


Enclosure on following Page:

Presentation slides on Montana's brucellosis program with  
testing and export numbers

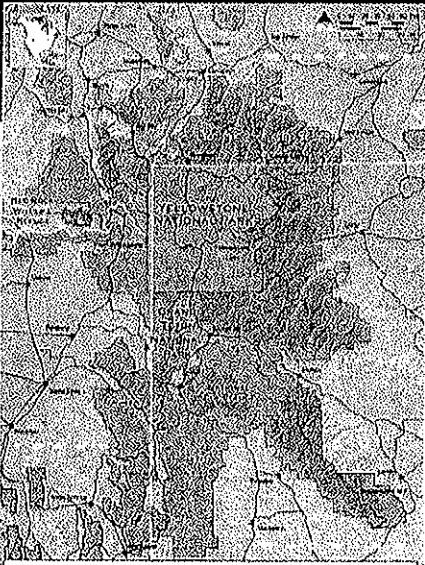
**MONTANA'S  
BRUCELLOSIS  
PROGRAM**

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DVM



**WHAT'S COVERED?**

- ▣ Background
- ▣ Summary of affected herds
- ▣ Elk surveillance
- ▣ Brucellosis surveillance programs

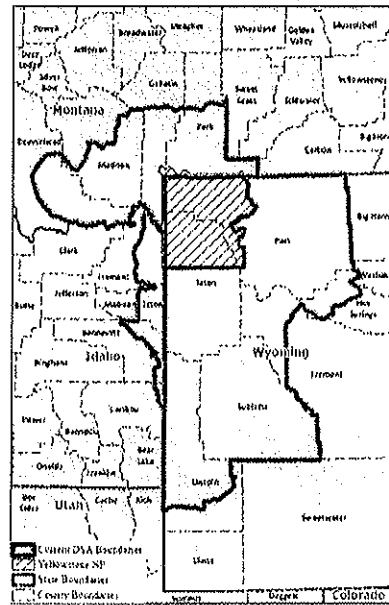


THE GREATER YELLOWSTONE ECOSYSTEM

## HISTORY OF BRUCELLOSIS IN MONTANA

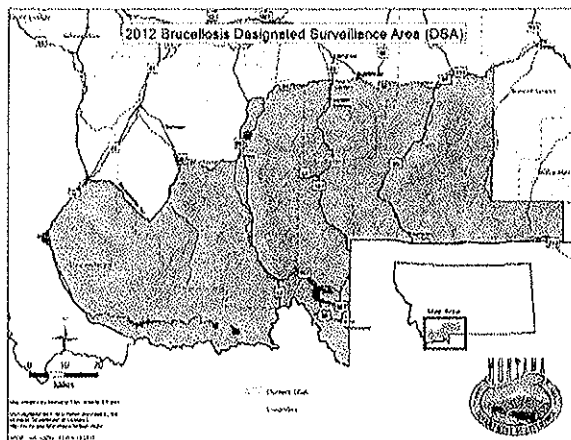
- USDA initiates a national brucellosis eradication program in 1934
- Brucellosis Class Free status gained in 1985
- 2 Brucellosis affected herds 2007, 2008 (8 reactors) and Class Free Status Loss
- MDOL starts aggressive surveillance program and regains Class Free Status in 2009
- 5 affected herds detected 2007, 2008, 2010, 2011, 2011 with total of 30 reactors

