



MT BRUCELLOSIS MANAGEMENT

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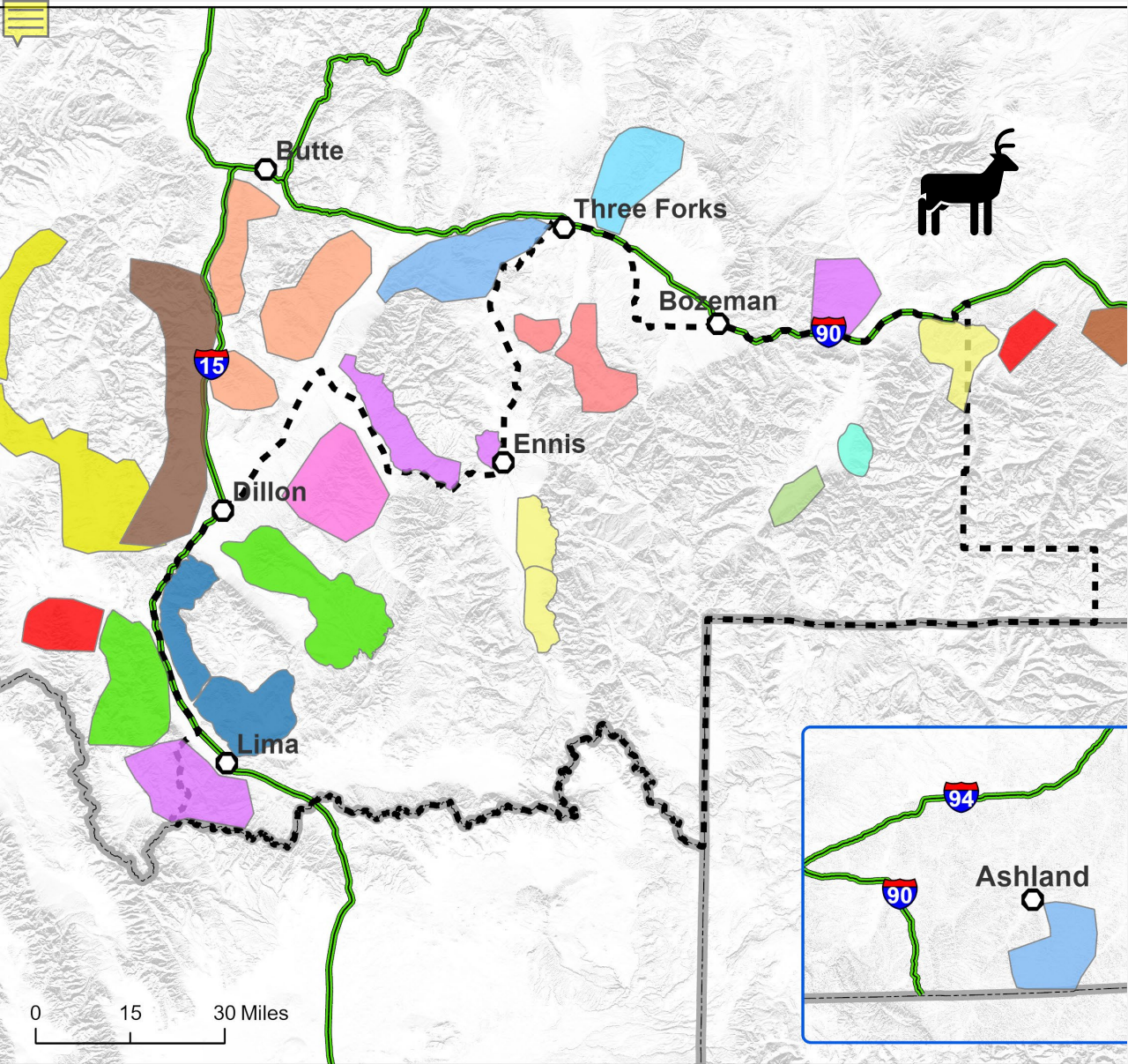




GOALS OF MONTANA BRUCELLOSIS PROGRAM

Prevent the movement of brucellosis infected animals to protect the ability of Montana livestock producers to move cattle and domestic bison without additional restriction.

