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## MARCH HOGS AND PIGS SUMMARY

The USDA March Hogs and Pigs Report estimated that there were 58.1 million hogs on U.S. farms March 1, with 51.9 million market hogs and 6.2 million breeding animals (Table 1). These figures represent 3.4 percent fewer total hogs, a 4.8 percent smaller breeding inventory, and 3.2 percent fewer market hogs. The liquidation phase of the hog cycle is continuing, but it has slowed its pace. Average pork producers are back into black ink after an extended period of losses. The estimated returns to farrow-to-finish operations were positive in February 2000, the first time they have been positive since October 1997.

Iowa Southern-Minnesota barrow and gilt prices are expected to average in the low to mid-\$40s until mid-May when a seasonal rally is expected to move live prices into the upper $\$ 40$ s for most of the summer with peaks over $\$ 50$. Fall prices are forecast to average in the low $\$ 40 \mathrm{~s}$.

While the current and forecast smaller supplies are supporting live hog prices, they cannot fully explain why first quarter prices are $\$ 13 /$ live cwt higher than the year before on 4.7 percent lower supplies. This type of price movement is demand driven. The forecasts below reflect strong demand continuing, but possibly waning toward the fall. Weaknesses in demand will be quickly reflected in weaker than expected prices.

Second quarter supplies will come from the Sep-Nov pig crop that was 2.7 percent below a year ago. Total pork supplies are forecast to be 2-3 percent lower than the same period as a year ago on heavier slaughter weights. Prices are expected to average in the upper $\$ 40$ s for the quarter.

Third quarter supplies will come from the Dec-Feb pig crop, which is 1.9 percent lower than the previous year. Increased slaughter weights will push total pork supplies to near year earlier levels. The Dec-Feb farrowing intentions in the December report were 2.9 percent lower than the year before and actual farrowings
decreased 2.5 percent. Increased pigs per litter raised the pig crop to within 1.9 percent of the 1999 value. In spite of the modest decline in pork supplies, prices are expected to average in the upper $\$ 40 \mathrm{~s}$ for the third quarter on good demand.

Table 1. USDA March Hogs and Pigs Summary.

|  | US |  | Iowa |  |
| :--- | ---: | :---: | ---: | ---: |
| Category | $\mathbf{1 , 0 0 0}$ | \% | $\mathbf{1 , 0 0 0}$ | \% |
|  | Hd | Chg | Hd | Chg |
| All Hogs and Pigs | 58.15 | -3.4 | 15.00 | 1.4 |
| Kept for Breeding | 6.22 | -4.8 | 1.16 | -4.9 |
| Market | 51.93 | -3.2 | 13.84 | 1.9 |
| Under 60 Pounds | 19.31 | -3.3 | 4.34 | -0.9 |
| 60-119 Pounds | 12.51 | -3.0 | 3.66 | 5.2 |
| 120-179 Pounds | 10.65 | -3.2 | 3.05 | 2.7 |
| 180 Pounds and Over | 9.46 | -3.4 | 2.79 | 1.5 |
| Pig Crop |  |  |  |  |
| Sep-Nov | 25.38 | -2.7 | 4.45 | 0.3 |
| Dec-Feb | 24.77 | -1.9 | 4.07 | -2.5 |
| Farrowing Intentions |  |  |  |  |
| Mar-May | 2.89 | -4.0 | 0.48 | -7.7 |
| Jun-Aug | 2.85 | -2.4 | 0.48 | -2.0 |

The fourth quarter supplies will be farrowed in the Mar-May period. Producer intentions are to farrow 4.0 percent fewer litters, but with improved weaning rates, the pig crop may decline only $2-3$ percent from the year before. Prices are expected to average in the low $\$ 40$ s.

First quarter 2001 slaughter will be largely determined by the Jun-Aug pig crop. Farrowing intentions are estimated to be $2.5 \%$ below the year earlier. Given the improved productivity of the breeding herd and heavier slaughter weights, pork supplies could show a year-overyear increase as early as the first quarter of 2001. Prices are currently forecast to average in the low $\$ 40$ s.

