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Livestock, Dairy, and Poultry Outlook

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Meat Markets Roiled by Disease Outbreaks

The outlook for world and domestic poultry markets continues to be in a state of upheaval due to outbreaks of Avian Influenza in Asia and the United States. High Pathogenic Avian Influenza (HPAI) has been reported in a number of Asian countries, including China and Thailand, two of the world's top producers and exporters. Making the outbreak even more serious is that the strain reported in a number of these Asian countries is one that can be transmitted to people through close contact. After the outbreaks were confirmed, many nations that had been importing from these countries placed bans on the importation of all poultry and poultry products from the infected countries. The United States and Brazil are expected to benefit from increased access to these markets, however, U.S. gains may be limited by price competition of certain products in these markets.

However, in the near term U.S. broiler exports have been disrupted by import bans announced by several countries following the announcement that two broiler flocks in Delaware have tested positive for Avian Influenza (AI). Based on previous experience, expectations are that the nationwide ban will be regionalized if the outbreak is confined to a small number of flocks, permitting exports from States unaffected by the outbreak. Officials in New Jersey have also indicated that AI is present in their State. In tests at live markets in New Jersey, four markets have tested positive for AI. However, officials noted that positive tests at live markets are not unusual. Officials in Pennsylvania have stated that samples from an egg laying flock have been sent to the National Veterinary Services Lab in Iowa for analysis. In the first flock found to be infected in Delaware, tests have confirmed that the AI was a low pathogenic type, one that is not transmittable to humans.

The findings of AI in New Jersey and the possibility of AI in Pennsylvania could greatly expand the time and resources needed for testing and surveillance. Based on 2002 production data, Pennsylvania is not a major poultry producer, accounting for only 2 percent of national broiler production. The picture is basically the same for turkey production, with Pennsylvania accounting for 4 percent of total U.S. production. In both

Contents

[Poultry](#)
[Cattle/Beef](#)
[Cattle/Beef Trade](#)
[Dairy](#)
[Sheep](#)
[Eggs](#)
[Contacts and Links](#)

Tables at a Glance

[Red Meat and Poultry](#)
[Economic Indicators](#)
[Dairy](#)

Web Sites

[Animal Production and Marketing Issues](#)
[Cattle](#)
[Dairy](#)
[Hogs](#)
[Poultry and Eggs](#)
[WASDE](#)

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cases New Jersey's production is very small. The possible impact on the egg side is stronger, with New Jersey accounting for 1 percent of national production and Pennsylvania accounting for 8 percent.

The eighth year of herd liquidation in this cattle cycle was marked in 2003, with little indication that the cattle industry will begin the move toward female retention in 2004. *Price direction* since Bovine Spongiform Encephalopathy (BSE) was confirmed in a dairy cow in Washington State on December 23, has been erratic, but somewhat predictable, particularly, as the export markets were cut off. Initially cattle/beef prices declined sharply, but once the markets realized that domestic consumer reaction was muted and consumer beef demand remained relatively strong, endusers moved to replenish the meat pipelines that as usual were pulled down over the holidays. This replenishing, was possibly a bit more hesitant than usual but occurred through mid- to late-January, resulting in strengthening prices. However, prices declined once the pipeline was replenished and the market began to assimilate beef supplies normally destined for export.

The January hog slaughter was higher than expected, prompting expectations of a 1-percent increase in first-quarter pork production. Pork production is expected to be 4.95 billion pounds in the first quarter of 2004. The live equivalent hog price (51-52% lean) averaged about \$39 per hundredweight (cwt) in January and is expected to average \$38 to \$40 in the first quarter, with foreign demand for U.S. pork products contributing to price strength. The forecast for U.S. pork imports for 2004 was lowered to 1.24 billion pounds, with the depreciated dollar translating into lower buying power in international markets.

Recent information lowered projected 2004 milk production, now expected to be about unchanged from 2003. The January 1 cattle inventory indicated that supplies of dairy replacements will be significantly smaller than a year earlier. More importantly, availability of bovine somatotropin (BST) will be quite limited because the maker has imposed reduced allocations that are expected to extend until the end of 2004.

World and Domestic Poultry Markets Roiled By Disease Outbreaks

The outlook for world and domestic poultry markets continues to be in a state of upheaval due to outbreaks of Avian Influenza in Asia and the United States. High Pathogenic Avian Influenza (HPAI) has been reported in a number of Asian countries, including China and Thailand, two of the world's top poultry producers and exporters. Making the outbreak even more serious is that the strain of HPAI reported in a number of the Asian countries is one that can be transmitted from chickens to people through close contact. After the outbreaks were confirmed, many nations placed bans on the importation of all poultry and poultry products from the infected countries. The United States and Brazil are expected to benefit from increased access to these markets. However, U.S. gains may be limited by price competition for certain products in these markets.

However, in the near term U.S. broiler exports have been disrupted by import bans announced by several countries following the announcement that two broiler flocks in Delaware have tested positive for Avian Influenza (AI). Officials in New Jersey have also indicated that AI is present in their State. In tests at live markets in New Jersey, four markets have tested positive for AI. However, officials noted that positive tests at live markets are not unusual. Officials in Pennsylvania have stated that samples from an egg laying flock have been sent to the National Veterinary Services Lab in Iowa for analysis. In the first flock found to be infected in Delaware, tests have confirmed that the AI was a low pathogenic type, one that is not transmittable to humans.

The findings of AI in New Jersey and the possibility of AI in Pennsylvania could greatly expand the time and resources needed for testing and surveillance. Based on 2002 production data, Pennsylvania is not a major poultry producer, accounting for only 2 percent of national broiler production. The picture is basically the same for turkey production, with Pennsylvania accounting for 4 percent of total U.S. production. In both cases New Jersey's production is very small. The possible impact on the egg side is stronger with New Jersey accounting for 1 percent of national

production and Pennsylvania accounting for 8 percent.

The HPAI outbreaks in Asia coming on the heels of the discovery of BSE in one cow in Washington State had placed considerable upward pressure on broiler product prices for domestic consumption and export. Some domestic consumers reacted to the finding of BSE by substituting broiler products for beef, and countries like Japan had begun increasing imports of U.S. broiler products after banning imports from Thailand and China. Prices for leg quarters in the Southern market averaged 28.3 cents a pound in January 2004, the highest monthly average since October 2001. The 12-city price for whole broilers averaged 68.7 cents a pound in January, up 3 cents from the previous month and the highest price since September 1998.

This forecast of tight supplies in the U.S. broiler market changed tremendously with the announcement that two broiler flocks in Delaware have tested positive for Avian Influenza (AI). The infected flocks have been destroyed and nearby flocks have been quarantined pending testing.

