<u>REPORT ON CATTLE FUTURES TRADING DURING MARCH/APRIL 2002</u>
Prepared by CFTC Market Surveillance, April 19, 2002

<u>EXECUTIVE SUMMARY</u>

On its own initiative, as well as in response to inquiries and requests from the NCBA and other industry groups, the CFTC's Market Surveillance staff has reviewed fundamental market data and conducted an intensive review of large-trader activity relative to the CME's live cattle futures and options markets from March 1 to April 12, 2002. These efforts were initially prompted by a market reaction to news of tests for foot-and-mouth disease (FMD) in Kansas, but have since expanded to include a significant price decrease in cattle over a period of several weeks. Commission staff has analyzed cattle futures and options data, which include the positions and activity of commodity funds, local traders, packers, and cattle feeders, and questioned a number of persons in the futures industry and the cattle industry who may have had information about the FMD tests. Commission staff has also worked closely with staff of the CME and the USDA. Conclusions drawn from the Market Surveillance review are as follows:

- Uncertainties concerning news of the tests for FMD in Kansas were in the futures market for one trading day—March 13. The staff is examining the sources, timing, and content of that news. Staff is also closely examining futures price movements—both with respect to the events around March 13 and in the broader context of the sharp downtrend in prices that has persisted for several weeks since then.

- The April 2002 live cattle futures price fell nearly $10 per hundredweight (about 13 percent) from March 12 through April 12. Cash prices have also fallen over this 1-month period, but this sharp, downward move is not unprecedented in recent years.

- Market fundamentals, particularly those released during this period, have generally shown increasing cattle placements on feed, higher beef production, large beef cold-storage stocks, record total meat production, lower beef exports, higher beef imports, and much lower prices for pork and chicken. Although no one of these factors by itself shocked the market, all of them tend to depress cattle prices.

- Surveillance of the soon-to-expire April 2002 live cattle futures contract thus far reveals no evidence of unusual trading activity. Surveillance is ongoing.

- About 85 percent of all noncommercial reportable traders in live cattle futures and options held 600 or fewer contracts net long or short throughout this period. No more than six noncommercial traders held over 2000 net long or short contracts.

- During the price declines beginning on March 13, commodity funds, as a group, sold substantial numbers of futures contracts. Through March 26, the first 10 days of that decline, funds, as a group, were reducing a net long exposure. Eventually funds got net short in the futures market on March 27, as prices continued to trend downward.

- To the extent that individual "local" futures traders held overnight positions in cattle futures and options, they were fairly well balanced between long and short positions. As a group, locals were net long all through the entire period of March 1 to April 12. As prices trended down, locals, as a group, had net sells to reduce their net long exposure.

- Packers, as a group, were net long live cattle futures for most of this period and were buyers of futures and options on 4 of the 5 days beginning on March 13, when the April 2002 live cattle future fell by $4.40 per cwt.

- On 7 trading days during this 6-week period, the April 2002 live cattle future closed down by $1.00 or more per cwt. The packers, as a group, were a net buyer in April 2002 futures on all 7 days, a net buyer in June 2002 futures on 5 of the 7 days, and a net buyer across all live cattle futures and options on 6 of the 7 days.

- Cattle feeders had more reportable futures and option traders than packers, funds, and locals combined. Feeders, as a group, had a large net short futures and options exposure throughout this period, which is consistent with a risk management strategy of hedging their ownership of cattle on feed.

BACKGROUND

The Commission's Market Surveillance staff routinely monitors all futures and option markets to detect and prevent price manipulation. A major source of information is derived from the large-trader reporting system (LTRS). Any trader that holds 100 or more live cattle futures or option contracts in a single futures month or option expiration is reported to the Commission on a daily basis. These "large traders" are identified and their business activities—both in futures and the underlying physical markets—are subject to inspection. These data are also used to monitor and enforce speculative position limits.[1]

Because of the sudden, dramatic downward price move in live cattle futures beginning on March 13, surveillance activities with respect to that market were intensified. The daily large-trader data were examined with respect to specific groups of similar traders, namely, commodity funds, local traders, beef packers, and cattle feeders. The Commissioners and senior staff were briefed on the latest developments in cattle at each of the weekly surveillance briefings held since March 13. The following information is a result of staff efforts to provide as many facts as possible as quickly as possible. Information concerning large traders is displayed in aggregate form to protect the confidentiality of individual trader's activity.