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## Other Factors...

Competing meats: Beef supplies are expected to be lower in the second half of 2000 than in 1999. Current large cattle-on-feed inventories will be partly offset by lower slaughter weights as we begin harvesting the larger number of calf-feds placed last fall. Poultry supplies are expected to slow their growth this year, but that is a similar story to what we had heard before, and yet supplies continue to climb approximately 5\% a year.

Canadian hogs: 1999 live slaughter hog imports from Canada totaled 2.1 million head, 23 percent lower than the same period in 1998. This decline was offset by growth of feeder pig imports. In 1999 Canadian feeder pig imports also totaled 2.1 million head. The new Maple Leaf plant in Manitoba is on schedule to reach full single shift capacity on April 1. While feeder pig imports may increase, slaughter hog imports will likely decrease in the future.

## Iowa Inventories...

Iowa's hog inventory is up 1.5 percent compared with that of March 1999 (Table 1). The breeding herd is 60,000 head or 4.9 percent lower than a year ago. Market hog inventories were higher than in 1999 with
the exception of under-60 pound pigs. The pig crops since June and farrowing intentions through May are also lower. North Carolina, the second largest hog producing state, had a breeding herd inventory that was unchanged from the previous year at 1 million head. Colorado, Michigan, and Oklahoma were the only top 17 states to post a larger breeding herd. Iowa, Oklahoma, and Texas were the only states posting a larger market hog inventory.

## Management Implications...

Pork producers are entering a period of time that is expected to be profitable. Total cost of production is estimated to be in the low to mid-\$30s for average Iowa producers. Prices for the remainder of 2000 should be higher than total costs. However, the losses accrued over the past 28 months will take a while to recoup.

While pork prices appear to be strong, there is considerable price risk on the input side. Dry conditions in the Corn Belt may pressure corn and soybean meal prices higher, and a nervous grain trade will likely add volatility to the markets through planting and the early growing season. Pork producers should consider locking in at least a portion of the feed needs before planting season.
...John Lawrence

## PLANTING INTENTIONS SHOW MAJOR CAUTION FOR SOYBEAN GROWERS

## Prospects for Large Rise in 2001 Carryover Stocks...

The March 31 prospective plantings are a caution to soybean growers that downward price risk is substantial, provided the U.S. average yield is near normal. Closing March 31 November soybean futures prices were about \$1/bu. above last fall's harvest-time prices in response to drought concerns.

> With the intended acreage and a U.S. average soybean yield 0.6 bushels per acre above 1998 (bringing the yield up to 39.5 bu./A.), a $9.5 \%$ increase in total utilization from the current level would be needed to prevent an increase in ending carryover stocks. That would be a growth rate in soybean utilization, which is more than double the $4.2 \%$ average of the last 20 years. If yields were to recover to the 1994 U.S. record of 41.4 bu./A, total utilization would need to increase by $14.7 \%$ from the current marketing year's expected utilization, more than triple the average growth rate of the last two decades. Adjusting the 1994 record soybean yield for a 0.3 bu./A annual growth in soybean yield potential, a yield deviation from trend matching 1994 would require a $19.7 \%$
increase in total utilization of U.S. soybeans to prevent a rise in carryover stocks next year. That would be more than four times the long-term average growth rate.

Out of the last 20 soybean marketing years, five had a growth rate exceeding $9.5 \%$ and were years following short U.S. soybean or world oilseed crops and reduced utilization. The year ending this August 31 was not a short crop by either measure. Only one year out of the last 20 has had an increase in total utilization of U.S. soybeans equaling or exceeding $14.7 \%$. That year was 1994-95, which followed 200-year floods in 1993 and sharply reduced U.S. production, with an accompanying sharp drop in soybean use in 1993-94.