The full repercussions of the discovery of AI in the Delaware flock are uncertain at this time and will depend on the answers to a number of questions. First, what is the exact strain of AI responsible for the infections? The reaction of importing countries and domestic consumers will certainly be different if both infected flocks are proven to have low pathogenic AI rather than the HPAI strains impacting much of Asia. Second, will any other flocks test positive for the disease? If the infection is confined to these two flocks the reaction of domestic consumers is expected to be muted. Also if the infection is confined to these two flocks importing nations may be willing to limit their bans strictly to poultry products from Delaware. This has been the case with other disease outbreaks in the United States, but only when other nations have been assured that the outbreak has been confined.

In the short term, the AI outbreak is expected to reduce U.S. broiler exports. U.S. exports are expected to increase about 7 percent to nearly 5.3 billion pounds. The increase was based on the expectation that countries that had been importing poultry products from Thailand and China would

turn to Brazil and the United States as alternative sources. However, increases in the first quarter will be smaller as a number of major importers have placed bans on imports from the U.S. pending testing results and containment of the outbreaks.

In 2002, Delaware produced 257 million broilers, or 3 percent of total national production. Delaware is not a major egg or turkey producer. However, the broiler production area of Delaware is close to those in Maryland which produced 292 million broilers in 2002. Maryland does also have egg and turkey production, but in both cases it too is a relatively minor producing State.

Broiler Production Up in 2003, Turkey Production Declines

With the addition of the broiler slaughter data for December 2003, the preliminary estimates of broiler slaughter in 2003 are 8.5 billion birds and a

production of 32.7 billion pounds of meat. The number of broilers slaughtered is down 0.4 percent from the previous year, while meat production was up 1.3 percent. So, all the increase in meat production was derived from a 1.4-percent increase in average bird weight at slaughter. In 2003, the average liveweight at slaughter was 5.19 pounds, up from 5.12 pounds the previous year. Presently, 2004 domestic broiler meat production is estimated at 33.9 billion pounds, an increase of 3.8 percent.

Both the number of turkeys and production of turkey meat declined in 2003. Turkey meat production totaled 5.6 billion pounds in 2003, down 1.2 percent from 2002. The decline was the result of 1.4 percent fewer birds being slaughtered, more than offsetting a small increase in the average liveweight of all turkeys at slaughter. Turkey meat production in 2004 is expected to reach 5.7 billion pounds, an increase of less than 1 percent from the previous year.

Cattle Cycle Liquidation Phase Extended

There is little indication that the cattle industry will begin the move toward female retention in 2004, following on the heels of the eighth year of herd liquidation in this cattle cycle. Although moisture conditions have improved somewhat this winter, forage conditions remain very uncertain for the 2004 grazing season. Price direction since Bovine Spongiform Encephalopathy (BSE) was confirmed in a dairy cow in Washington State on December 23 has been erratic, but somewhat predictable particularly as the export markets were cut off. Initially cattle/beef prices declined sharply, but once the markets realized that domestic consumer reaction was muted and consumer beef demand remained relatively strong, endusers moved to replenish the meat pipeline that was drawn down over the holidays. This replenishing, was possibly a bit more hesitant than usual but occurred through mid- to late-January, resulting in strengthening prices. However, once the pipeline was replenished and export beef began to be assimilated into the market, prices declined. Even with improved forage conditions and the smallest cattle inventory since 1959, the present environment of uncertainty may not be very conducive to herd expansion.

Feed Costs Rise

Declining feed grain stocks and strong domestic and export demand is resulting in higher feed costs. This rise in feed costs will put additional pressure on cattle feeders due to high prices paid for feeder cattle placements last fall, many of which won't be marketed until this spring and early summer. The farm price of corn in 2003/04 is expected to range from \$2.35 to \$2.55 a bushel, up from \$2.15 to \$2.45 in January and potentially the highest price since the mid-1990s. Similarly soybean meal price ranges have been raised to \$230 to \$250 a ton, up \$5 a ton from January, and potentially the highest price since the mid-1990s. Uncertainties about meat meal use and production have helped support plant protein prices.

Hay Stocks Rise, Other Hay Prices Remain Strong

Hay stocks on December 1, 2003, were up nearly 7 percent from a year earlier, the largest December 1 stocks since 1998. Cattle inventories are down 5 percent since 1998, removing some pressure on hay stocks, but poor forage conditions going into winter and increased snow cover are increasing supplemental feeding in many areas. Weather conditions and supplemental feeding needs will be the key to prices on other hay over the next couple of months. The farm price of other hays in January averaged \$71.40 a ton, down from \$78.10 a year earlier, but up from \$66.90 in December. Alfalfa hay averaged \$83.60 a ton in January, down from \$98.50 a year ago, and also down from \$87.90 in December. Hay quality has been an issue, particularly for other hays, and the prices are likely sending mixed signals of fairly strong demand, but poorer quality hay.

Cattle Inventory Decline Continues

The number of cattle and calves on farms and ranches on January 1, 2004, was down 1 percent from a year earlier and down over 8 percent from the cyclical peak on January 1, 1996. Last year marked the eighth year of herd liquidation, there is no hint of movement toward increased female retention. Beef cow inventories were down only modestly, while dairy cow inventories were down nearly 2 percent. Beef and dairy heifers being retained for possible herd expansion were both down about 2 percent. The number of replacement heifers expected to calve this year declined somewhat more sharply, with beef heifers expected to calve down 2 percent and dairy heifers expected to calve down 4 percent. During 2003, beef cow slaughter rose over 2 percent, to the largest level since 1998, while dairy cow slaughter rose over 9 percent to the largest level since 1997. Overall, the supplies of cattle continue to be constricted; and once female retention begins, beef production will

decline even more sharply. At the present time, the reduced production potential will help the industry adjust to bans on beef exports. Beef production plus the export beef being absorbed domestically will result in domestic supplies rising to near 2002 levels, with trade levels being very uncertain. Global beef trade will adjust as prices rise in countries that formerly imported U.S. beef and potentially pull in products from countries that otherwise would be shipped to the United States. The problem is that the United States exports high quality fed beef, and imports lower quality grass-fed processing beef. For many enduses, even short-fed beef is a fairly poor substitute.

Feeder Cattle Supplies Continue To Decline

The 2003 calf crop was down 1 percent from a year earlier, but more importantly was the smallest calf crop since 1951. Large numbers of cattle were placed on feed last fall as fed cattle prices rose to record levels and fall/winter grazing prospects declined. The number of cattle grazing on small grain pastures in Kansas, Oklahoma, and Texas was down 22 percent from the good 2003 winter grazing season. Consequently, the number of cattle on feed in all States on January 1 was up 4 percent from a year earlier, while cattle on feed in feedlots with over 1,000 head of capacity were up 6 percent. The declining calf crop and large number of cattle on feed resulted in a 4.5-percent decline in the number of cattle outside feedlots and available for future feedlot placement. Feeder cattle supplies will continue to tighten, but the sharpest declines will occur as more heifers are retained for herd replacement, an event not likely before this fall, when heifers may be retained from this year's calf crop. Calf slaughter continues to decline, a function of declining calf crops, but also because more dairy steer calves are being bid into feedlots as feeder cattle supplies tighten.