- *Determine the geographic distribution of seropositive wildlife on the landscape.*
- *Conduct surveillance on the population of cattle and domestic bison that may be exposed to seropositive wildlife.*
- Require identification of all sexually intact animals, including those animals <12 mos. feeding channels.
- Require brucellosis vaccination of cattle and domestic bison that may be at risk of exposure to brucellosis.
- Facilitate spatial and temporal separation of wildlife and livestock on the landscape
 - Bison – complete
 - Elk – where practically applicable

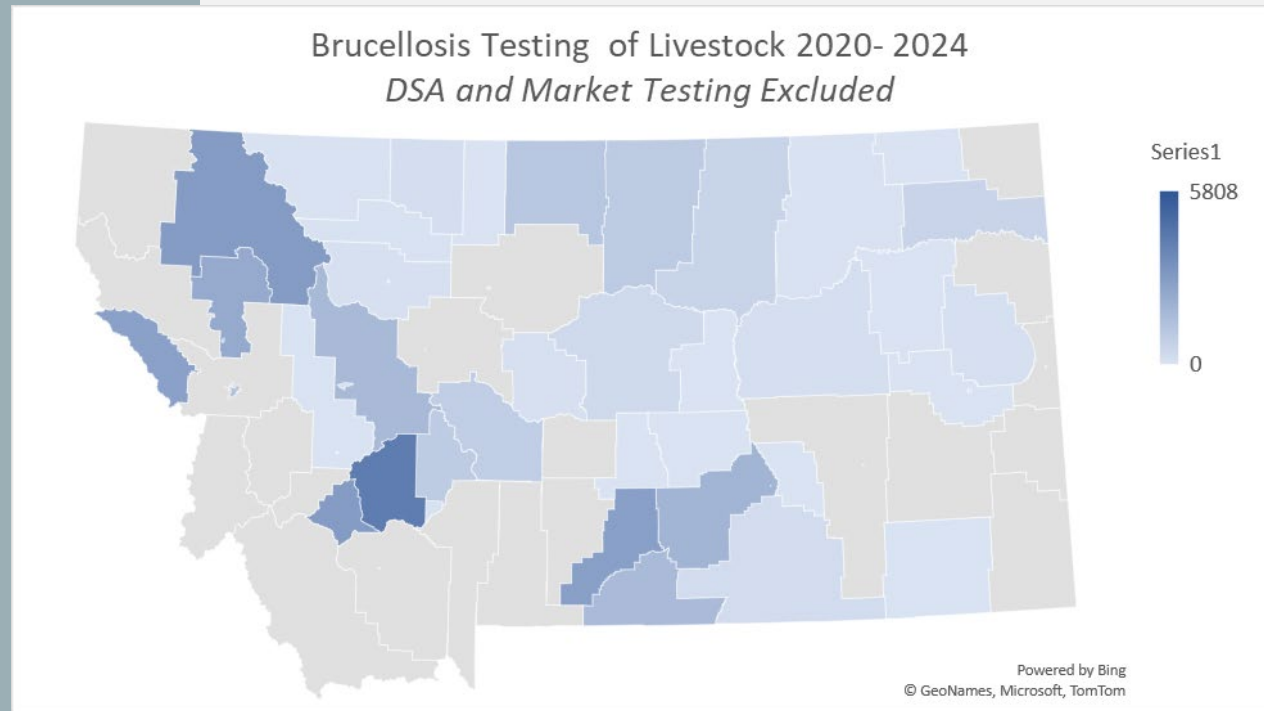
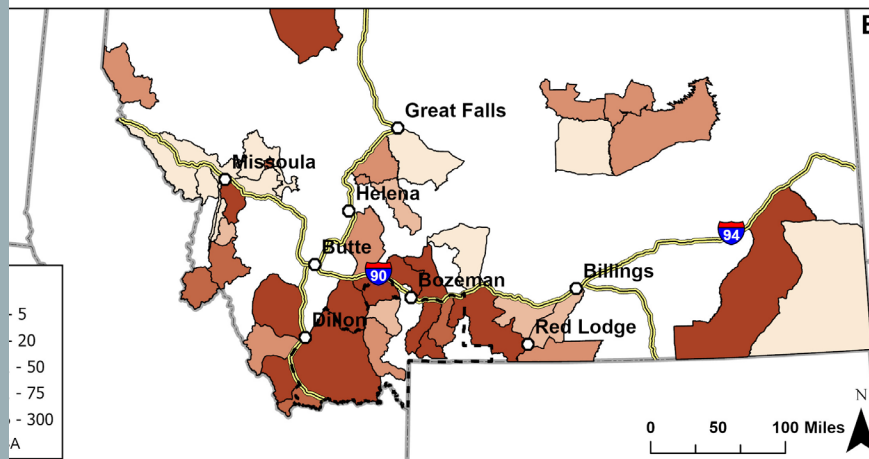
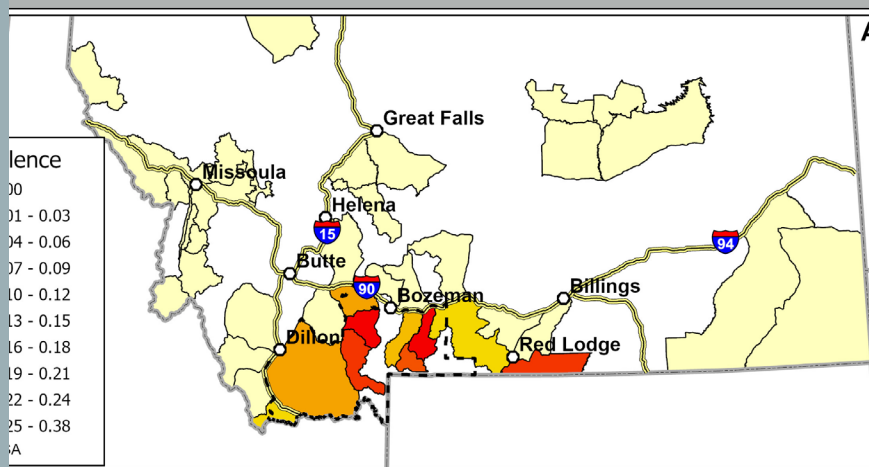