EVENTS SURROUNDING THE TESTING OF CATTLE IN KANSAS

Based upon a timeline **[Exhibit 1]** provided by USDA's Animal and Plant Health Inspection Service (APHIS), a small number of cows at a public market in Holton, KS, were isolated for a possible disease on the afternoon of March 12. Biological samples were sent to a USDA lab in New York early the next day to test for foot-and-mouth disease (FMD). USDA announced that the test results were negative later that evening of March 13. News of the testing spread among the cattle and futures industry during the futures trading session (9:05am to 1:00pm Central) of March 13. The April 2002 future went into a "fast market" condition at midmorning, touched limit (150 points) down, and closed at a loss of 112 points. **[Exhibit 2]** On the morning of March 14, after the negative test results were announced, the April future initially traded as much as 35 points higher, but moved lower, and settled down 130 points. Since then cattle futures prices have been sharply lower well into April, with the April future closing at $65.87 on April 12 for a loss of nearly $10 per hundredweight and about 13 percent from March 12, before the news of testing at the Kansas market.

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[1] Full descriptions of the Commission's market surveillance program, the large-trader reporting system, and the program for enforcing speculative position limits can be found in recently updated Backgrounders on the Commission's website [www.cftc.gov].

The Commission staff is closely examining the circumstances surrounding these events. A number of persons in the cattle industry and futures industry have already been questioned—more will be questioned. If needed, the staff has broad record-inspection authorities to obtain records of cash and futures transactions. No final conclusions on any of these issues have been reached at this stage of the staff's ongoing examination.

PRICES

Cattle prices usually rise to a seasonal peak sometime in the March/April period and then decline toward a seasonal low in the summer months. So far in 2002, cattle prices started out the year by rising more sharply than recent years, but have since fallen just as sharply. The decline, so far, has not been so different from other recent years. Moreover, cattle prices have fallen much less than hog prices. **[Exhibits 3-5]**

MARKET FUNDAMENTALS

The Market Surveillance staff intensified its review of the fundamental market data, paying particular attention to any data and other types of news that appeared to have had an impact on prices, plus or minus, during the sharp downward price move that began on March 13. Clearly every day, in addition to actual data and the various forecasted statistics based upon estimates, there are various fundamental market forces at work in the cattle and beef markets the importance and accuracy of which are not yet known to the market and may not be known for weeks or months from now. Some of the potentially market-moving data and news that did surface during this period include the following.

On March 15, USDA released its monthly 7-states cattle-on-feed report. Based upon pre-report estimates and subsequent market commentary, some in the cattle industry were surprised by a larger-than-expected number of cattle placed on feed during February (over 1.5 million animals). Although a substantial increase over the anemic placements in February 2001 was anticipated, the 16 percent increase was reportedly much larger than expected and 5 percent above the 5-year average. Some of these placements were attributed to extremely poor forage-grazing conditions in drought-stricken western states, which forced more cattle, particularly heavyweight cattle, into feedlots. On the positive side, marketings in February were at the high end of pre-report estimates, but the potential positive impact of that number was tempered by the fact that on-feed numbers were also at the high end of forecasts. **[Exhibits 6-7]** (The next cattle-on-feed report is scheduled for release on April 19.)