While sharply accelerated demand for U.S. soybeans is possible in the next marketing year, key indicators do not currently point to an increase of the magnitude needed to hold stocks constant with normal U.S. yields. South America's soybean harvest was nearly half done at the end of March, and production there is expected to be only a little below last year. USDA World Agricultural Outlook Board projections indicate combined Brazilian and Argentine soybean and product exports will increase because of a slight drawdown of carryover stocks. Global
production of other major oilseeds is projected to increase slightly from 1999.

## Will China Absorb Excess U.S. Soybean Production?...

China has been a bright spot in soybean demand this season. Its combined purchases of U.S. soybean and soybean products through March 23 were up about 33 million bushels from last year (involving more beans, less products), adding $1.2 \%$ to the total demand for U.S. soybeans. For the 2000 crop year, China is taking steps to shift some cropland from corn (where it has surplus production) to soybeans and other oilseeds. If successful, this could bring steady to slightly reduced demand for imported soybeans in China. For the rest of the 1999-00 marketing year ending August 31, 2000, China likely will rely heavily on South American soybeans.

## Corn Intentions and Prospective Carryover...

Intended U.S. corn plantings, while modestly above grain trade expectations, point to only a small increase in 2001 carryover stocks with normal yields. Those conditions would be expected to push harvest prices down near levels of last fall. Closing March 31, 2000 prices for December futures were about $\$ 0.65$ above last fall's lows, reflecting drought fears and a weather premium.

With intended plantings and normal yields, a $2 \%$ increase in combined domestic utilization and exports of U.S. corn would be needed to prevent a rise in 2001 carryover stocks. That is 1.4 times the 20-year average growth rate. In ten out of the last 20 years, the annual growth in total utilization of U.S. corn has exceeded this rate of increase. Six of those years followed short U.S. corn and/or world feed grain crops. Like soybeans, last year's harvest was not a short crop by either standard. A repeat of the 1994 record U.S. average corn yield of 138.6 would require a growth in total utilization of U.S. corn of $4.1 \%$ to hold carryover stocks constant, about three times the 20-year average growth rate. The same percentage upward deviation from the long-run trend in yields as in 1994 would require a $7.7 \%$ increase in total utilization of U.S. corn to hold carryover stocks constant next year. That would be 5.5 times the 20 -year average growth rate in corn utilization. Two times in the last 20 years, the growth in total utilization of U.S. corn exceeded $4 \%$ when the previous year's crop was not a short crop. Both were years when extremely low prices were the means for gaining an increased quantity demanded in the marketplace.

## Weather Developments...

The recent rally in corn and soybean prices was initiated by the National Weather Service spring weather outlook showing forecasts for drought in the southeast and much of the western Corn Belt. The forecast was presented to the media through a press conference, and received widespread coverage including articles in such widely read publications as Wall Street Journal and USA Today. A missing element in the forecast, as we understand it, was that no probability of drought was given. Dr. Elwynn Taylor, ISU climatologist, indicated this winter from his work that the probability of widespread Corn Belt drought was around 33 to $34 \%$, well above the long-term average of about $15 \%$. Even so, that leaves a much greater probability of non-drought conditions, with resulting downside price risk. Weather will remain a potentially key influence on prices for both crops through the rest of this year. Recent weather indicators show signs that La Niña may be fading out, which would reduce drought risk in the Corn Belt. For updated weather forecasts, see Taylor's web site at: http://www.extension.iastate.edu/Information/weather.html

