1,362	3,865	10,650	17,917
Thailand	36	6	31	57	0	0	0	3	854	267	267	326	890	273	297	386
Indonesia	0	0	2	70	0	0	0	0	2,211	2,759	2,120	4,995	2,211	2,759	2,122	5,066
China	0	1,307	6,750	5,253	0	0	109	430	218	505	3,344	3,497	218	1,812	10,204	9,180
Taiwan	10,891	13,765	8,697	11,718	305	121	135	41	1,750	4,512	3,472	3,032	12,946	18,399	12,304	14,792
Other	0	5	139	63	59	25	266	982	65	168	103	389	124	198	508	1,434
Total	10,946	15,366	15,718	17,319	8,691	11,505	20,972	31,279	5,752	8,550	9,732	12,707	25,388	35,421	46,422	61,304

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