ELK SURVEILLANCE

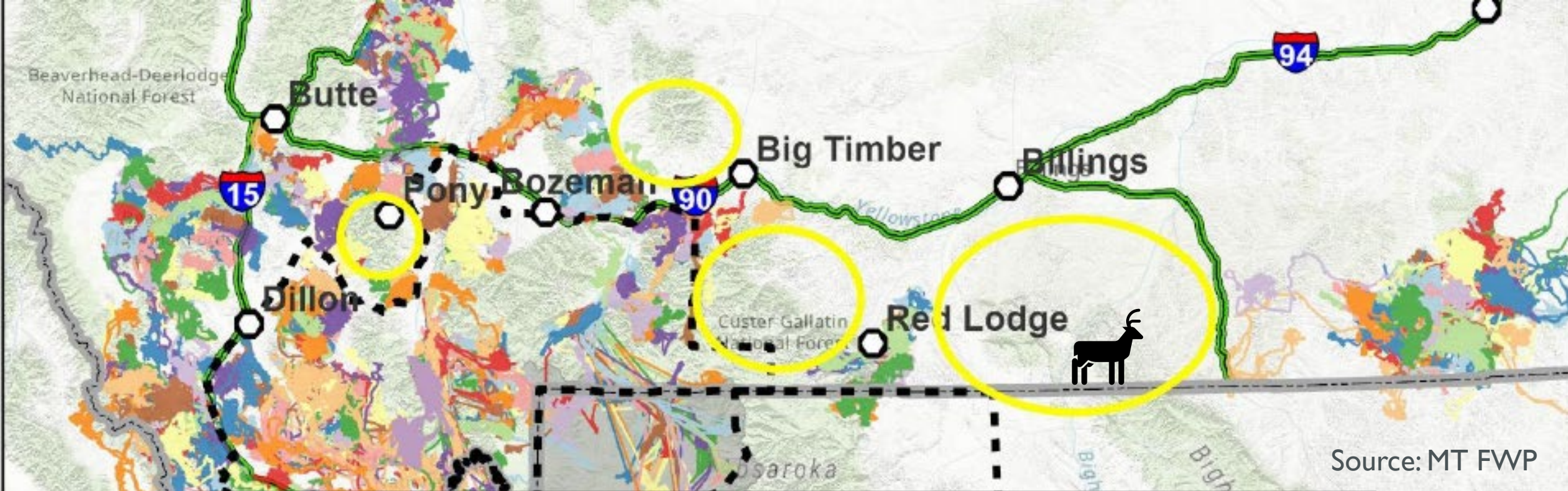
- January 2025 – 52 elk in the southern Crazyes, all seronegative
- No recommendations for boundary adjustment.
 - *Since the creation of the DSA in 2009, there have been five boundary adjustments in response to the finding of seropositive elk outside of the DSA (2011, 2012, 2014, 2019, 2020)*

