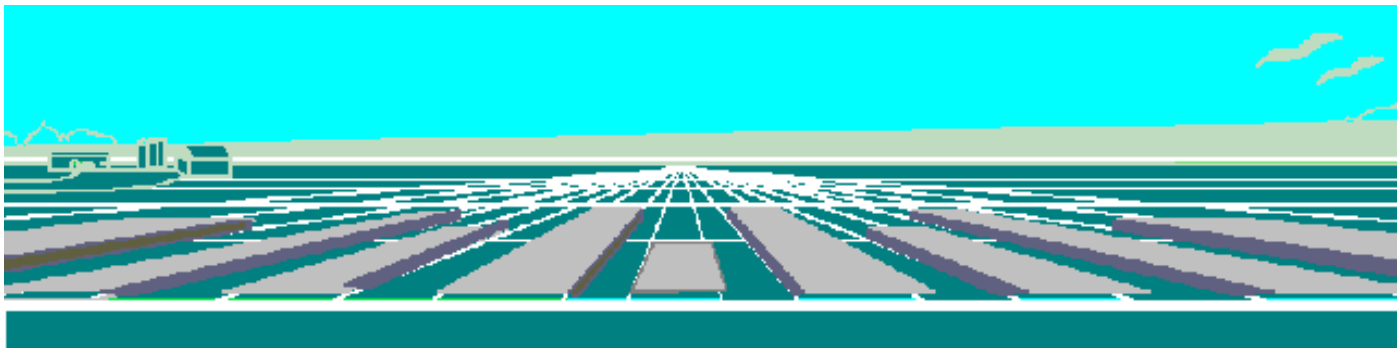

January 2, 2001 **Ames, Iowa** **Econ. Info. 1804**

GRAIN PRICES TO REFLECT STARLINK, SOUTH AMERICAN WEATHER, AND FARMER MARKETING PATTERNS

Corn and soybean futures prices have shown some volatility in the last week related to potential delivery problems on the Illinois River, the main delivery area for the two crops under a new futures delivery system implemented last year. The corn delivery area is from Pekin north, while for soybeans, it is the entire Illinois River from Chicago to St. Louis. Delivery is by barge shipping certificates, in contrast to the previous system used for decades in which grain was delivered into approved warehouse storage. Because of extreme cold, parts of the Illinois River are icebound—a highly unusual condition. Winter navigation problems on the Illinois may have some impact on the basis under expiring January futures contracts. If delivery cannot be made, the expiring futures contracts will not necessarily reflect cash market conditions. Potential delivery is the link connecting the cash and futures prices. However, grain buyers have a long-standing rule that when grain is bought and sold in the month that the nearby futures contract expires, pricing of grain should be done with the next-out futures contract month. For that reason, corn and soybean prices will likely reflect action in the March futures contracts in the next two to three weeks, rather than the January futures. In times of certain extenuating circumstances, shorts (sellers) holding unexpired contracts are not required to meet daily futures contract load-out delivery requirements, thus causing part of the costs of unexpected transportation problems to be passed to buyers of the contracts.

Major factors in the corn market continue to be Starlink and its negative impact on exports, and winter weather, which is a positive influence on feed demand. Protocol has been established for testing corn for Starlink for foreign processor markets, and the feed protocol is being finalized; however, problems still exist in Far East markets. Japanese buyers say they are being asked to pay for the added testing, which amounts to about $0.12/ bu. according to our Japanese contacts. Also, some corn tested earlier in the marketing system and found to be free from Starlink reportedly was found to be Starlink-contaminated further up the marketing system. As a result, major grain buyers in Japan and South Korea are less aggressive than normal in buying U.S. corn. In a related development, Pioneer announced it would postpone sales of six varieties of GMO corn that are not approved by the European Union. This action supports advice to producers by two major processors, cautioning against planting varieties of crops that are not approved for all uses worldwide.

Seasonality and Cash Grain Marketing Decisions

Figures 1 and 2 show the seasonal pattern of Iowa monthly average grain prices for the last 21 years. As expected, the seasonal low in prices, on average, comes in October. The average high was in May, a bit earlier than many would expect. The average price rise from October to May for corn was 23 cents per bushel; for soybeans, it was 48 cents. These are the returns available for storing corn and soybeans with a strictly cash marketing strategy. Returns would be somewhat greater if we used weekly or daily prices. For corn, the average return over interest cost for storing corn from October to May was 13 cents per bushel; for soybeans it was 10 cents per bushel. These are the returns available to cover all other costs of storage beyond interest expenses. Under current farm programs, returns may be a bit greater as market incentives replace government incentives for grain storage. In some years, returns for hedged storage were substantially greater than those for unhedged storage.