In its release on March 22, 2002, the USDA showed total commercial red meat production for the United States at 3.50 billion pounds in February, up 3 percent from the 3.40 billion pounds produced in February 2001. Beef production, at 1.99 billion pounds, was 6 percent above the previous year. Cattle slaughter totaled 2.61 million head, up 1 percent from February 2001. The average live weight was 1,255 pounds, up 38 pounds from February a year ago. January - February red meat production was 7.58 billion pounds, up 3 percent above the previous year. Beef production for those 2 months was up 6 percent from last year and pork was up 1 percent. These data are causing analysts to revise upward earlier forecasts that beef production would show a small decrease in 2002. Now USDA is forecasting higher year-over-year beef production for the first three quarter of 2002, with the potential for a significant fall-off in the fourth quarter. **[Exhibits 8-11]**

USDA commentary released on March 26 described the relative impact of declining exports and increasing imports on the U.S. beef market. U.S. exports were down 8 percent in 2001 and are expected to decline another 3-4 percent in 2002, due to a continuation of a strong dollar, worldwide economic weakness, and BSE concerns. The latter concern had a major impact on exports to Japan, which dropped by one-third in November and December of 2001. There is hope that some of these conditions may improve as the year progresses.[2] Adding to domestic production, beef imports were up 4 percent in 2001 to a record 3.16 billion pounds and are forecast to rise by another 2-3 percent this year. Increasing supplies of U.S. beef are also evident in the cold storage report released by USDA on March 20. Total beef in cold storage as of February 28 was 430 million pounds, the largest inventory on that date since at least 1990 and 19 percent higher than last year. **[Exhibit 12]** (Cold storage data as of March 31 will be released on April 19.)

In the pork complex, hog prices over these past several weeks have fallen much more than cattle prices. Lean hog carcass prices (the CME's 2-day index) fell from over $54 per hundredweight in early March to under $42 on April 12, a drop of over $12 or about 24 percent. The USDA reported the U.S. inventory of all hogs and pigs on March 1 at 58.7 million head. This was 2 percent above March 2001, but 1 percent below December 1, 2001. Breeding inventory, at 6.24 million head, was up slightly from both March 1, 2001, and last quarter. Market hog inventory, at 52.5 million head, was 2 percent above last year but 1 percent below last quarter. The December 2001-February 2002 U.S. pig crop, at 24.7 million head, was 3 percent more than 2001, and 1 percent more than 2000. Imports of hogs from Canada are large and increasing, the U.S. imported 5.3 million hogs (mostly feeder pigs) from Canada last year and USDA projects that 5.8 million will be imported this year, an increase of 9 percent. **[Exhibits 13-14]**

USDA projects broiler production in 2002 at 32.05 billion pounds, up nearly 3 percent from last year and above earlier forecasts. Recent news in the poultry market has focused primarily on news, on March 10, that Russia placed a ban on U.S. poultry imports purportedly because U.S. processors are using

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[2] In fact, in a report released just this week, USDA is forecasting beef exports in 2002 as virtually unchanged from 2001—an improvement from earlier expectations that exports might decline.

certain antibiotics and other medications. News on April 1 that the ban had apparently been lifted may have contributed to a limit-up price move in live cattle futures that day—news of lifting the ban proved to be premature and markets for beef, pork, and poultry have reacted up and down to progress, or lack of progress, over the past several weeks.[3] Russia imported 2.3 billion pounds of broiler products in 2001, which represented over 7 percent of U.S. broiler production by weight. Price weakness in chicken leg quarters,[4] the primary product shipped to Russia, would put some pressure on beef and pork prices as they compete for the consumer's dollar. **[Exhibits 15-17]**

[A summary of how some key market fundamentals and forecasts changed after March 13, as prices were generally falling, is attached as **Exhibit 18**.]

LARGE-TRADER ACTIVITY

Expiration of April 2002 Live Cattle. The Surveillance staff has closely monitored the liquidation of the April 2002 live cattle future—the spot futures month throughout this period. The spot futures month tends to get more attention because it has the closest connection with cash prices and can be the most susceptible to market pressures as traders exit the market or position themselves to make or take deliveries. Typically the Surveillance staff assesses the fundamental market situation and how the contract is liquidating in broad terms, as well as a daily examination of individual large traders—who they are and how they are conducting themselves, any relationships or commonalities among traders, the relationship between the futures and cash prices, and the reasons for deliveries or lack of deliveries, **[Exhibits 19-21]** Surveillance of the April 2002 future has detected no evidence of unusual activity thus far, but close monitoring will continue through its last trading day—April 30.