Beef Production Declining, Feedlots Becoming Less Current

As markets adjust to lower fed cattle prices and uncertain demand prospects as more export beef must be marketed domestically, endusers will be less concerned with tight beef supplies than was the situation in 2003. In addition to much more chuck products being forced onto the domestic market, sharply lower by-product credits on variety meats

is also reducing bids on cattle. Cow slaughter is remaining fairly large this winter, due to relatively poor conditions in many areas. As spring grazing season begins, assuming near-normal grazing conditions, cow slaughter is expected to drop well below year-earlier levels. While reduced cow slaughter is expected to slow the decline in cow inventories, numbers will continue to decline until larger numbers of heifers are retained, bred, calve, and enter the cow herd. This series of events is not likely to begin until heifers from this year's calf crop are retained this fall, bred in 2005, calve in 2006, weaned in the fall of 2006, and begin to be marketed from feedlots in mid-2007. The stronger the female retention the sharper the decline in beef supplies over the next couple of years.

Beef production was down 3 percent in 2003 and is expected to decline another 3 percent in 2004, with production declining 4 to 5 percent below year-earlier levels through the third quarter. Fourth-quarter production is expected to be near the sharply lower 2003 levels. Slaughter weights continue to rise and are expected to exceed the weather-reduced year-earlier weights by late winter and move above the record levels of 2002.

Supply/Demand Relationships Seeking Balance

Boxed beef prices have ranged widely since December 23. After averaging \$153.71 a cwt, prices for light Choice boxed beef in December dropped to near \$127 a cwt in early January before rising to near \$147 per cwt as consumer demand remained solid and endusers refilled the meat pipeline pulled down over the holidays. However, once the pipeline was refilled and more of the export beef was being absorbed into the domestic market, prices again declined to near \$127 per cwt in mid-February.

Retail Choice beef prices were already declining in December following a meteoric rise from last winter to November's \$4.32 a pound peak, followed by a 20-cent decline in December, largely before BSE was discovered. The retail/wholesale price spread widened sharply in December, and with fed cattle prices dropping even further through mid-February, retail prices are expected to decline through summer, although the wholesale-retail spread may remain relatively wide as typically

occurs as live and boxed beef prices decline. Prices for Choice beef at retail averaged \$3.75 a pound in 2003, up sharply as supplies tightened from \$3.32 in 2002. Prices are expected to average in the mid-\$3.50s a pound in 2004, down 5 percent from the 2003 record, but up 7 percent from 2002.

Any opening of export trade would tighten beef supplies, resulting in stronger cattle/beef prices, however, although negotiations continue there is not a clear picture on when the BSE trade issues will be resolved. The United States and Canada are the only sources in the world market for high quality fed beef. Negotiations on both sides are likely to be intense, with much pressure to resolve the issue in a safe and scientific manner. Due to uncertainties as to the length of the bans, it is assumed that these restrictions will remain in place until such time as importing countries announce a change in policy. Subsequent forecasts will reflect any announced changes.

Fed cattle prices peaked in October at \$105.50 per cwt, but declined about \$10 per month through January's \$80.36 per cwt. Prices in mid-February were averaging in the mid-\$70s, but below year-earlier levels for the first time since October 2002. Feedlots remain fairly current with dressed weights averaging 15 to 20 pounds below a year earlier, however, as weights continue to rise and feedlots become less current, prices are expected to come under additional pressure of rising domestic supplies through summer. Prices are likely to move toward a low \$70s average this summer, before rising to the mid-\$70s this fall as supplies tighten seasonally, particularly if even modest levels of heifer retention begins.

Similarly, prices for 750-800 pound yearlings at Oklahoma City peaked in October-November just shy of \$104.50 per cwt, and were \$101.63 in December, before declining to \$87.36 in January. Prices remained in the mid-\$80s in February, well above year-earlier levels. However, as feedlot losses mount due to high feeder cattle prices last fall and declining fed cattle prices through summer, feeder cattle prices will come under increased pressure. Prices are likely to average in the low- to mid-\$80s through the year with only a modest rise expected this fall.

Utility cow prices remain strong and well above a year earlier, in spite of concerns of the increased costs of slaughtering cattle over 30 months of age. Slaughter remains fairly large, but is expected to decline as the grazing season begins. Prices for boning Utility cows in Sioux Falls are expected to average in the mid- to upper-\$40s for much of the year. Cow slaughter will be inversely related to grazing conditions, as the cow herd is already well culled and a good grazing year could result in the lowest proportion of the cowherd slaughtered in a number of years. If processed beef imports are priced into other markets Utility cow beef prices could rise fairly sharply. In 2003, with very tight supplies of fed beef and consequently tight beef trim supplies, the price of 50 percent beef trim rose sharply. Now, with large supplies of fed beef, particularly fatter chuck cuts remaining in the domestic market, the price of beef trim has dropped sharply while the price of 90 percent lean beef, both domestic and imported, has held up very well.

BSE-Related Trade Bans Continue To Affect U.S. Beef Trade

After hitting a record 2.57 billion pounds in 2003, beef exports may reach only 220,000 pounds in 2004 if bans currently in place remain for the entire year. Significantly reduced exports are likely in 2004 because all major markets except Canada have banned U.S. beef and live animal imports after discovery of a cow with BSE in Washington State on December 23, 2003. Since the date of their removal is unknown, those bans are treated as remaining in place for the entirety of 2004 for the purpose of forecasting trade.

U.S. beef exports had steadily increased throughout 2003 because of a weak dollar and generally strong markets, particularly in Japan. Throughout 2003, Japanese beef consumption increased steadily toward levels attained before the discovery of BSE in Japan in September 2001 reduced its beef demand. Exports of U.S. beef further accelerated after the May 20, 2003, discovery of BSE in Canada resulted in a worldwide ban on exports of Canadian beef and live cattle, and increased dependence upon U.S. beef as a substitute, principally by Mexico. Export growth then declined somewhat after the ban on Canadian beef was conditionally lifted in August, and it once again began flowing to Mexico. In spite of the renewed availability of Canadian beef to Mexico, U.S. exports remained strong enough to end 2003 at a record high level in spite of the post-Dec. 23 ban on U.S. beef and live animals. Removing the ban on Canadian live animals remains under consideration.

The discovery of BSE in North America has also affected U.S. beef imports. Beef imports in 2003 were down 9 percent compared with the previous year, mainly because the ban on Canadian beef extended from May 20 until August 8 when the U.S. Department of Agriculture (USDA) announced conditions for removing the ban. Beef imports from Canada were marginal in September as new import protocols were designed and written, but have returned to normal levels since October. Additionally, the demand for imported processing beef declined in 2003 because of a 4.5-percent increase in U.S. cow slaughter attributed to a continuation of drought conditions and poor returns

to dairy producers that increased the culling of cows.