## Marketing Considerations...

The probability of fall 2000 corn and soybean prices returning to levels similar to those of last fall (or lower in the case of soybeans), appears to be greater than $50 \%$, perhaps as high as 60 to $70 \%$. With both crops, a drought as severe as in 1983 or 1988 would cause a major additional increase in prices, probably pushing December corn futures to well over $\$ 3$ and November soybean futures to well over $\$ 6 / \mathrm{bu}$. However, these prospects need to be balanced with the strong possibility of prices returning to last fall's levels. Recent new-crop forward contracting prices for new-crop soybeans have moved up to levels near the loan rate, somewhat reducing the riskexposure that comes when beans are contracted below the loan rate with the expectation that the LDPs will at least bring net prices received up to the loan. In the potentially very volatile market for the next few months, producers may want to consider the use of options purchases to protect against lower prices while retaining upward price flexibility. One way to do this is to buy new-crop put options, which establish a floor on prices. Another way is to buy call options after selling grain on the futures market or through forward contracts. If futures prices rise sharply, the options will gain in value, letting you benefit from a rising market. The call options can be held into the summer, until weather and crop production prospects become clearer. Since the start of options trading with the 1985 crop year, planting-time December corn put
options purchases have added value to harvest-time prices of the corn crop about $76 \%$ of the time. In the other $24 \%$ of the years, cash prices rose because of adverse weather and the value of the corn crop increased for producers using options. Similar results occurred for soybeans when beans were sold at planting time for harvest delivery using November futures, and upward price flexibility was retained into July, August, or September by purchasing November call options.
...Robert Wisner
We thank all our past subscribers for your interest in this publication. Look for future issues on the internet! John, Bob, and Marci

Table 1. U.S. Soybean Balance Sheet (Mil. bu.) 03/31/00

| Supplies: | 1994-5 | 1995-6 | 1997-8 | PROJ.1998-9 | $\begin{aligned} & \text { Proj. } \\ & \text { 1999-00 } \end{aligned}$ | Proj. 2000-01 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | A | B | C |
| Harv. A., Mil. | 60.9 | 61.6 | 69.1 | 70.4 | 72.5 | 73.4 | 73.6 | 73.9 |
| Bu./A. | 41.4 | 35.3 | 38.9 | 38.9 | 36.5 | 33.5 | 39.5 | 41.0 |
| Production | 2,517 | 2,174 | 2,689 | 2,741 | 2,643 | 2,459 | 2,907 | 3,030 |
| Imports | 5 | 4 | 5 | 4 | 3 | 8 | 4 | 4 |
| Carryover | 209 | 335 | 132 | 200 | 348 | 335 | 335 | 335 |
| Total | 2,729 | 2,514 | 2,826 | 2,945 | 2,994 | 2,802 | 3,246 | 3,369 |
| Utilization: |  |  |  |  |  |  |  |  |
| Crush | 1,405 | 1,370 | 1,597 | 1,590 | 1,590 | 1,575 | 1,605 | 1,615 |
| Exports | 838 | 851 | 870 | 801 | 910 | 885 | 940 | 965 |
| Other Domestic | 151 | 109 | 158 | 205 | 159 | 185 | 160 | 160 |
| Total | 2,395 | 2,330 | 2,626 | 2,596 | 2,659 | 2,645 | 2,705 | 2,740 |
| Carryover | 335 | 183 | 200 | 348 | 335 | 157 | 541 | 629 |
| U.S. Avg. Price, \$/Bu. | 5.48 | 6.72 | 6.47 | 4.93 | 4.85 | 5.85 | 4.40 | 4.10 |
| IA. Avg. Price, \$/Bu. | 5.38 | 6.67 | 6.37 | 4.83 | 4.75 | 5.75 | 4.30 | 4.00 |
| N.C.IA.Harv. Price | 4.90 | 6.75 | 6.05 | 4.80 | 4.35 | 5.70 | 4.00 | 3.70 |
| Meal Decatur, \$/T 48\% | 163 | 236 | 186 | 139 | 157 | 187 | 141 | 130 |
| Meal, 44\% \$/T | 153 | 222 | 174 | 129 | 148 | 176 | 133 | 122 |
| Soy Oil, Decatur | 27.50 | 24.70 | 25.80 | 19.90 | 15.60 | 19.00 | 15.50 | 15.00 |
| Nov. Fut @ Harv. \$/ Bu. | 5.28 | 7.15 | 6.50 | 5.30 | 4.95 | 6.25 | 4.60 | 4.30 |
| Long-term probability (\%) |  |  |  |  |  | 20 | 60 | 20 |
| Carryover/use \% | 14.0 | 7.9 | 7.6 | 13.4 | 12.6 | 5.9 | 20.0 | 23.0 |

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