Another key aspect of grain storage is the seasonal variation in price risk. That is especially true for producers who take the Loan Deficiency Payment (LDP) but continue storing the grain. Figures 3 and 4 show the percentages of time that corn and soybean prices declined from one month to the next over the last 21 years. The heavy red line on the center of each graph represents 50% of the time that prices declined from one month to the next. Note that the low-risk

season is the first few months after harvest. ***Higher risk periods are: (1) February, when farmers often sell grain to meet cash-flow requirements, and (2) from late spring onward into the summer and fall. Note that Iowa cash corn prices declined 72% to 78% of the time for each additional month of storage from May through September. Soybeans exhibited a similar pattern, but with a little less risk of declining prices from June to July.*** Reasons behind the pattern relate to weather and crop developments, and a tendency of many farmers to hold grain into summer months as a hedge against adverse weather and a small crop. History says that such weather develops less than one-third of the time over a long period of years. With favorable growing conditions, prices tend to decline into the summer and fall.

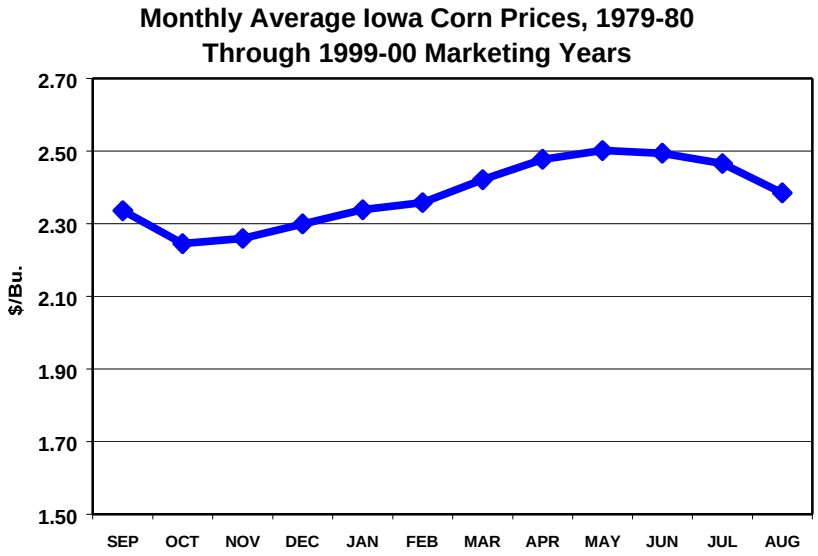

Figure 1

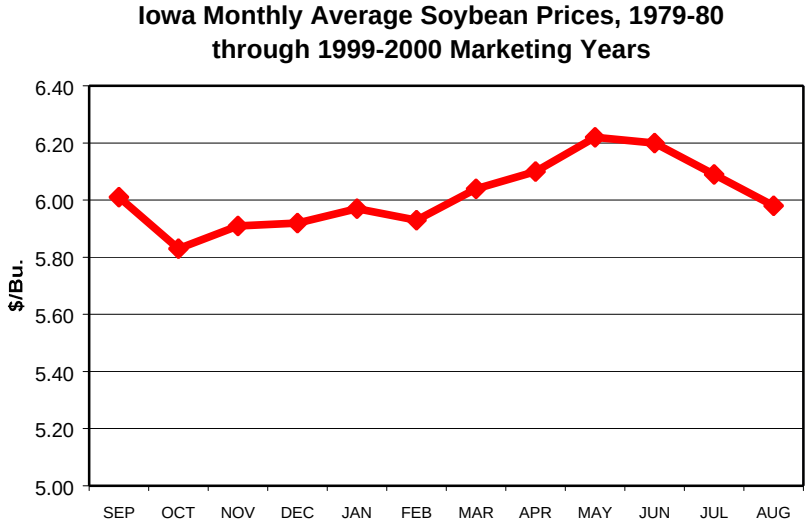

Figure 2

Implications for Marketing

For those who have already taken the LDP, these patterns say that a "plan-ahead" marketing strategy may be very important this winter. If you have large cash-flow needs coming due in late winter, you may want to watch for opportunities to lock in prices ahead of the time you will actually need the cash. Also, these patterns suggest that farmers who are concerned about possible 2001 weather problems may want to consider other ways of retaining ownership than just storing the grain. One alternative would be to buy September, November, or December call options.