## DESIGNATED SURVEILLANCE AREA BOUNDARY CHANGES



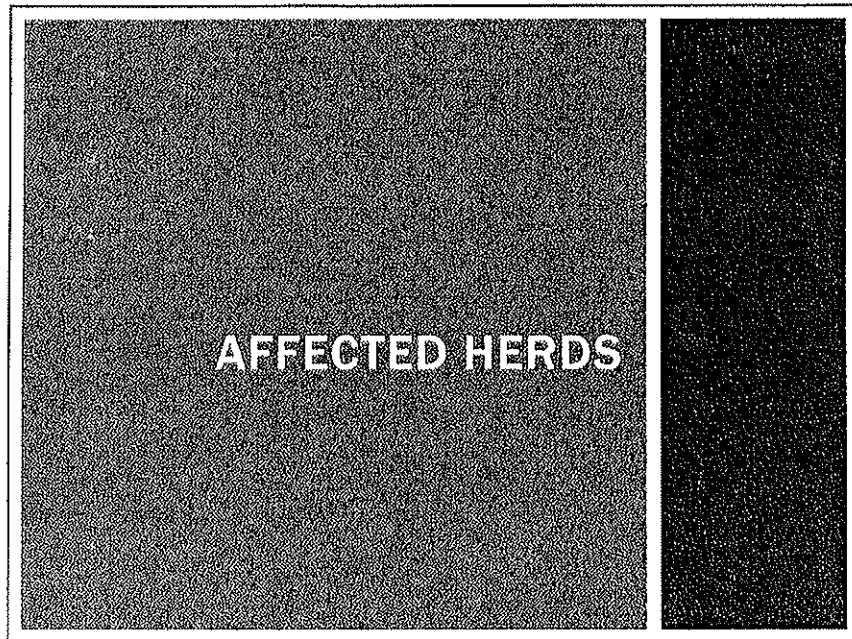
▪ **DSA ARM Change: June 22, 2012**

Boundary change to include area inside Sweetwater Rd and I-15 south of Dillon following second phase of Elk Study

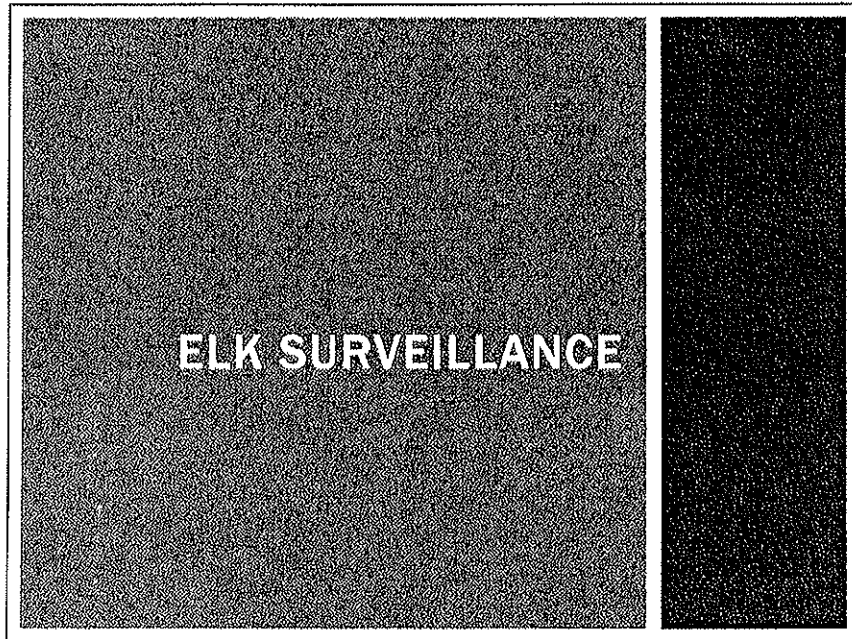


## PILLARS OF DSA

- **Traceability**
  - Intact males and females of any age Officially Identified
- **Change of ownership / movement testing**
  - Animals sold in/from DSA or moved out of DSA tested
  - Any age (males and females) if used for breeding
  - 12 months of age for all others
- **Vaccination**
  - Mandatory vaccination for cattle in entirety of four counties
  - Enforcement actions taken
- **Live capture of elk for brucellosis testing**
  - Tests elk for brucellosis
  - Monitors movement of elk to ensure see if positives stay within DSA



<b>EPI INVESTIGATIONS BY YEAR OF DETECTION</b>					
	<b>2007</b>	<b>2008</b>	<b>2010</b>	<b>2011</b>	<b>2011</b>
Affected Herd Size	260	28	3,250	275	1,550
No of Reactors	7	1	14	7	1
Species	Cattle	Cattle	Bison	Cattle	Bison
Affected Herd Quarantine	2 months	3 months	Ongoing	7 months	Ongoing
Disposition	Depopulation	Depopulation	Test out	Test out	Test out
Adjacent Herd Tests done to date	3,100	1,128	7,117	2,693	9,868
Adjacent Herd tests complete	Yes	Yes	Yes	Yes	Yes
County	Park / (Carbon)	Park	Gallatin	Park	Madison