U.S. beef imports may increase by 14 percent in 2004, to a record 3.3 billion pounds, as the result of a 15-percent decline in U.S. cow slaughter to a record low of 5.2 million animals. Imports of processing beef from Australia, however, are likely to decline from the levels reached in 2003 as that country redirects product to Japan as a substitute for banned U.S. beef. Last year, imports from Australia (and New Zealand) were 99 percent of their tariff-rate-quotas. However, processing beef from Canada could make up some of the shortfall in imports of processing beef from the former two countries in 2004.

So far, 2004 has not seen a surge in demand for imported processing beef, as its price has fallen below \$1.20 per pound, from a December high exceeding \$1.40 per pound. This lack of demand growth appears to be due to carryover of domestic processing beef from the 6-year high in fourth-quarter 2003 U.S. cow slaughter, and would help explain the falloff in beef imports from both Canada and Australia indicated by U.S. Customs data through January 31. Additionally, the weak U.S. dollar has made imported beef more expensive. Since imports from Australia may remain below year-earlier levels throughout 2004, U.S. demand for Canadian beef for processing may increase sharply as both domestic stocks of processing beef and U.S. cow slaughter decline.

Canada's capacity to satisfy increased U.S. demand for imported processing beef will depend, first, upon the number of animals less than 30 months old available for slaughter in Canada, as that is the age below which Canadian beef for export is allowed by the post-August 8 protocols. A sufficient number of those animals should be available, as the majority of the roughly 1 million head of live animals still banned from export to the United States meet that age criteria. More importantly, Mexican demand for fed beef from Canadian animals less than 30 months old may also increase as product from the United States is unavailable, and Mexico has limited capacity for increasing its own fed beef production. Even if a sufficient number of age-appropriate animals are available in Canada, the ability of Canada to supply

shortfalls in both the U.S. processing beef and the Mexican fed beef markets could be limited by slaughter capacity in Canada.

BSE-Related Trade Bans Have Reduced Live Cattle Trade

The post-May 20 ban on Canadian live cattle reduced imports of live animals from Canada by over 50 percent in 2003. Imports from Mexico ended the year at the high level of 1.2 million head because of dry conditions in Mexico, high prices in the United States for feeder cattle, and a weakened Mexican currency. Nevertheless, total imports of live animals declined by 31 percent to only 1.75 million animals.

Imports for 2004 may only approach 1.15 million animals shipped only from Mexico, as the ban on Canadian cattle is assumed to remain pending any changes in U.S. rulemaking (transshipments of cattle from Hawaii and other countries through Canada are not included in the ban, however). Imports of Mexican cattle could decline, however, if there is any movement to slaughter them in Mexico as partial substitutes for banned U.S. beef. However, Canada has been increasing beef exports to Mexico, traditionally its second largest market, and this is likely to reduce pressure on the Mexican

beef markets. Recent sharp declines in weekly feeder cattle exports to the United States may be due to the higher-than-normal precipitation levels that have prevailed throughout Mexico during January

(http://www.cpc.ncep.noaa.gov/products/analysis_monitoring/regional_monitoring/1cpnp9.gif), and may not portend decreased imports for the remainder of the year after dry conditions return.

U.S. cattle exports for 2003 declined by 60 percent to 100,270 animals. Exports of live animals to Canada began to decline following the May 20 ban on imports of beef and live animals from Canada. This caused a surplus of beef and live animals in Canada and less demand for U.S. feeder cattle. Consequently, exports of live animals to Canada dropped from 134,215 in 2002 to 68,100 in 2003. Exports of live animals to Mexico were weak throughout 2003 due, at least partially, to the 15-percent depreciation of the peso from mid-2002 through the end of 2003. Exports of live animals in 2004 may be less than 5,000 animals, as only a few minor markets are to allow imports of live U.S. cattle.

2004 Milk Production Now Seen Steady

Recent information led to lower projected 2004 milk production, now expected to be about unchanged from 2003. The January 1 cattle inventory indicated that supplies of dairy replacements will be significantly smaller than a year earlier. More importantly, availability of bovine somatotropin (BST) will be quite limited because the maker has imposed allocations that are expected to extend until the end of 2004.

On January 1, 2004, there were 4,020,000 dairy replacement heifers (500 pounds and over) on farms, down more than 2 percent from a year earlier. At 44.7 heifers per 100 milk cows, the replacement herd was still large by historic standards—although possibly not large in light of the elevated culling of recent years. The largest decline from a year ago was for older heifers. Heifers expected to enter the milking herd during the coming year were down 4 percent from a year earlier. At the start of 2003, a relatively large share of the replacement herd was due to start milking that year.

The absence of imported Canadian heifers and cows will add extra tightness to replacement supplies. Live animals can no longer be brought in from Canada because of BSE-related restrictions. In recent years, imports of female dairy breeding stock from Canada have been equivalent to 1 to 2 percent of the U.S. heifer herd. It is uncertain when these restrictions will be relaxed.

Tighter replacement supplies had already been anticipated, and January replacement prices were similar to those of 2003.

Demand for replacements has been considerably weakened by low milk prices and higher feed prices and probably has offset the effects of smaller supplies. In addition, the increase in farms leaving dairying has provided an alternative source of replacement cows.

BST Availability Limited

Monsanto, the maker of recombinant BST, has announced that current users of BST can buy only half their normal amount and no new customers will be accepted. The allocations are expected to run through the end of 2004 and replace the much more modest and shorter-lived allocations announced in December.

According to the National Animal Health Monitoring System of the Animal and Plant Health Inspection Service, about 22 percent of the milk cows in 2002 received BST during their current lactation. This implies that about 2 percent of the milk supply can be attributed to the use of BST.

The impact of the allocations is expected to be less than 1 percent for a number of reasons. Low milk prices and higher feed prices in 2004 likely would have discouraged BST use in any case. In addition, farmers probably had BST inventories on hand at the time the allocations were announced. Lastly, farmers selectively will eliminate those injections that they believe have the lowest odds of a profitable response, resulting in a less-than-proportional reduction in BST-induced milk.

Sheep: 2003 in Review and Perspectives on 2004

The sheep inventory and lamb and mutton production continued to decline in 2003, despite continued efforts to rebuild the flock through the **Lamb Industry Improvement Program** and the re-institution of the wool payment program. Continued drought conditions in the major sheep-producing regions contributed to the steady decline in inventory and hindered possible herd rebuilding efforts. Meanwhile, the price up-tick continued as demand remained stable and supplies tightened.