Buying calls gives you a known maximum risk exposure—the upfront cost of purchasing the options. With major drought or severe flooding across the Corn Belt, the options contracts would increase in value as the futures trend strongly upward. If markets decline, the maximum loss exposure would be just the initial purchase cost. If the corn or soybeans is stored, the loss-exposure includes both the price decline and the storage-related costs. Also, if the grain is stored on the farm, a quality deterioration risk is present.

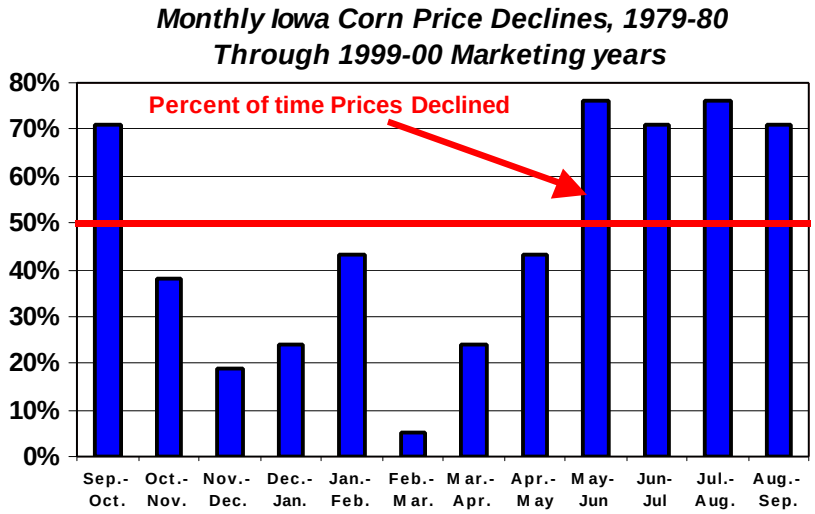

Figure 3

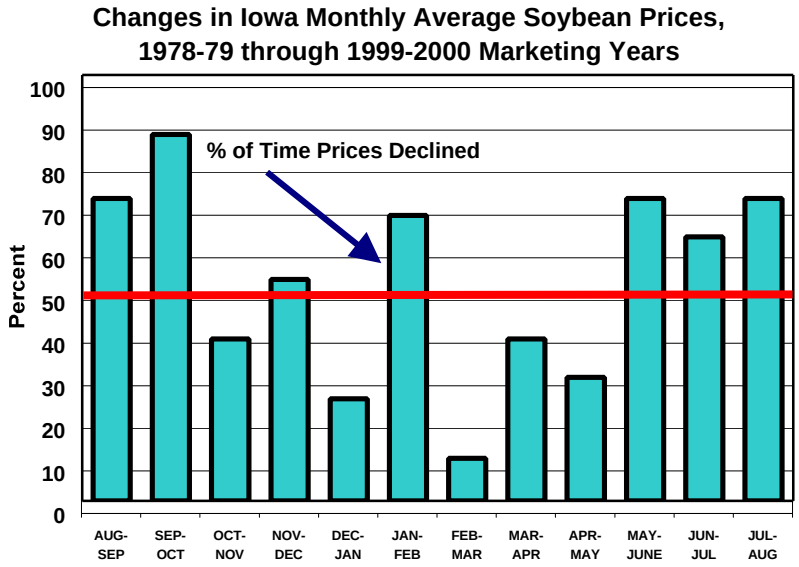

Figure 4

South American Crops

While parts of Brazil's three southernmost provinces and parts of Argentina's Corn/Soybean Belt had below normal precipitation in December, crops there appear to be in generally good condition. Brazil's soybean plantings are believed to be modestly above those of last year, and there is an estimated 16 percent rise in Argentina's planted soybean acreage. The increased Argentine plantings reflect extensive double cropping after the winter wheat harvest, and the large wheat acreage this season. The European meat meal-feeding ban will make soybean prices potentially more sensitive than usual to South American weather developments. World oilseed users and traders are counting on South America to fill a significant part of the increased EU demand for soybean meal, and any major threat to South American crops would bring added demand for U.S. soybeans.