pled Herds

Ashland	Deer Creeks	Madison SE	Pioneers E	Sixmile
Bangtails	Greeley	Mill Creek	Ruby	Tendoy's I
Blacktail	Highlands	North Madison	Sage Creek	Tendoy's I
Clarks Fork	Horseshoe Hills	Pioneers W/S	Silver Run	Tendoy's I



DO WE HAVE THE CORRECT POPULATION
OF CATTLE UNDER SURVEILLANCE?

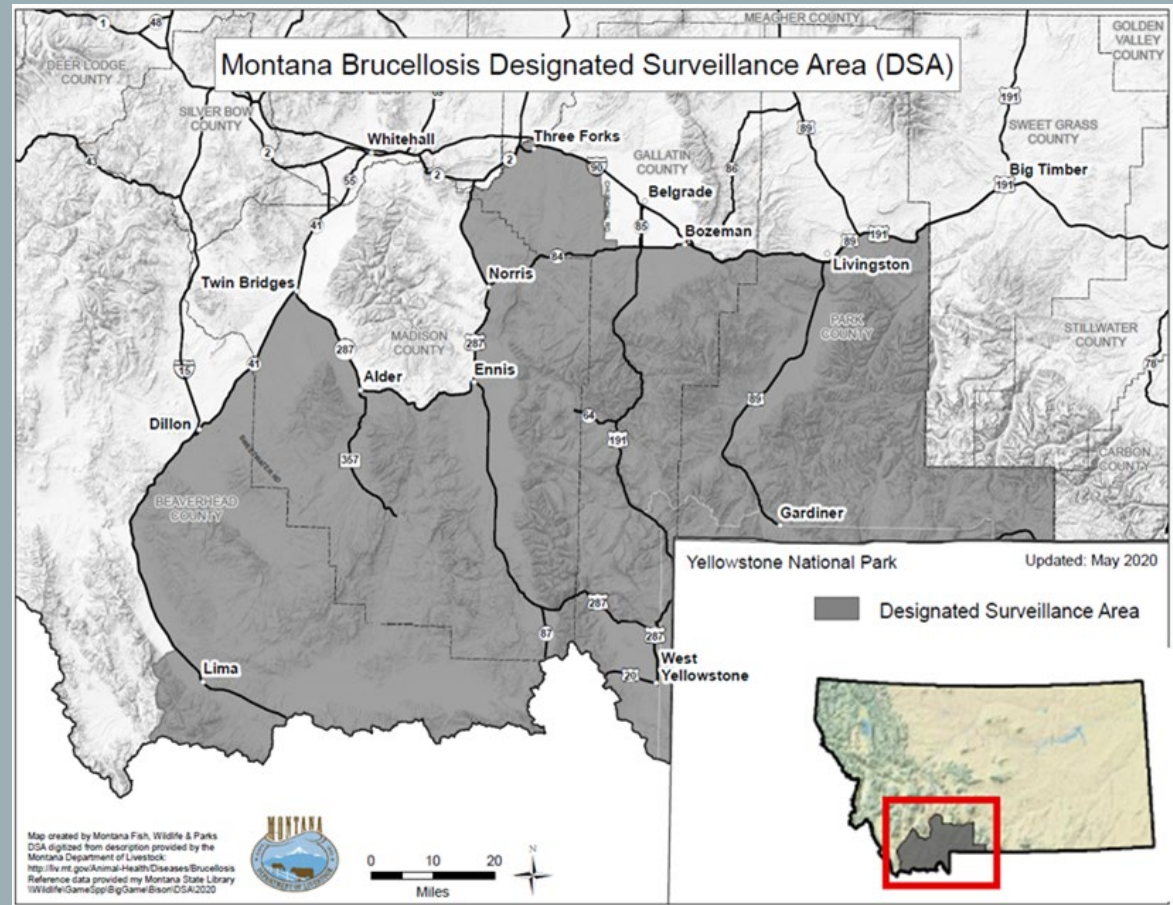


2026 LIVE ELK CAPTURE

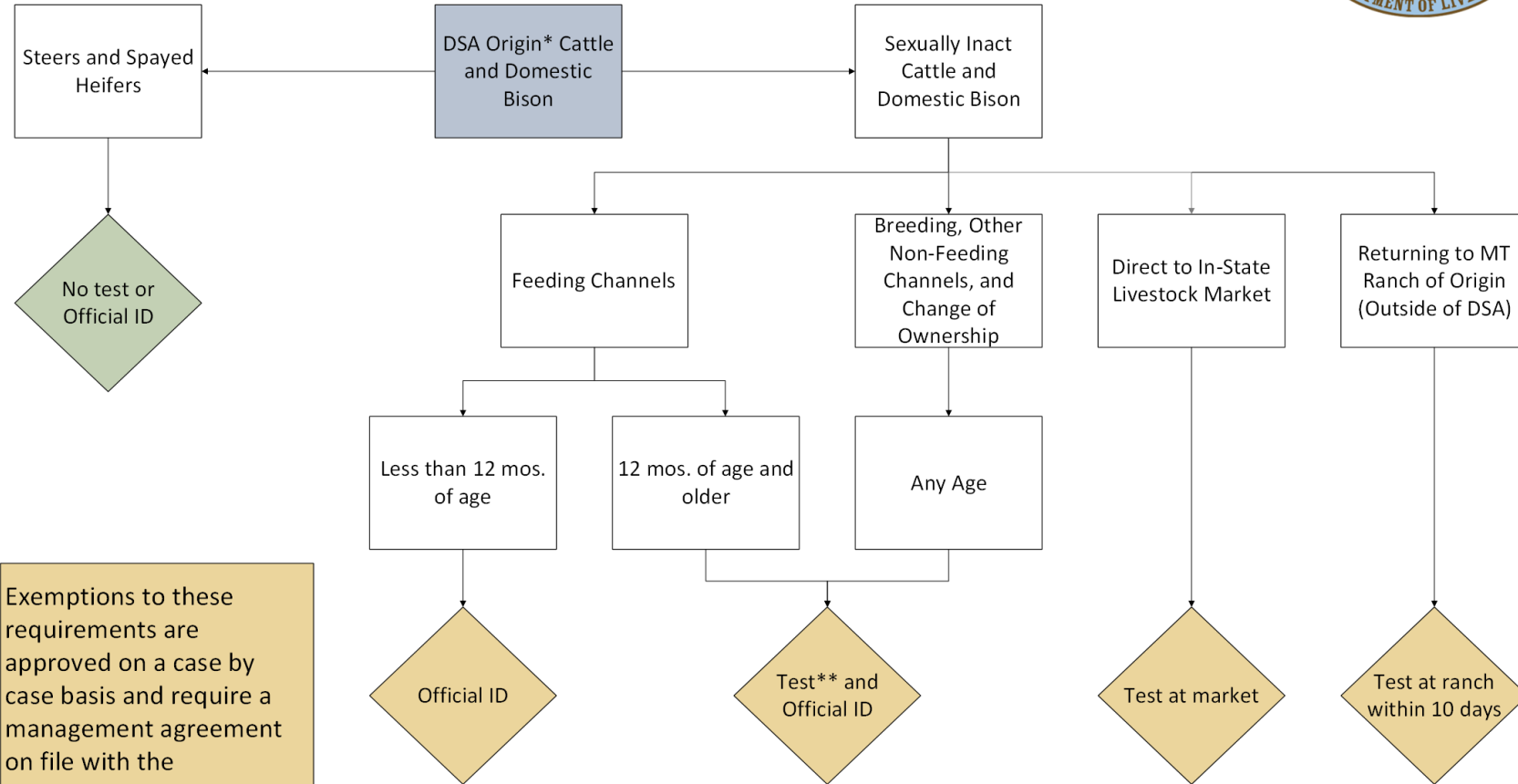


MONTANA'S DESIGNATED SURVEILLANCE AREA - FY23

- 480 herds (seasonal and resident)
- 137,372 cattle and domestic bison
- FY25 brucellosis Tests
 - DSA 83,727
 - All MT 91,203
- 14 Affected herds since 2010



Brucellosis Designated Surveillance Area Requirements



Exemptions to these requirements are approved on a case by case basis and require a management agreement on file with the Department of Livestock.

* Animals that utilize the DSA during the low-risk period ONLY (enter the DSA after July 15 and exit prior to January 15) are exempt from test requirements. Please note, official identification requirements apply regardless of when sexually intact animals enter/exit the DSA.