Production Down and Prices Increase Sharply

Commercial lamb and mutton production in 2003 fell to 199 million pounds, a decline of 20 million pounds (9 percent) from the previous year (fig. 1). In 2003, 9 percent fewer sheep and lambs were commercially slaughtered than in 2002 and average live weight at slaughter were 1 pound heavier. Weights increased in fourth-quarter 2003 as supplies became tighter and prices increased.

The price response to tight supplies throughout 2003 was evident. Choice slaughter lamb prices at San Angelo, Texas rose progressively, ranging from a low of \$85.81 per cwt in January 2003 to a high of \$97.25 per cwt in December 2003 (table 1). The annual average Choice slaughter lamb price at San Angelo was \$91.98 per cwt—\$19.67 greater than the previous year, and with much greater variability. The highest prices were seen in the third and fourth quarters of 2003 when supplies tightened considerably.

The United States banned live sheep imports from Canada in May 2003 as a result of a reported BSE-infected cow, reducing the number of animals destined to slaughter in U.S. plants. Lamb imports from Australia and New Zealand were also below normal from their flock rebuilding due to prior drought conditions, especially in Australia. The growing strength of the Australian and New Zealand currencies relative to the U.S. dollar may have hampered imports as well.

Tight supplies and higher slaughter lamb prices translated into higher retail prices for both

imported and domestic lamb meat (figs. 2 and 3). Retail prices of both imported and domestic lamb trended upward in 2003, and the gap between imported and domestic lamb prices narrowed.

Lamb and Mutton Imports Still Growing

Lamb and mutton imports continue to grow, though at a much slower pace than in the past decade. Lamb and mutton imports for 2003 came in at 168 million pounds, 4 percent above the same period the prior year. Total 2003 lamb and mutton imports rose at a much slower rate than the 11.2-percent increase between 2001 and 2002 and the 125-percent increase since 1996. Prior to last year, U.S. lamb and mutton imports surged for several years, largely to offset decreased lamb and mutton production. Australia and New Zealand are the major suppliers of lamb and mutton to the United States, supplying over 99 percent of all U.S. imports.

Exports of lamb and mutton for 2003 were just about 6.6 million pounds, 7 percent less than in 2002. Lamb and mutton exports in 2002 were 7.1 million pounds, up 8.9 percent over the previous year. Persistent drought conditions in the Western States resulted in higher-than-normal sell-off and slaughter of breeding ewes for the past 2 years. Mexico was the main recipient of the U.S. exported lamb and mutton before the BSE trade ban on which also affected lamb, mutton, and other meat-based preparations.

Live Sheep Imports Lower Than Normal

Until 2002, both live sheep imports and live sheep exports increased for 5 straight years. This trend was discontinued in 2003 when live sheep imports totaled only 67,778 head, (45 percent less than for the same period in 2002). Imports come primarily from Canada and are mainly slaughter lambs. The U.S. ban, in May 2003, of live sheep imports from Canada as a result of a reported BSE-infected cow, reduced the number of animals destined for slaughter in U.S. plants.

Live exports were also well below normal. Live exports for 2003 totaled 172,726 head, 232,852 head (57 percent) below the prior year. Monthly live sheep exports throughout 2003 were generally

lower than in 2002, but much of the export reduction took place in the latter half of 2003 when live imports were restricted. Tight supplies and attractive domestic prices possibly created incentives for producers to sell domestically rather than to export markets.

Ewe Retention Program Extended

On January 27, 2004, USDA announced that it would provide the U.S. lamb industry with \$18.85 million this fiscal year (2003/04) for payment to sheep and lamb producers to encourage the replacement and retention of ewe lamb breeding stock. This new, 1-year program will give producers an opportunity to enhance the genetics of their ewe lamb breeding stock.

The sheep industry has been involved in a number of sheep industry improvement efforts. Among these efforts was a 3-year, \$100 million, Lamb Industry Assistance Package, instituted by the U.S. Department of Agriculture in January 2000 aimed at helping the industry rebuild herds so as to better compete globally. One of the key elements of this program was the ewe lamb retention program. As part of this program, producers were provided with a ewe lamb incentive payment. The incentive payments were to help ewe lamb producers who were suffering financial losses from the poor market conditions. Eligibility required that producers purchase or retain a new lamb to expand their flock from August 1, 2001, to July 31, 2003. Despite the implementation of this program, ewe lamb replacements in the United States dropped 4.4 percent in January 2003, and again decreased in January 2004, though by less than 1 percent. The U.S. lamb crop totaled 4.12 million head in 2003, down 5 percent from the previous year.

Outlook for 2004

The U.S. sheep industry is forecast to continue its long-term trend of declining inventory and declining lamb and mutton production. Production declined by nearly 9 percent in 2003 but it is expected to decline at a much slower rate—about 2 percent in 2004. The fairly stable U.S. lamb

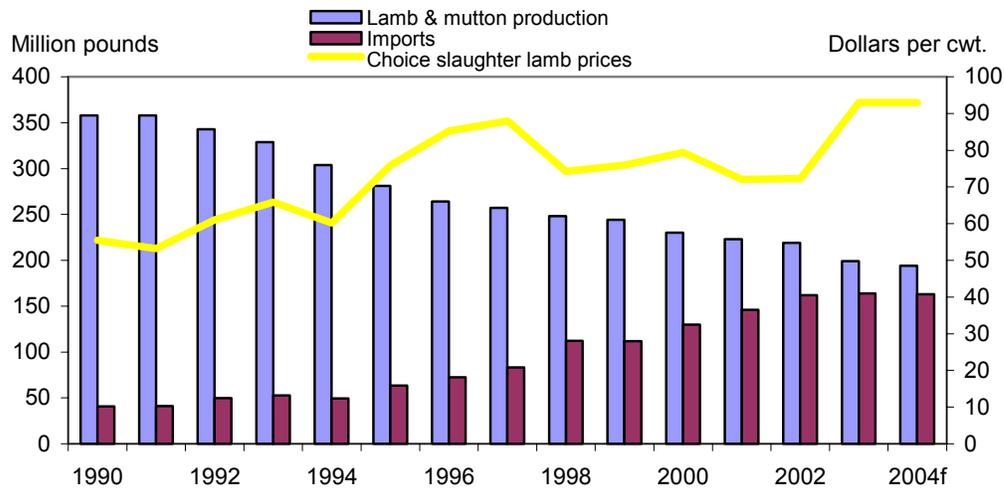
demand, coupled with the overall low supply in the imported market will continue to exert pressure on the already declining U.S. sheep stock, and will continue to support domestic lamb prices. Slaughter lamb prices at the San Angelo, Texas market are expected to remain fairly strong and show about a 1-percent increase in 2004, to \$91-\$95 per cwt, over the same period in 2003.