Robert Wisner

DECEMBER HOGS AND PIGS REPORT ANALYSIS

The December USDA Hogs and Pigs report estimated all hogs and pigs on farms in the U.S. at 59.85 million head, with 6.28 million breeding animals and 53.57 million market hogs. All hogs and pigs are estimated to be 0.9 percent above the December 1, 1999 number and 3.8 percent below 1998 numbers. The breeding herd is 0.7 percent larger and the market hog inventory is 0.9 percent above December 1, 1999 inventory levels. The breakdown of market hog weights shows the heavier hog inventories down and the lighter weight animals up. The under 60 pound pigs and those weighing 60–119 pounds were up 1.7 percent. Market hogs at 120–179 pounds were down 0.2 percent and the 180-pound and over pigs were down 0.7 percent. Table 1 summarizes the report for the U.S. and Iowa.

September–November farrowings were up 1.1 percent and pigs per litter were also up 1.1 percent. The September–November pig crop was 2.3 percent larger than in 1999. Farrowing intentions confirm that expansion is taking place but the pace may slow in the future. December–February 2001 farrowing intentions are up 3.9 percent, but the March–May farrowing intentions are only up 1.0 percent, indicating a slowdown in the expansion phase.

Most of the estimates in the report came in very close to the pre-report trade. The biggest surprises were in the farrowing intentions. The September USDA Hogs and Pigs report first estimated the December–February 2001 farrowing intentions up 3.4 percent. This report estimated them to be up 3.9 percent, considerably higher than the 2.5 percent increase estimated in the pre-report, and actually above the top end of the range estimates. Conversely, the March–May numbers from the pre-report estimates were for a 3.3 percent increase in farrowings. Actual numbers from the report were for only a 1.0 percent increase, a number below the bottom of the range of pre-report estimates.

Table 1. December USDA Hogs and Pigs Summary.

	US		Iowa	
	1,000 Head	% Change	1,000 Head	% Change
All Hogs and Pigs	59,848	0.9	15,400	0.0
Breeding Herd	6,275	0.7	1,120	-3.4
Market Hogs	53,573	0.9	14,280	0.3
Under 60 Pounds	19,566	1.7	4,410	1.1
60 – 119 Pounds	13,333	1.7	3,950	4.8
120 – 179 Pounds	11,051	-0.2	3,170	-1.2
180 Pounds and Over	9,624	-0.7	2,750	-5.2
Sows Farrowing				
Sept – Nov	2,875	1.1	460	-6.1
Dec – Feb ’01 Intentions	2,906	3.9	450	-1.1
Mar – May ’01 Intentions	2,918	1.0	460	-7.1
Pig Crop				
Sept – Nov	25,536	2.3	4,094	-6.1
Pigs per Litter				
Sept – Nov	8.88	1.1	8.90	0.0

With the breeding herd up nearly 1 percent, pork production will be above year earlier levels throughout most of 2001. The September USDA Hogs and Pigs report put the breeding herd at 6.3 million head, down 0.6 percent from 1999. Sows farrowing during September–November were up 1.1 percent and pigs per litter were also up 1.1 percent, resulting in a 2.3 percent larger September–November pig crop. Slight revisions in the December report show the September 1st breeding herd was actually 0.9 percent lower than in 1999. Continued productivity in the breeding herd has caused a 0.9 percent reduction in breeding numbers to produce 2.3 percent more pigs. Higher slaughter weights will potentially push pork production even higher.

This productivity is estimated to continue, based on the December report. The breeding herd is 0.7 percent higher and farrowing intentions for December–February 2001 are up 3.9 percent. An additional 1.0 percent increase in pigs per litter could push the December–February pig crop and third quarter slaughter up over 5 percent. Further out, the March–May intentions suggest a slowdown in breeding herd productivity. However, continued growth in litter size will push fourth quarter slaughter above 2000 levels.

Supply and Price Forecast

Pork producers received a belated Christmas present. The December Hogs and Pigs report indicted that producers have started to expand, but have slowed the rate of growth to a more manageable level than was predicted. Pork supplies are forecast to increase an average of 3 percent over 2000 levels with the largest year-over-year increase coming in the third quarter. The fourth quarter was of greatest concern and posed some risk of repeating the fourth quarter of 1998. It now appears that, while supplies will be larger than those of this year, supplies will not be large enough in the fourth quarter of 2001 to cause a packer constraint that sent December 1998 prices to record lows.

Demand remains relatively strong. Export growth is 4.7 percent over that of the previous year. Domestic demand, which has been remarkably strong, may slow on a slower economy, higher heating prices, and post-holiday credit card bills. Supplies of beef will begin to decline in the second quarter, if not sooner, and poultry production has slowed its rate of increase to a forecasted 2-4 percent for 2001.