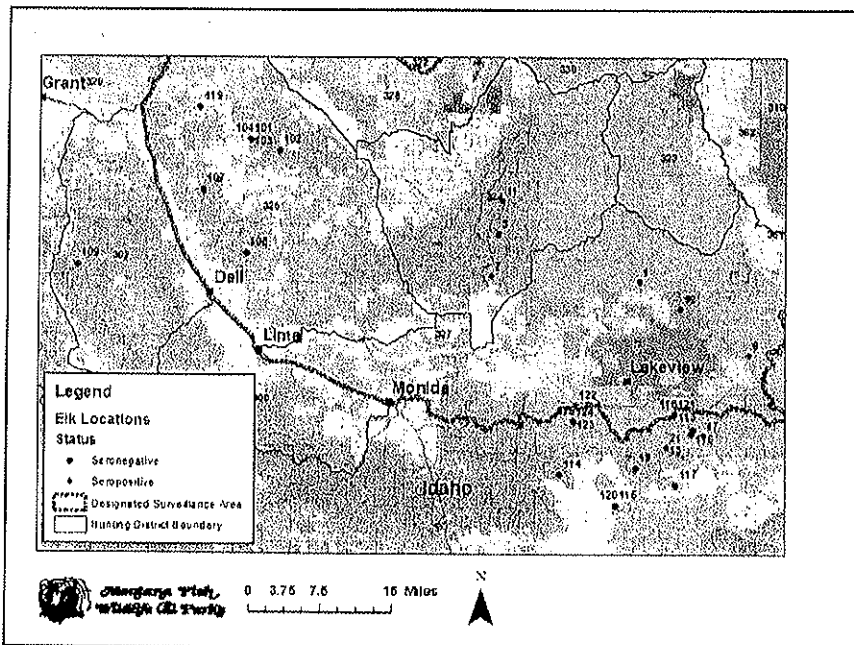


**MULTI-YEAR ELK SURVEILLANCE PROJECT**

- 500 elk to be captured over 5 years
- Focus on boundary area of known infection
- Positive elk collared and implanted with vaginal transmitters
- Abortion / birth sites sought for location and culture
- Elk remaining seropositive removed at end of study period

## ELK SURVEILLANCE PROJECT

- Phase 1: 2011  
Ruby Range southeast of Dillon  
12 of 100 captured elk tested positive for exposure to brucellosis  
Resulted in a DSA boundary area change
- Phase 2: 2012  
Blacktail-Sage Creek Area south of Dillon  
5 of 46 captured elk tested positive for exposure to brucellosis  
Resulted in a DSA boundary area change
- Phase 3: 2013  
Pioneer Mountains (near Dillon)  
100 of 100 elk seronegative



# DSA REGULATIONS COMPARISON

	Idaho (Updated by D. Lawrence 08/27/2012)	Montana (Updated by E. Liska 08/28/2012)	Wyoming (No updates submitted as of 08/31/2012)
<b>Testing</b>			
<b>Test Eligible</b> (Objective Teams #1 and #6)	All sexually intact cattle 18 months of age or greater, parturient/post-parturient of any age.	All sexually intact cattle and privately owned bison 12 months of age and older (± 6 months for abt investigations) Any age if used for breeding	All sexually intact female cattle 18 months of age and older
<b>Movement Testing</b> (Objective Teams #2 and #4)	If they have resided in the DSA between January 1st and June 15th, sexually intact cattle must be tested within 30 days of leaving DSA.	Must be tested within 30 days prior to leaving DSA unless to an approved livestock market or directly to a slaughter facility that will test on arrival. Tests completed July 16th or after are acceptable until February 15th of the following year.	All test eligible female cattle must be tested within 30 days prior to leaving DSA
<b>Change of Ownership</b> (Objective Team #7)	Sexually intact cattle 18 months of age or greater	All sexually intact cattle and privately owned bison must be tested within 30 days prior	All sexually intact female cattle must be tested within 30 days prior
<b>Whole herd testing</b> (Objective Team #3)	Voluntary unless known contact with elk	Voluntary, only the cohort that resided in the DSA if the herd is located outside the DSA.	Voluntary based on risk assessment and herd plan agreement
<b>Slaughter cattle</b> (Objective Team #2)	Must be tested if not consigned to a USDA inspected establishment	All sexually intact cattle from the DSA are tested prior to going to slaughter, either on road or via 2nd, 3rd and 4th slaughter plants in state (excluding MC)	All cattle 12 months of age and older
<b>Dairy Testing</b> (Objective Team #2)	Quarterly testing using DMT	2 or more times / yr for DSA (dairy, quantity / or non DSA)	Annual Ring testing
<b>Identification</b> (Objective Team #4)	All cattle in DSA with official ID that links to DSA	All sexually intact cattle and privately owned bison within the DSA	All sexually intact female cattle in DSA and sexually intact cattle 12 months and older in the rest of the state