Sheep inventory declined 3 percent from the previous year to an estimated 6.09 million head on January 1, 2004. Sheep numbers are projected to decline through 2005. Despite the renewed efforts at herd rebuilding, the long-term drought conditions, tight market supplies, and attractive prices will continue to slow herd rebuilding.

Import demand is expected to remain strong but imports are expected to increase by less than 1 percent in 2004. The slowdown in the rate of increase over the past 3 years (12.5 percent in 2001, 11.2 percent in 2002 and 1.2 percent in 2003) is largely due to the drought conditions in Australia throughout much of 2002 and 2003 and more recently the growing strength in the currencies of the major suppliers--Australia and New Zealand--relative to that of the United States. Stock liquidation in Australia hindered its ability to produce extra heavy lambs for the U.S. market. Even with the improved weather conditions in 2003, herd rebuilding will make it difficult for the depressed supply to strengthen before 2005. Australia supplies nearly 60 percent of U.S. imported lamb.

Tight supplies are expected to persist throughout 2004 and maintain relatively high lamb prices. Domestic supplies will continue to be tight due to the low inventory and the plateauing of imports. Higher lamb prices, extension of the ewe lamb retention program, and the re-introduction of the wool support program are expected to encourage flock rebuilding. If these are successful, slaughter lamb supply will be even tighter in the near term. The re-introduction of a wool support program may also prompt producers to hold lambs longer for multiple shearing.

Figure 1

Production, imports and choice slaughter lamb prices, 1990-2004**Table 1--Monthly lamb and mutton statistics, 2002-2003**

	Mean		Monthly Low		Monthly High		Coefficient of Variation	
	2002	2003	2002	2003	2002	2003	2002	2003
Prices								
Prices received by farmers for sheep (\$/cwt)	28.92	35.48	23.50	28.30	38.70	44.40	5.77	5.88
Prices received by farmers for lamb (\$/cwt)	73.34	94.63	64.40	87.60	87.20	99.20	9.53	25.74
Choice slaughter lamb price, San Angelo (\$/cwt)	72.31	92.82	64.00	85.81	86.88	97.25	9.72	24.14
Production								
Commercial sheep and lamb production (million pounds)	18.16	16.63	15.10	15.00	22.20	19.40	9.83	11.48
Commercial sheep and lamb slaughtered (100 head)	273.85	246.99	230.60	222.20	324.30	295.60	11.59	11.24
Avg. dressed weight of sheep and lamb slaughtered	67.58	68.08	64.00	66.00	70.00	69.00	29.20	45.24
Imports								
Lamb and mutton imports (million pounds)	13.33	13.56	9.10	9.62	21.88	19.31	3.97	4.25
Lamb and mutton imports from Australia (million pounds)	9.10	8.27	5.93	5.71	16.46	12.92	3.18	3.37
Lamb and mutton imports from New Zealand (million pounds)	4.20	5.26	3.13	3.66	5.36	8.16	6.42	3.59
Live sheep imports (number)	11,596.83	11,296.33	5,840.00	12.00	18,115.00	17,996.00	3.03	1.67
Exports								
Lamb and mutton exports (1000 pounds)	591.77	496.18	268.61	-	998.22	694.90	2.72	2.43
Live sheep exports (number)	33,798.17	13,327.00	25,977.00	1,727.00	41,674.00	29,853.00	7.21	1.59

Figure 2
Retail prices of U.S. and imported lamb

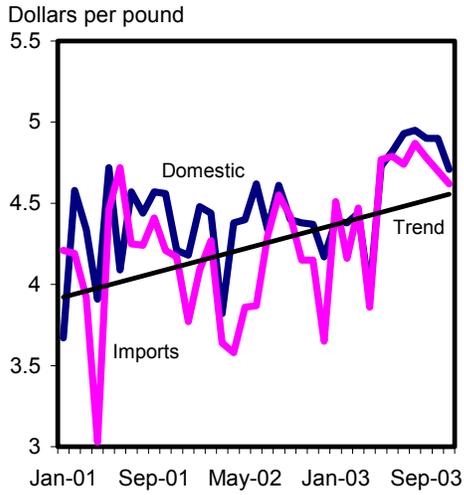
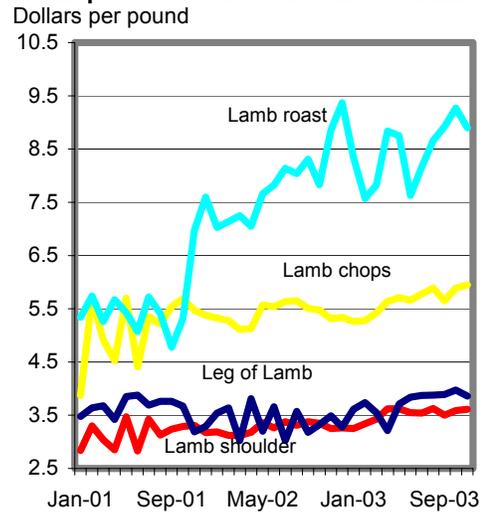


Figure 3
Retail prices of selected domestic lamb cuts



Retail Egg Prices Ended 2003 at Historical Records

For all of 2003, retail egg prices averaged \$1.24 per dozen, compared with \$1.03 last year and far above the historical record retail prices of \$1.11 per dozen registered in 1996. During 2003 retail egg prices (U.S. city average, grade A) rose from \$1.01 per dozen in May to \$1.55 in December 2003. The price increase was due to the only fractional increase in table egg production (.3 percent) which was below the increase in population, and good protein food demand. The number of U.S. egg-type layers was slightly above its 2002 level until May and slipped below that level for the remainder of 2003, tightening egg supplies. Year-to-year comparisons indicated that the gap in egg-type layers between 2003 and 2002 widened by more than 4 million birds in October. Egg-layer numbers climbed up during the fourth quarter in normal anticipation of increased holiday consumption, yet ended 2003 nearly 2 million birds below last year.

Wholesale Prices Rise Sharply

Similar to retail markets, the wholesale egg market is also an inelastic market, where small changes in supply can have a large price impact.