In addition to changes in inventories, pig crops, and farrowing intentions, pork supplies continue to increase due to improved productivity. Slaughter weights have increased an average of 1.7 pounds a year or about 0.7 percent, and pigs per litter have increased at about the same percentage rate. Thus, from the same number of farrowings, pork production is expected to increase 1.5-2 percent a year.

First quarter supplies will be comparable to year earlier levels with prices steady to slightly higher on strong demand. Closing futures prices on the day of the report, adjusted for a 5-year average basis, also indicate a price close to that of the previous year.

Forecast Pork Supplies and IA-MN Live Prices and pre-Report Hedge Price.

	% Chg in Supply	2000 Actual	Price Forecast	Futures Forecast
Jan-Mar	0	39.16	38-41	39.76
Apr-Jun	+3	48.16	43-46	41.53
Jul-Sep	+5	44.15	37-40	41.75
Oct-Dec	+3	38.67	34-37	36.26
2001	+3	42.54	38-41	39.82

Second quarter prices are forecast to average in the low-mid $40s based on 3 percent higher supplies. Futures are not currently offering hedge prices this high. Third quarter should see 5 percent larger supplies given the 4 percent increase in farrowings, larger litters, and heavier carcasses. As a result, prices are expected to average in the upper $30s to near $40.

Fourth quarter supplies are forecast to increase approximately 3 percent and prices should average in the mid-$30s. Futures are currently offering hedge prices higher than my forecast for the third and fourth quarters.

The forecast prices are above breakeven for average producers through the third quarter, considering the current grain price outlook. As a result, expansion is expected to continue. The profit prospects are not such to warrant an all-out expansion based on new construction, but rather modest growth from existing facilities and imports from Canada. If this expansion continues as expected, the next trouble spot would appear to be fourth quarter 2002. Fourth quarter will continue to be the large supply quarter and, while profits will likely be squeezed during 2002, prices are not expected to be low enough to cause liquidation until late 2002.

Slaughter Weights

Iowa-Southern Minnesota hog slaughter weights have dropped over 3 pounds in the last 3 weeks after peaking at a new record level in early December. Slaughter weights reached a peak of 264.0 pounds for the week ending December 2nd and fell to 260.7 for the week ending December 23rd. Weights dropped sharply due to the winter weather in December, but are still over 2 pounds above year earlier levels. Just two weeks prior, weights were nearly 3.5 pounds above 1999 levels. For 2000, slaughter weights have averaged 259.4 pounds or 2.3 pounds higher than in 1999, nearly a 1% increase.

Figure 1 shows the weekly Iowa-Southern Minnesota slaughter weights for 1998, 1999, 2000, and the 1995-1999 five-year average.

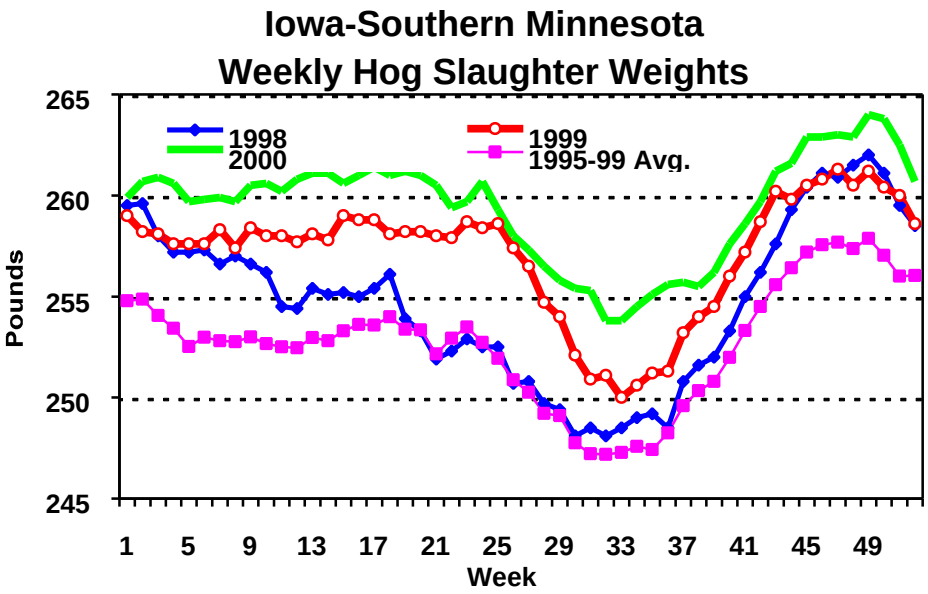

Figure 1

Cold Storage

Figure 2 shows pork in cold storage for 1998, 1999, 2000, and the 1995-1999 five-year average. Cold storage stocks increased slightly from 444 million pounds on October 31st to 453 million pounds at the end of November. November marked the fourth consecutive month with inventories above year earlier levels. Seasonally we can expect cold storage to increase until April. Demand will play a big role in determining how large supplies will grow in 2001 as pork production increases.