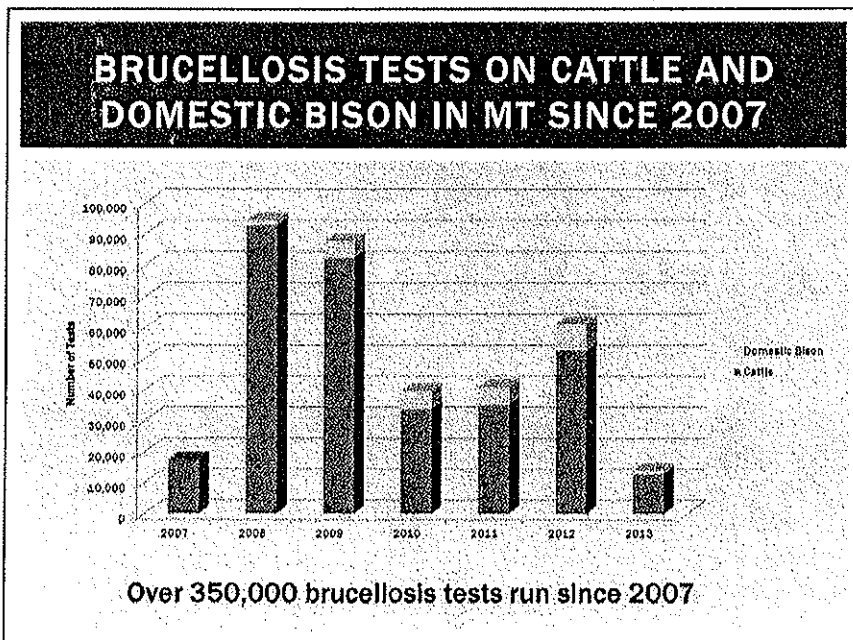
Description of Activities (Objective Team #s) (Refer to the State's Objectives for Wildlife in the State's Objectives for Wildlife)	Idaho (Updated by D. Lawrence 08/27/2012)	Montana (Updated by M. Zelnick 05/30/2013)	Wyoming (No updates submitted as of 08/31/2012)
<b>Mitigations</b>			
Vaccination (Objective Team #6)	Required Statewide	Required within the 4 counties which the DSA lies within	Required in DSA
Calving vaccination (Objective Team #6)	Yes	Yes	Yes
Adult vaccination (Objective Team #6)	Yes, booster/ing encourage and free of charge	Yes if not DCV, AV encouraged and free of charge	Yearling and adult boosters in at risk herds as per herd plan
Herd plans to reduce contact with elk in DSA (Objective Teams #5 and #6)	Voluntary	Voluntary, may include testing variants in low risk wean herd, non herd births are subject to all requirements	Voluntary
Elk Mitigations (Objective Team #5)	Elk fencing around haystacks and other cattle areas to discourage elk, depredation logs given to producers if elk can not be removed through hazing or relocation activities	Fencing of feed storage areas if they become an attractant to elk. Delay turn out areas in the pastures where contact is likely to occur. Some hazing State or Federal feeding prohibited	Feed ground to discourage elk from entering cattle areas, vaccination of elk, low density feeding, vaginal implants to determine calving time/abortion, out of season hunting and hazing, feed storage fencing, spatial and temporal separation
Private feeding of wildlife (Objective Team #5)	Prohibited by rule	Prohibited	
Trigger for DSA change (All Objective Teams need to consider if activities they are assessing could/should be a trigger in any situation(s))	ISDA and IDFA meet annually to exchange information. Whenever scientific proof/explanation for change occurs.	Based on consultations with Fish and Wildlife and parks and encourage the known extent of elk in the area	Based on consultations with WY Livestock Board and WY Game and Fish Department, to include a buffer zone of DSA elk seroprevalence. Increased elk/cattle interactions in buffer areas considered.