Figure 4

U.S. egg-type layers in 2002 and 2003

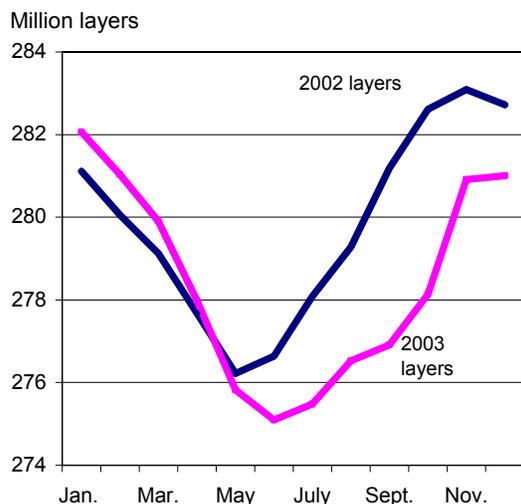
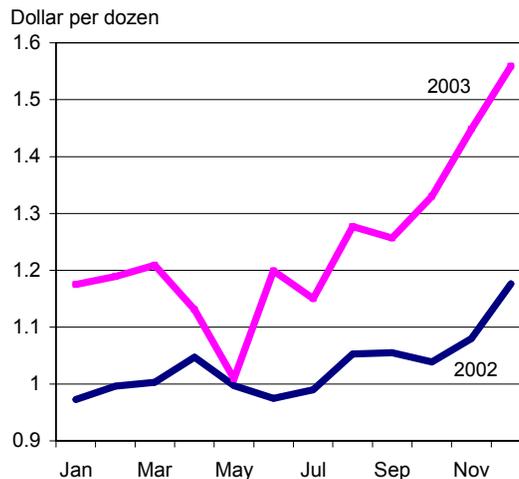


Figure 5

Retail egg prices (U.S. city average), 2002-2003



Consequently, wholesale table egg prices (NY grade A large) closed the fourth quarter of 2003 at 110.7 cents a dozen, 23.1 percent higher than the previous quarter, and 46.6 percent higher than the same quarter of 2002. The year-over-year wholesale egg price (NY grade A large) increased sharply from 67.1 cents per dozen in 2002 to 87.9 cents in 2003, or 31 percent. This was the highest wholesale price level since 1996, when the average was 88.2 cents per dozen. In 2003, however, high egg prices were likely due to tighter supplies, resulting from declining U.S. flocks of egg-type layers. The decline in the number of egg-type layers was a result of poor profitability during 1999-2002 and layer depopulation following the infectious Exotic Newcastle disease in California, Nevada, Arizona, and Texas in 2002-2003.

In 2004, wholesale prices will probably decline from the fourth quarter 2003 peak of 110.7 cents to an average of 96-102 cents per dozen, or about 12 percent, as the industry increases the number of layers, and the recent improved return provides an incentive to increase production. Average prices in 2004 are expected to remain above average prices in 2003.

Egg Production Up Moderately in 2004

Egg production is expected to increase 1.3 percent in 2004 due to expected continued higher prices improving producers' returns and anticipated

growth in hatching use for broilers. Hatching egg production in 2003 decreased by nearly 1 percent, but is expected to rise by nearly 3 percent in 2004. Table egg production is expected to rise only 1 percent. Table eggs account for 85 percent of total egg production.

During the fourth quarter of 2003, table egg production edged 2.4 percent above the third quarter, but hatching egg production trended in the opposite direction, ending the fourth quarter below the first three quarters. For all 2003, U.S. egg production (of both table and hatching) rose only marginally, to 7.27 billion dozen (.1 percent). Although U.S. egg-type layers' number averaged lower in 2003 compared with 2002, most of the production growth resulted in increasing the force molt percentage rate by less than 1 percent, as well as the number of eggs laid per 100 table egg-type layers in 2003 by a little over one and one-half eggs per 100 layers per year.

Per Capita Consumption Declines

Per capita egg consumption in 2003 decreased slightly to 254.2 eggs, a little over one egg less than the previous year. Since 1996, U.S. egg consumption has increased by nearly 8 percent, or about 18 eggs per person. In large part this was due to increasing demand for breaking eggs by the commercial baking, confections, and fast-food industries. This trend was clearly indicated by the amount of eggs going to the breaking market, which rose from 28 percent of total table egg production in 1996 to 29.3 percent in 2003, nearly 1 percent below last year, due to high prices that dominated the market during 2003. Higher shell egg prices have inverse impact on the quantity of eggs going to the breaking market, which declined 3.4 percent compared with last year. The trends will most likely reverse course in 2004, as prices are expected to rise only modestly.

U.S. Egg Exports Decline in 2003

In 2003, U.S. egg exports totaled 150 million dozen, 14 percent less than the previous year. Exports accounted for only 2.1 percent of total U.S. total egg production. Shell eggs (for human consumption and hatching) made up nearly 55

percent of total U.S. exports, and the remaining 45 percent were exported as processed albumen and yolk in dried or in liquid forms. Most exports are shipped to five markets: Canada, the European Union (EU), Hong Kong, Japan, and Mexico, that accounted for 77 percent of U.S. total egg and product exports in 2003, and 83 in 2002. The drop was mainly attributed to smaller U.S. shipments to the European Union (EU-15), from 21 percent of the U.S. total in 2002 to 11 percent in 2003. Traditionally, the largest U.S. egg export market is Canada, receiving over one-quarter of all exports, followed by the EU, Hong Kong, Japan, and Mexico. U.S. egg exports to Canada are twice as large as each of these countries.

The recovery of egg-layer flocks from avian diseases in the Netherlands, Belgium, and Germany was completed in the first few months of 2003, resulting in a substantial drop of U.S. exports from 14 million dozen in the first half of 2003 to only 1.5 million dozen in the second half. The poultry sectors of these countries were reduced substantially due to Avian Influenza. As a consequence, the Netherlands, Belgium, and Germany increased imports of shell egg and egg products to compensate for their egg production lost. Over 91 and 83 percent of U.S. shell- and processed-egg exports to the EU went to these three countries in 2002 and 2003, respectively.

The composition of U.S. exports was divided evenly between shell (hatching and non-hatching eggs) and processed eggs (dried albumen, yolk, and processed products) at 51 and 49 percent in 2002. In 2003, shell eggs accounted for nearly 55 percent of total U.S. exports. The remaining 45 percent were exported as processed albumen and yolk in dried or liquid forms.

In 2004, U.S. exports of shell-eggs and processed eggs are estimated to increase by 6-7 percent due to expected increases in demand from China and other Asian countries following the spread of highly pathogenic Avian Influenza, which led to millions of layers, parent, and grandparent birds being culled.

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Data

Retail Price Reporting for Meat

<http://www.ers.usda.gov/Data/Meatscanner/> A new ERS database contains monthly average retail prices for selected cuts of red meat and poultry, based on electronic supermarket scanner data. While not based on a random sample, the raw data underlying the database are from supermarkets across the United States that account for approximately 20 percent of U.S. supermarket sales. [Leland Southard](#), (202) 694-5187.

