



30 December 2003

BSE Impacts on PNW Livestock *EI -- 03-05*

Events will continue to move rapidly for the next several weeks on this important issue. Following the detection and confirmation of BSE in a dairy Holstein in Washington State, Secretary of Agriculture Ann Veneman and other USDA officials have made a number of announcements about the process and changes to protect the U.S. food supply.

Closing the Barn Door

To prevent the entry into commerce of meat and meat food products that are adulterated, FSIS inspection program personnel perform ante- and post-mortem inspection of cattle that are slaughtered in the United States. As part of the ante-mortem inspection, FSIS personnel look for signs of disease, including signs of central nervous system impairment. Animals showing signs of systemic disease, including those exhibiting signs of neurologic impairment, are condemned. Meat from all condemned animals has never been permitted for use as human food.

As announced on December 30, 2003, USDA's Food Safety Inspection Service (FSIS) will take the following actions:

- **Downer Animals.** Effectively immediately, USDA will ban all downer cattle from the human food chain. USDA will continue its BSE surveillance program.
- **Product Holding.** USDA Food Safety and Inspection Service inspectors will no longer mark cattle tested under the BSE surveillance program as "inspected and passed" until confirmation is received that the animals have, in fact, tested negative for BSE. This new policy will be in the form of an interpretive rule that will be published in the Federal Register.
- **Specified Risk Material.** Effective immediately upon publication in the Federal Register, USDA will enhance its regulations by declaring as specified risk materials skull, brain, trigeminal ganglia, eyes, vertebral column, spinal cord and dorsal root ganglia of cattle over 30 months of age and the distal ileum of the small intestine of cattle of all ages, thus prohibiting their use in the human food supply. Tonsils from all cattle are already considered inedible and therefore do not enter the food supply. These enhancements are consistent with the actions taken by Canada after the discovery of BSE in May.
- **In an interim final rule,** FSIS will require federally inspected establishments that slaughter cattle to develop, implement, and maintain procedures to remove, segregate, and dispose of these specified risk materials so that they cannot possibly enter the food chain. Plants must also make that information readily available for review by FSIS inspection personnel. FSIS has also developed procedures for verifying the approximate age of cattle that are slaughtered in official establishments. State inspected plants must have equivalent procedures in place.
- **Advanced Meat Recovery.** AMR is an industrial technology that removes muscle tissue from the bone of beef carcasses under high pressure without incorporating bone material when operated properly. AMR product can be labeled as "meat." FSIS has previously had regulations in place that prohibit spinal cord from being included in products labeled as "meat." The regulation, effective upon publication in the Federal Register, expands that prohibition to include dorsal root ganglia, clusters of nerve cells connected to the spinal cord along the vertebrae column, in addition to spinal cord

tissue. Like spinal cord, the dorsal root ganglia may also contain BSE infectivity if the animal is infected. In addition, because the vertebral column and skull in cattle 30 months and older will be considered inedible, it cannot be used for AMR.

- Air-Injection Stunning. To ensure that portions of the brain are not dislocated into the tissues of the carcass as a consequence of humanely stunning cattle during the slaughter process, FSIS is issuing a regulation to ban the practice of air-injection stunning.
- In March 2003, FSIS began a routine regulatory sampling program for beef produced from Advanced Meat Recovery (AMR) systems to ensure that spinal cord tissue is not present in this product. In a new interim final rule announced today, establishments have to ensure process control through verification testing to ensure that neither spinal cord nor dorsal root ganglia is present in the product.
- Mechanically Separated Meat (MSM). USDA will prohibit use of mechanically separated meat in human food.
- AMR has replaced MSM in nearly all US packing plants. The AMR technology by regulation is not to crush, grind or pulverize bone material when removing meat from hard to trim bones. That may occur with MSM technology resulting in small fragments being present in the meat product. MSM derived material must be labeled as such. AMR material is not required to carry any additional label other than meat.

Consumers with other food safety questions can phone the toll-free USDA Meat and Poultry Hotline at 1-888-MPHotline. The hotline is available in English and Spanish and can be reached from 10 a.m. to 4 p.m. (Eastern Time), Monday through Friday. Recorded food safety messages are available 24 hours a day.

What about the cow(s)?

The cow with BSE, now known as the “index” cow, was in a dairy herd, the “index herd”, near Mabton, WA. She was listed on a Canadian health certificate dated August 28, 2001, which lists 82 ear-tag numbers from cattle that were part of a herd dispersal in Alberta, Canada. USDA is tracing those 82 animals, and now has 11 of them definitively accounted for. One is the indexed positive cow; 9 are those known to be in the indexed herd; one is the animal on a Mattawa, WA dairy operation. One animal may have remained in Canada that is now being verified. The whereabouts of the remaining 70 animals is yet to be confirmed but leads are being followed.