** A test completed August 16 or after is acceptable for movement out of the DSA or change of ownership through February 15 of the following year.

	FY23 GALLATIN COUNTY	FY23 PARK COUNTY	FY24 BEAVERHEAD COUNTY	FY25 MADISON COUNTY
Number of Inspections Evaluated	811	209	438	643
Number of Cattle- Total	11,808	4,906	27,480	17,933
Compliant Inspections (% Total Inspections)	769 (95%)	204 (98%)	426 (97%)	624 (97%)
Number of Cattle- Compliant	11,052	4,867	26,156	17,447

COMPLIANCE ASSESSMENT

	FY24 Beaverhead County		FY25 Madison County	
Type of Noncompliance	Number of Inspections	Number of Animals	Number of Inspections	Number of Animals
No Test- Animals Sent to Feedlot	2	500 Females	0	0
No Test for Private Sale Out of the DSA	5	72 Females, 3 Bulls	5	14 Females, 4 Bulls
No Test for Private Sale Within DSA	0	0	5	7 Females, 11 Bulls
No Test to Leave DSA- Animals Stayed in State	2	132 Females, 2 Bulls	6	338 Females, 14 Bulls
No Test to Leave DSA- Animals Left State	1	4 Females, 1 Bull	3	65 Females, 33 Bulls