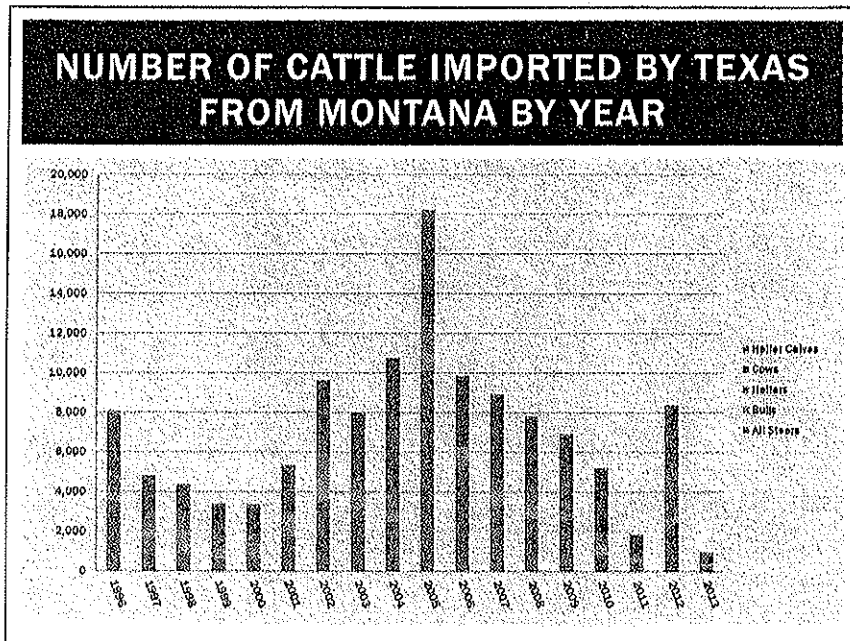
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<b>Wildlife Surveillance</b>			
State Elk Trapping (Objective Team #5)	Yes, data from planned IDFG trapping (net gun, aerial) projects is shared with ISDA	Yes, 5 year plan, 100 elk each year within and around DSA. Radio/GPS collared for movement data (focused primarily on where elk are during the risk periods Feb-May)	Game & Fish conduct surveillance testing anytime elk are trapped as part of other projects.
Hunter surveillance (Objective Team #5)	At least 2500 test kits provided to hunters in eastern ID	Yes, kits provided to hunter with antler tags within survey areas (90 hunting districts)	Yes - Rhon and Elk on a rotational basis; G&F consults with WLSB annually on areas to survey within and around the DSA.
Approximate Elk Prevalence (Objective Team #5)	2-80%	0 to 20%	Generally 0 to 15% (a few small areas near feedgrounds may be slightly higher) depending on area of DSA sampled.
Surveillance Area (for wildlife) (Objective Team #5)	Elk Management units adjacent to Yellowstone and most areas where infected elk have been previously found and have been known to interact with cattle.	Within DSA and areas surrounding the DSA. Have focused primarily on areas just outside of the DSA	Within DSA and areas surrounding the DSA.

### HOW SURE ARE WE?

	Pre Aug 2011	August 2011 (Dillon adjustment)	June 2012 (Lima adjustment)
Number of Producers	217	234	282
Number of Cattle/bison	34,500	46,300	73,200
% Area of MT	3.63%	4.04%	4.58%
# of tests per year	30,250	37,174	42,025*
Prevalence detected with 99% confidence at this sample size	0.0085 %	0.0074%	0.0078**%

\* Note: Testing per state fiscal year (June 30). (\*) represents partial year testing results.





## THANKS

- ▣ Eric Liska, DVM
- ▣ Amy Patterson
- ▣ USDA-APHIS-VS
- ▣ Cattlemen and Women
- ▣ FWP