

IMPACTS OF BOVINE TB TESTING AND ASSOCIATED COSTS ON COW-CALF PRODUCER PROFITABILITY IN 2008-2009

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Background

The fall of 2008 and winter of 2009 will prove to be challenging times for Minnesota beef cow-calf producers. The implications of Minnesota's downgraded status to Modified Accredited (MA) on untested feeder calf markets are reasons for introspection and analysis. At stake is the question as to whether cow-calf producers should schedule a TB test for cattle they will sell this fall and winter, and whether whole-herd test and individual test or individual test and heifer spaying is the least economically burdensome or greater opportunity for a more "normalized" market. As of the time of this writing, the most optimistic scenario is that the USDA will grant Minnesota Split-State Status on the grounds of an application made June 2008, outlining an approximate 300-herd split in the Northwest corner of Minnesota, and that most states Minnesota trades feeder cattle with will recognize this decision (it is already understood that Wisconsin will not recognize Split-State Status).

On the other end of the spectrum, a yet to be determined pessimistic or realistic end, that USDA will not grant Split-State Status to Minnesota until sometime after October 2008. Minnesota cow-calf producers sell a majority of their calf crop sometime between mid-October and mid-December, with a small percentage of producers backgrounding calves until mid-January to mid-March. Delays in status upgrade likely will impinge on feeder calf sales, and will lead to some cow-calf producers bringing TB untested cattle to the sale barn. Therefore, the cost of planning ahead for a delayed upgrade in status versus the potential discount resulting from offering cattle TB untested to the sale barn must be weighed so that cow-calf producers can plan accordingly. One thing is clear: if TB was not an issue in Minnesota, increased demand for feeders, especially heavy feeders, because of a tight feeder supply, and attractive fed cattle price markets, should hold feeder prices somewhere above \$115/cwt. There is an underlying feeling that if cattle are made ready for export beyond Minnesota borders, prices offered should be relatively attractive to Minnesota cow-calf producers.

Scenarios

Two main scenarios were modeled based on the premise that to sell a full calf crop (steers and intact heifers), producers must either conduct a whole herd TB test within the 12 months preceding shipping and individual TB test within 60 days from shipment on all feeders, or individual TB test within 60 days from shipment on all steers and heifers (certified spayed). Because costs are variable, a spreadsheet to individualize cost scenarios was prepared in Excel (Costs of TB Marketing Requirements.XLS). Costs were divided as fixed (veterinarian visit and labor associated with veterinarian visit, where appropriate) and variable (TB test cost, farm labor to move cattle through chute, and facility cost and depreciation). Because a caudal fold test

requires two veterinarian visits, two visits were charged, and variable costs associated with moving cattle through chute and facility charge were doubled. A tax credit option is available in the spreadsheet, and it was set at 50 percent (current Minnesota law) for test, veterinary visit, veterinary labor, and equipment rental needed to conduct TB test, but it can be changed accordingly. The spreadsheet permits determination of additional impact of fixed costs when whole and individual TB tests are conducted at two dates.

The alternative of testing feeders only with assumption that heifers would be spayed was generated by assigning veterinarian visit (\$40) and labor (\$0) as fixed costs, and heifer spaying procedure (\$7/heifer), chute farm labor (\$3/heifer) and facility charge (\$0) as variable costs. These costs were added to the total and heifer cost of selling. When customizing values on the spreadsheet for projection of costs of TB testing for specific situations, the user may set the cost of the veterinary visit for spaying heifers as \$0 if spaying occurs concurrent with TB test reading date.

Inclusion of projected sale weights for steers and heifers permits estimation of breakeven cost of TB testing. Concurrently, a discount per feeder sensitivity table was generated with discount increments of \$1/cwt, and sale weights in the range of 300 to 900 lb. Discount is assumed to occur if cattle are presented to the sale barn not tested for TB. Value of the discount per feeder is to be compared with cost per feeder generated in the individualized spreadsheet. For a more specific comparison, steer and heifer TB testing costs within each of the two testing options (whole herd and individual TB test or individual feeder test on steers and spayed heifers) were generated as well.

All values are customizable, but were assumed as follows:

Veterinary visit, \$/visit	40.00
Veterinary labor, \$/visit	0.00
Test cost, \$/animal	8.00
TB Tax credit, % of cost	50
Chute side farm labor, \$/animal	3.00
Facility cost and depreciation, \$/animal	0.00

Observations

- Fixed costs are a small proportion of the TB testing costs, but were greater for the individual feeder TB test with spayed heifer option or for whole herd TB test conducted at a different date than individual TB test
- Total costs of TB testing averaged \$26 or \$18/feeder for sale under the whole herd and individual TB test and the individual feeder TB test with spayed heifer option, respectively
- On 550-lb steers and 500-lb heifers, impact costs of TB on steer marketing averaged \$2.00/cwt, and impact costs of TB on heifer marketing averaged \$8.91/cwt (whole herd test option) or \$4.87/cwt (spayed heifer option)
- Thus, it pays to TB test all steers for sale when discounts for TB untested steers presented to the sale are over \$3.00/cwt
- Also, discounts for TB untested heifers presented to the sale need to be over \$5/cwt to pay the additional cost of spaying or over \$8/cwt to pay for the additional cost of whole herd testing

- When marketing heavy feeders (over 700 lb), discounts greater than \$3/cwt are more than sufficient to encourage paying for costs of TB testing steers and heifers (certified spayed).
- An alternative exists to test all steers and sell in the fall, and retain heifers for sale later (when Split-State Status is gained). This alternative may save from \$300 to \$600 per heifer in herds with 20 to 50 cows. At feed costs averaging \$1.50/heifer/day, the savings in TB testing the whole herd and individual heifer or testing and spaying the individual heifer, may be applied toward 17 to 30 days of feeding. However, if Minnesota does not acquire Split-State Status, then TB tests will need to be incurred to sell heifers beyond MN borders.
- Because fixed costs are a small proportion of the total cost, herd size has an impact of up to \$4 or \$6/feeder for the whole herd and individual TB test or individual TB test with spayed heifer option until the initial \$80 or \$120 for veterinarian visits were amortized (approximately 100-cow herd). Beyond 100 cows, costs of testing per feeder decrease slowly.

Conclusions

Under optimistic scenarios, Minnesota can achieve Split-State Status this fall. However, producers should be planning to invest \$15 to \$25 per feeder expected to sell to prepare for delays in this process. Regardless, due to the increased volume of TB testing and shortage of veterinarian practitioners, early planning a TB test may be the best strategy. Additionally, most private practitioners will permit additional health practices (vaccination, pregnancy checking, etc.) to occur concurrent with the reading date of the caudal fold test (second visit).

Failing to offer for sale properly tested cattle this fall will likely result in price discounts, particularly for untested heifers. Because costs of TB testing are not highly sensitive to herd size, most producers will require \$2/cwt to cover the costs associated with testing steers, but will require from \$5 to \$9/cwt to prepare heifers for sale (individual TB test and spayed heifers or individual and whole herd TB test). This means that discounts greater than \$2/cwt for TB untested steers, and discounts greater than \$5 to \$9/cwt for TB untested heifers will likely make it attractive to be prepared. Markets are yet untested, but the first weeks in September will permit evaluation of these observations.