USDA has three facilities under state hold orders, as the epidemiological investigation continues. The first is the index herd near Mabton, the herd which the positive cow was a part of. The second being a nearby facility that has the indexed cows’ recently born bull calf, and the third being that dairy operation in Mattawa. On January 5, 2004 USDA announced the decision to “depopulate” or slaughter the 450 bull calves at the facility where one of the BSE cows calves is being held. The index cow had 3 known calves, one was stillborn, one is a heifer on the index dairy and the 3rd is the bull calf.

Consumers and Trade

As was the case with Canada, our export markets closed the door overnight on imports of U.S. beef until the BSE situation is resolved. Mexico is apparently willing to discuss a fairly rapid reopening of the border with the US to beef and cattle trade. Japan and South Korea will be

much more challenging to reopen anytime soon. Those three plus Canada represent the bulk of US meat export destinations. Since May 20 when the BSE animal was detected in Alberta the US has continued to ship some beef and cattle to Canada. Beginning in October the US border was reopened to Canadian muscle cuts of boneless beef 30 months of age or less. A comment period on re-opening the border to live animal imports of stock 30 months of age or less began November 4th, 2003 and closed January 5, 2004. A determination will be made later this year on live animal imports from Canada.

One of the recommendations of Secretary Veneman is to move forward on an animal identification system to assist in tracking suspect animals in situations like this. That will also aid the Country of Origin Labeling (COOL) mandate by having a verifiable tracking system in place. Congress will reconvene on January 20 with a first order of business to pass the omnibus appropriations bill which contains the remaining appropriations for government operations. The house version currently has no funding for COOL implementation. That is one issue to be resolved when the joint committee meets.

When the finding of a Canadian cow with BSE was announced in May of 2003 domestic beef consumption was not adversely affected. In fact, because beef exports are a very high percentage of production and supplies became burdensome, beef specials by retailers made it attractive to consumers. So far there is little indication that American consumers will react much different. HRI and retail sales over the holidays were essentially normal.

In early 2003 cattle and beef prices were strong due to increasing demand and tighter supplies. In the first quarter of 2003 fed cattle prices averaged \$78.43/cwt., 11% over the \$70.71 first quarter average of 2002 and spot prices near \$85 were recorded. With the Canadian cow turning up mid-way through the second quarter our already strong prices received a boost. Second quarter prices averaged \$78.08 or 19% over 2002's \$65.55/cwt. Prices in the second half were abnormally high as the tight supply situation was further provoked by the closing of the Canadian border and the accompanying 5% reduction in imports.

The shoe may now be on the other foot

Now that the U.S. has its own BSE cow we are facing many of the problems our Canadian neighbors did last year. Countries importing US beef immediately closed their borders pending the outcome of the investigation into the situation. To reassure consumers beef from the plant that processed the index cow was recalled. Secretary Veneman also announced several changes to the food inspection system in order to tighten bio-security and to reassure consumers.

US beef exports had been about 10% of total domestic production. With our exports shut down that meat will remain here. Some offset will occur due to our current low level of imports from Canada. There was a fairly active trade with Canada in live cattle, both feeder calves and fed cattle ready for slaughter. The Canadian cattle feeding industry is larger than their packing industry so the excess had come here for processing. US packers have been pulling cattle forward in order to keep the chains as full as possible. One reflection of that has been the widening of the choice-select spread. Green cattle don't grade choice as easily. From the packer-feeder perspective the tight supply situation will ease slightly. From the retail and consumer perspective beef prices should moderate and supplies remain adequate. Retail beef prices had only started to move up in the fourth quarter of 2003. It is likely that those prices will plateau for a while and could remain stable or move lower later in the year. Much will depend on timing of events and that leaves a degree of uncertainty to the markets at this point.

What happens to our prices?

Since the announcement of finding the index cow on December 23rd live cattle prices dropped about 18%. Prices have appeared to stabilize recently. The CME live cattle futures contracts are floating around in the low \$70/cwt range with the fourth quarter of 2004 near the mid-\$70 area. Their feeder cattle contracts are in the low \$80's for the first half of 2004 and the mid-\$80's for the second half.

My outlook is predicated on a few assumptions.

- Only one BSE animal will be discovered.
- Our exports will be slow to recover
 - Mexico, Canada and some other nations will re-open borders by the second quarter of 2004 but Japan and So. Korea won't until sometime in the second half of 2004
- Importation of slaughter steers and heifers from Canada will be delayed until the second half of 2004
- Pork and poultry exports will increase significantly to partially "fill in" for beef.