Market Composition. One method for examining trading in live cattle futures is to group reportable traders by similar interests or occupations. The Commission publishes a "Commitments of Traders" report each week that groups large traders as either Commercials or Non-Commercials. For the benefit of this report on live cattle futures, the Surveillance staff is providing far more detail by grouping large traders into the following six categories: cattle feeders, beef packers, other commercial traders, commodity funds, local traders, and other non-commercial traders, These groups of traders, together with the small, non-reportable traders (*i.e.*, traders that did not hold more than 100 contracts in a single future or option expiration) make up the total long and short contracts.

For a general comparison, market composition data were calculated for two dates—March 12, the day before the sharp price break, and April 12, the last

[3] On April 13, the Russian government notified the U.S. Government that the ban would be lifted as of April 15, saying that the U.S. had met all the demands put forward by the Russian veterinary control.

[4] For example, at least one Chicago-area grocery store featured chicken leg quarters at 17¢ per pound the week ending April 12.

day of this period examined. The charts show that 72 to 75 percent of the total open interest on either date is identified to the Commission through its large-trader reporting system.[5] There were some changes in the proportions of open interest held by the various large-trader groupings over this 1-month period. Cattle feeders reduced both their long and their short shares of the market from March 12 to April 12. Beef packers reduced their long share slightly and had a larger reduction in their short percentage of the market. Commodity funds reduced their long proportion of the market and had a significant increase in their share of the short side. Locals increased slightly their share of the total open interest on both sides of the market over this 1-month period. **[Exhibits 22-23]**

Non-Commercial Accounts. Non-Commercial (or speculative) traders in live cattle futures are subject to a single-month speculative position limit of 3,300 futures contract equivalents.[6] As an expiring future trades into the spot month, the limit is reduced to 600 contracts and then to 300 contracts for the last 5 trading days. Speculative limit levels have been set by the CME and approved by the Commission and are jointly enforced. A review of large-trader data shows that about 85 percent of all speculative traders held no more than 600 net long or short futures-equivalent contracts on any day from March 1 through April 12. No more than six traders held speculative positions of over 2000 contracts long or short in all live cattle futures and options combined on any day throughout this period. **[Exhibit 24]**

Commodity Funds. Over many years of observing the activity of commodity funds, the Surveillance staff has observed that, although a large number of funds may hold positions in a market, most of them do not trade on any given day. When funds do trade, however, they tend to trade in the same direction. Since many funds use technical, trend-following trading systems, it is not clear whether fund activity contributes to the magnitude or direction of the price change or whether they are reacting to the price change. Cattle futures are no different than any other market insofar as one can observe days when funds traded heavily in the same direction as a large price move.

During the period examined for this report, it is clear that funds had significant long and short futures positions, but, as a group, were net long cattle futures as the events of March 13 transpired. This is not surprising in light of the uptrend in prices through March 8. At the same time that prices broke sharply lower on March 13, funds, as a group, sold to reduce their net long position. For example, on March 14, the day the funds had their largest net sells, funds had

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[5] Note that the total open interest for all futures and options combined, which is calculated on a futures-equivalent basis, was 109,768 contracts on March 12 and 114,743 contracts on April 12.

[6] "Futures equivalent" measures a trader's total market exposure by combining futures and option positions. Using delta factors supplied by the exchange, long-call and short-put open positions are converted to long futures-equivalent open positions. Likewise, short-call and long-put open positions are converted to short futures-equivalent open positions. For example, a trader holding a long put position of 300 contracts with a delta factor of 0.50 is considered to be holding a short futures-equivalent position of 150 contracts.

net sells of 3703 futures-equivalent contracts, of which 2570 represented a reduction in their long positions. Clearly, traders holding long positions in a declining market have no incentive to create additional downside momentum. The funds continued to sell as prices continued to decline. As they did so, as a group, they became net short cattle futures on March 27. As prices fell still further into April, funds reached their largest net short position of 2666 contracts on April 3. **[Exhibits 25-26]**

