

## BRUCELLOSIS:

Two cattle brucellosis positive herds were found within Montana's Designated Surveillance Area (DSA) in the fall of 2014. Both were released from quarantine in the spring of 2015 following extensive epidemiologic investigations. One domestic bison herd in the DSA remains under quarantine since 2010 and continues annual entire herd testing.

1. **Madison County: cattle herd:** November 10, 2014
  - 8 year old cow (pregnant, with heifer calf at side) found as part of a herd test.
  - 2,300 head.
  - This herd tested as negative in 2010 (change of ownership test).
  - The cow had a calf each year so and was pregnant at the time of test.
  - Epidemiologic investigation:
    - 25 adjacent herds
      - 23,000 cattle.
    - Assurance testing: fall 2015
  - Quarantine release: April 27, 2015 (calving test).
  
2. **Park/Carbon cattle herd:** October 23, 2014
  - 3 year old cow (open with steer calf at side) found as part of a movement test.
  - 650 head.
  - Epidemiologic investigation:
    - 4 adjacent herds in Park County
      - 1100 cattle.
    - 4 adjacent herds in Carbon County
      - 900 animals.
    - Assurance testing: fall 2015
  - Quarantine release: March 16, 2015 (calving test).

### Montana's DSA

- 60,000 head utilize the DSA
  - 21,000 of the 80,000 are seasonal
  - 4% of the Montana herd
- An in house DSA compliance evaluation was completed for FY14
  - 96% compliance (percent of herd inventory with some brucellosis surveillance)
  - More than 60,000 tests performed
    - some duplication and some non DSA cattle tested in epi investigations
- USDA-APHIS-CEAH risk assessment published-January 2015
  - VERY low risk of a brucellosis positive breeding animal leaving Montana's DSA undetected (111 years).

- To justify post entry brucellosis testing an outbreak would need to cost a gazillion dollars....Okay, \$100-\$300 million.

Montana Department of Livestock, in conjunction with the Montana Department of Fish Wildlife and Parks is in the fifth year of a five year live elk capture brucellosis surveillance project. A final project summary will be completed this year. 2015 elk surveillance

- Mill Creek area-Paradise Valley Montana is an area within the DSA has been of concern: 30 elk captured; 16 seropositive (53.3%) Additional cattle surveillance through management agreements continue to be utilized in this area as well as throughout the DSA.
- Eastern edge of DSA 63 elk; 2 seropositive (3.2%).
  - Movements continue to be monitored but have remained within DSA
- Total (5 years) seropositive birth site sampling-29 Vaginal Implant Transmitters (VITs)
  - 26 live births with no *Brucella* detected
  - 3 abortions with *Brucella* detected
  - Capture results by year:

Year	Area	Total Tested	Seropositive
2011	Blacktail/Sweetwater	100	12 (12%)
2012	Sage Creek	45	5 (9%)
2012	Clark Canyon	44	0 (0%)
2013	Pioneers	100	0 (0%)
2014	Tobacco Roots	70	0 (0%)
2014	Black's Ford	40	9 (23%)
2014	Red Mountain	20	1 (5%)
2015	Mill Creek	30	16 (53.3%)
2015	North Absaroka	63	2 (3.2%)