The first quarter will probably be the time period most affected by the situation. In Canada prices dropped for the first couple of weeks, leveled out for several weeks, and then declined again before stabilizing. The adjustment period took about 8-10 weeks in total. We may see something similar here. If so, prices could work lower from the present levels. If not and we have stabilized we may see prices at levels only slightly below the first quarter of 2003. Prices in later quarters will hopefully follow a more typical seasonal pattern. Prices could begin to strengthen by late third or early fourth quarter as the index cow begins to recede into the mists of time. Price projections are given in Table 1 at the end of the paper.

Heavier weight feeders will also suffer price wise as indicated by the CME's feeder cattle futures (700-800 lbs) contracts. My reasoning is that these are closer to going into feed yards and with low fed prices for the next while lot operators will be reluctant to bid too much for calves that have an uncertain return. Many cattle on feed now have break-even prices in the high \$80 to low \$90 per cwt. area. Person's holding calves that are market ready or very close should consider selling as soon as practicable. Calves that would be marketed next fall stand a better chance of holding up price wise. Projections are in Table 1.

The category that will be hurt the most is the non-ambulatory or "downer" cull animals. They represent the most at risk class. Cull animals in good physical shape will find the market dependant on the attitude of the HRI and retail sectors. Canadian cull cows were selling for 5 to 18 cents a lb. Canadian at years end. That translates to between 8 and 28 cents US. Until last May many cull Canadian cows were processed in the US.

The 'drop credit' or offal value has also been negatively impacted. This is the hide and variety products like tongues, livers, tripe, blood meal, and meat & bone meal. Many export markets have stopped taking these variety items. The drop credit adds to the total value of the carcass so this loss will impact live animal prices as well.

For those who still have calves on hand watching markets closely will be the name of the game. Near term markets could be very unsettled but should become more stable as more is learned about the BSE situation. By February more confidence should be in the market.

If you sold cattle on contract before December 23rd you may want to read it carefully for any escape clauses. It is not without precedent for buyers to walk away from contracts and pay the penalty clause to get out if prices drop enough to make it more cost effective for them.

In the long term this situation may serve to improve food safety and the reputation of US beef. A recent study by Kansas State University noted that statistically we were not testing enough animals to know for certain whether BSE was present in the US. Now we will. We will also not allow suspect animals to enter the food supply now until testing is complete. Both should be positive moves.

Table 1. Quarterly forecast planning prices for PNW livestock.

	Unit	2004 Quarterly Forecast			
		I-f	II-f	III-f	IV-f
Choice Steers 11 – 1300# *	cwt	67-70.50	67-71.50	68-72	74-79
Steer Calf 8-900# *	cwt	69-72	63.50-68	71-74	77-82
Steer Calf 7-800# *	cwt	75-78	78-82	80-87	81-89
Steer Calf 6-700# *	cwt	78-81	81-85	83-90	85-93
Steer Calf 5-600# *	cwt	85-90	92-101	89-102	90-103
Steer Calf 4-500# *	cwt	93-99	100-110	93-103	94-106
Utility Cows **	cwt	25-31	22-27	19-25	15-25
Sltr Lambs W Direct (100-125#) ‡	cwt	164-173	165-178	162-173	157-169
Feeder Lambs (70-90#) ‡	cwt	96-104	91-97	89-94	87-93
Ewe Sheep	cwt	32.00- 38.60	27.50- 36.30	27.10- 33.60	29.90- 34.40
Wool (Clean, USDA 56's)	lb.	1.38-1.45	1.41-1.48	1.34-1.41	1.28-1.35
Wool (Grease, US farm Price)	lb.	.87-.94	.89-.96	.84-.91	.80-.87
Milk, Class III	cwt	10.90- 12.00	10.75- 11.90	11.25- 13.00	11.00- 12.50
Milk, Class IV	cwt	9.65- 10.35	9.50- 10.50	9.85- 10.95	9.80- 10.80

f = forecast

* heifers will be 2 to 10 cents under steers in the same wt. class depending on supply and demand factors.

** cull bulls will be 4 to 6 cents over utility cows.

‡ Slaughter lamb prices are on dressed weight basis, feeder lambs are on live weight basis
Forecast estimates are by UI Agricultural Economics Extension. Estimates were adjusted for the discovery of a cow in Washington State with BSE on 12/23/03. Utility cow price is adjusted to reflect a loss of \$7 on offal credit and a discount for over 30 months of age based on the assumption that the market for “downers” and older animals will become very restricted.