Local Traders. This category represents mostly traders on the exchange floor (registered as floor traders or floor brokers) and a few other futures professionals that carried large positions overnight.[7] Locals, as a group, tended to carry nearly balanced long and short futures and option positions, resulting in relatively small net exposure. That net futures exposure was long throughout the entire period, with small net buys on 5 of the 6 days beginning March 13, which increased their net long exposure to its highest level of 2623 futures-equivalent contracts on March 20. Beginning the next day, locals tended to reduce their net long position until they were only net long 193 contracts on April 11. **[Exhibits 27-28]**

Beef Packers. Some cattle feeders have expressed concerns that beef packers engaged in futures trading activity that, if not the cause, at the very least contributed to the sharp downtrend in prices. The Surveillance staff examined the activity of packers that held reportable futures positions at any time from March 1 through April 12. On any given day during this period, there were 7 or 8 packers with reportable futures and option positions, which included the five largest beef packers in the U.S. as well as some small packers. The data show that packers, as a group, were net long cattle futures and options on all but 4 days of the 6-week period. Moreover, packers were net buyers of futures on 4 of the first 5 days of the price decline that began on March 13, during which time the April cattle future dropped by $4.40. **[Exhibits 29-30]**

During the remainder of the period, packers, as a group, began to sell to reduce their net long futures and option position on March 20 and continued to have net sells each day through March 27. As a result, their net long exposure was reduced to near zero on March 26 and became slightly net short on March 27. Beginning the next day, March 28, packers had net buys on 10 of the next 11 trading days through April 12, which increased their net long exposure until it reached the highest levels of the 6-week period.

Surveillance staff examined separately the trading by packers on days of large downward price moves. Specifically, we looked at packers trading in the April 2002 future (the spot month throughout this period), in the June 2002 future,

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[7] Of course many so-called “locals” trade actively during the day without carrying significant positions overnight. Large-trader data do not show details of intraday activity, but that trading can be examined using transaction data. The transaction data can be too voluminous to study in a comprehensive manner over long periods of time but can be thoroughly examined either on many dates for specific traders or on certain specific dates for many traders.

and in all-futures-and-options-combined for each of the 7 days during the 6-week study period when the April future settled at 100 or more points (*i.e*., $1.00 per hundredweight) down from the previous day. [8] The data show that packers, as a group, were a net buyer in the April 2002 future on all 7 days, were a net buyer in the June 2002 future on 5 of the 7 days, and a net buyer across all live cattle futures and options on 6 of the 7 days of large price declines. **[Exhibit 31]**

Cattle Feeders. Cattle feeders during this period had more reportable traders than commodity funds, local traders, and packers combined. Cattle feeders, as a group, held a large net short futures and options exposure throughout this period, which is consistent with a risk management strategy of hedging their cattle on feed. Feeders, as a group, were a net buyer of futures and options on March 13 and 14—the first 2 days of the sharp price decline, a net sellers for 4 consecutive days after that, and a net buyer for 7 of the next 8 trading days through April 2. Since April 2, feeders tended to reduce their long positions and, to a lesser extent, reduce their short positions, so that, as a group, their net short exposure increased through April 12. The other three groups (funds, locals, and packers) had relatively slight changes in the numbers of reportable traders during the 6-week period, but the number of reportable cattle feeders declined from 122 on March 20 to 95 on April 12. **[Exhibits 32-33]**

WORK IN PROGRESS

The Market Surveillance staff is continuing its close monitoring of the liquidation of the April 2002 live cattle future as well as large-trader activity in the cattle futures market as a whole. The CME has been conducting its own inquiry into these events. The USDA had also opened up a review of these matters, particularly with respect to the handling of the examination of cattle at Holton, KS, and the actions by the State and Federal officials that became involved.

[8] The 7 days during the period of March 1 through April 12, 2002, that the April 2002 live cattle future settled at 100 or more points below the previous day were as follows: March 13—112 points, March 14—130 points, April 4—150 points, April 5—145 points, April 8—100 points, April 10—150 points, and April 12—112 points.