Web Sites

Animal Production and Marketing Issues, <http://www.ers.usda.gov/briefing/AnimalProducts/>

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Red meat and poultry forecasts

	2001	2002	2003				2004					
	Annual	Annual	I	II	III	IV	Annual	I	II	III	IV	Annual
Production, million lb												
Beef	26,107	27,090	6,287	6,907	7,078	5,962	26,234	6,050	6,625	6,700	6,000	25,375
Pork	19,138	19,664	4,889	4,734	4,795	5,491	19,909	4,950	4,900	4,925	5,300	20,075
Lamb and mutton	223	219	49	50	48	52	199	49	48	47	50	194
Broilers	31,266	32,240	7,770	8,238	8,454	8,200	32,663	8,040	8,565	8,800	8,500	33,905
Turkeys	5,562	5,713	1,379	1,438	1,407	1,422	5,646	1,355	1,415	1,430	1,460	5,660
Total red meat & poultry	83,006	85,669	20,550	21,546	21,954	21,295	85,346	20,607	21,724	22,077	21,476	85,884
Table eggs, mil. doz.	6,078	6,190	1,524	1,528	1,559	1,597	6,208	1,545	1,545	1,575	1,610	6,275
Per capita consumption, retail lb 1/												
Beef	66.2	67.6	16.2	16.9	16.8	14.6	64.5	16.0	18.0	17.9	16.0	67.8
Pork	50.2	51.5	12.6	12.5	12.5	14.1	51.7	12.6	12.6	12.8	13.5	51.5
Lamb and mutton	1.1	1.2	0.3	0.3	0.2	0.3	1.1	0.3	0.3	0.3	0.3	1.1
Broilers	76.6	80.5	19.6	20.6	21.3	19.7	81.1	19.7	20.8	21.5	20.5	82.5
Turkeys	17.5	17.7	3.6	3.9	4.6	5.3	17.4	3.7	3.8	4.2	5.6	17.3
Total red meat & poultry	213.6	220.5	52.7	54.6	55.9	54.4	217.7	52.7	56.0	57.1	56.3	222.1
Eggs, number	252.7	255.5	62.5	62.9	63.6	65.1	254.1	62.8	62.7	63.8	65.0	254.4
Market prices												
Choice steers, Neb., \$/cwt	72.71	67.04	77.82	78.49	83.07	99.38	84.69	76-78	72-76	69-75	73-79	72-77
Feeder steers, Ok City, \$/cwt	88.20	80.04	78.48	82.49	94.90	103.51	89.85	83-85	81-85	81-87	82-88	81-87
Boning utility cows, S. Falls, \$/cwt	44.39	39.23	40.53	46.52	49.84	49.60	46.62	45-47	47-49	45-49	45-49	46-48
Choice slaughter lambs, San Angelo, \$/cwt	72.04	72.31	91.92	93.71	89.48	92.82	91.98	94-96	92-96	89-95	89-95	91-96
Barrows & gilts, N. base, l.e. \$/cwt	45.81	34.92	35.38	42.64	42.90	36.89	39.45	38-40	39-41	38-42	34-38	38-40
Broilers, 12 City, cents/lb	59.10	55.60	60.30	59.60	63.40	64.60	62.00	68-70	70-74	67-73	65-71	68-72
Turkeys, Eastern, cents/lb	66.30	64.50	61.10	60.60	59.10	67.40	62.10	60-62	60-64	61-67	63-69	61-65
Eggs, New York, cents/doz.	67.20	67.10	77.20	73.90	89.90	110.70	87.90	103-107	92-98	91-99	96-104	96-102
U.S. trade, million lb												
Beef & veal exports	2,269	2,447	585	678	681	579	2,523	50	60	60	50	220
Beef & veal imports	3,164	3,218	810	741	619	836	3,006	835	900	855	740	3,330
Lamb and mutton imports	146	162	40	44	35	49	168	43	41	39	40	163
Pork exports	1,560	1,611	413	438	406	460	1,717	425	450	420	470	1,765
Pork imports	951	1,070	289	301	298	297	1,185	285	305	315	330	1,235
Broiler exports	5,555	4,807	1,200	1,166	1,182	1,384	4,932	1,240	1,345	1,340	1,350	5,275
Turkey exports	487	439	103	114	130	136	483	125	125	125	135	510

1/ Per capita meat and egg consumption data are revised, incorporating a new population series from the Commerce Department's Bureau of Economic Analysis based on the 2000 Census.

Economic Indicator Forecast 1/

1/

	2002		2003					2004				
	IV	Annual	I	II	III	IV	Annual	I	II	III	IV	Annual
GDP, chain wtd (bil. 1996 dol.)	9,503	9,440	9,556	9,608	9,797	9,894	9,718	9,999	10,085	10,177	10,272	10,136
CPI-U, annual rate (pct.)	2.4	2.2	3.9	0.6	2.3	2.2	2.2	2.1	2.0	2.2	2.2	2.1
Unemployment (pct.)	5.9	5.8	5.8	6.2	6.1	6.0	6.0	5.9	5.8	5.8	5.6	5.8
Interest (pct.)												
3-month Treasury bill	1.3	1.6	1.2	1.0	1.0	1.0	1.0	1.0	1.1	1.3	1.5	1.3
10-year Treasury bond yield	4.0	4.6	3.9	3.6	4.2	4.4	4.0	4.5	4.6	4.8	4.9	4.8

1/ Source: Survey of Professional Forecasters, Philadelphia Federal Reserve Bank, November 2003.

Dairy Forecasts

	2002		2003					2004				
	IV	Annual	I	II	III	IV	Annual	I	II	III	IV	Annual
Milk cows (thous.)	9,148	9,141	9,154	9,114	9,064	9,007	9,085	8,965	8,930	8,900	8,870	8,915
Milk per cow (pounds)	4,543	18,573	4,691	4,814	4,581	4,588	18,674	4,805	4,905	4,665	4,675	19,050
Milk production (bil. pounds)	41.6	169.8	42.9	43.9	41.5	41.3	169.7	43.1	43.8	41.5	41.5	169.9
Commercial use (bil. pounds)												
milkfat basis	43.9	170.5	41.2	43.0	44.7	45.1	174.0	42.2	43.7	45.0	44.9	175.8
skim solids basis	41.2	163.6	40.0	41.2	41.9	41.7	164.8	41.0	42.0	43.1	42.8	168.8
Net removals (bil. pounds)												
milkfat basis	0.1	0.3	3.1	3.2	1.5	0.9	8.7	-0.1	0.1	0.1	0.0	0.1
skim solids basis	1.4	9.8	0.0	0.0	0.0	0.0	0.0	2.1	2.1	1.1	0.3	5.6
Prices (dol./cwt)												
All milk 1/	11.97	12.11	11.37	11.07	13.20	14.40	12.51	13.05	12.10	12.50	14.10	12.95
								-13.35	-12.70	-13.40	-15.10	-13.65
Class III	10.10	10.42	9.52	9.62	13.29	13.24	11.42	11.50	11.05	11.70	12.70	11.75
								-11.80	-11.65	-12.60	-13.70	-12.45
Class IV	10.52	10.81	9.89	9.74	10.05	10.33	10.00	11.05	10.65	10.80	11.15	10.95
								-11.45	-11.35	-11.80	-12.25	-11.75

1/ Simple averages of monthly prices. May not match reported annual averages.