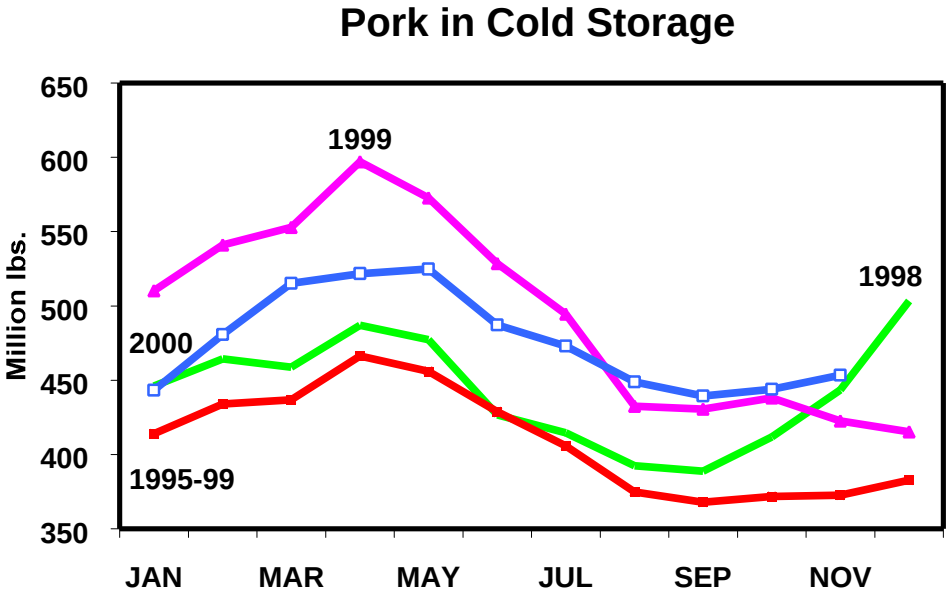

Figure 2

Slaughter

Since the September USDA Hogs and Pigs report, slaughter numbers have been running lower than expected. September–November Federally Inspected hog slaughter totaled 25.37 million head, down 2.6 percent from 26.06 million

in 1999. The September report estimated the over 180 pound market hogs at 1.4 percent lower and the 120–179 pound pigs at 0.7 percent lower. Year-to-date Federally Inspected slaughter is down 3.9 percent.

Federally Inspected Slaughter for the previous 3 weeks ending December 23rd has been up 0.4 percent from year earlier levels. This is affected somewhat by Christmas falling during this time period in 1999. Slaughter for the first two weeks of December has been down 5.1 percent compared with year earlier levels. Hogs over 180 pounds were estimated to be 0.7 percent lower as of December 1st.

Additional Information

Beginning with this repor,t the USDA will be issuing a monthly report with sow and gilt inventories, number of animals bred, and monthly farrowings and pig crop estimates. The sow and gilt inventory and animals bred during the month for the previous three months is shown in the December report. In the future, as this data continues to be collected, it will be very helpful in estimating future slaughter levels and pork production.

Industry Structure

The December USDA Hogs and Pigs report also reports farm numbers and inventory levels. Numbers of operations with hogs continued to decline from 98,610 in 1999 to only 85,760 in 2000, a decrease of over 13 percent. Table 2 gives the breakdown of numbers of operations by size groups and the percent of inventory.

Table 2. Percentage Breakdown of Number of Operations and Percent of Inventory by Size Groups.

	2000		1999	
	% Of Operations	% Of Inventory	% Of Operations	% Of Inventory
1 – 99 Head	55.5	1.0	53.6	1.5
100 – 499 Head	20.6	6.0	23.1	8.0
500 – 999 Head	9.0	8.0	9.4	9.0
1,000 – 1,999 Head	6.8	13.0	6.6	13.0
2,000 – 4,999 Head	5.6	21.5	5.2	22.0
5,000+ Head	2.4	50.5	2.1	46.5
Total	100.0	100.0	100.0	100.0

John Lawrence and Alan Vontalge