No Test to Leave DSA- Animals Tested on Return	1	601 Females	0	0
Test Expired	1	9 Bulls	0	0

REASONS FOR
NON-COMPLIANCE

BRUCELLOSIS AFFECTED HERD MANAGEMENT

2025 BEAVERHEAD COUNTY

- Single 4 yr old bovine bull tested at a Montana livestock market
 - FPA Plate positive @ 108
 - FPA Tube positive @ 101.3 and 109.2 delta mP
 - BAPA positive
- Re-draw confirmed ID with similar test results
- Animal euthanized and tissues collected for culture

Individual specimen results are listed below:

Tissue / Lymph Node- Retropharyngeal

Tissue / Lymph Node- Parotid

Tissue / Lymph Node- Mandibular

Brucella Isolation Result

Isolate Determined

Brucella Identification Result

Brucella abortus

Tissue / Lymph Node- Bronchial

Tissue / Lymph Node- Internal Iliac

Tissue / Lymph Node- S. Cervical

Tissue / Lymph Node- Prefemoral

Tissue / Lymph Node- Popliteal

Tissue / Lymph Node- Hepatic

Tissue / Ileum

Tissue / Testicle

Tissue / Epididymis

Tissue / Liver

Tissue / Spleen

Tissue / Lymph Node- Mesenteric

Tissue / Kidney

Tissue / Tonsil

2025 BEAVERHEAD COUNTY AFFECTED HERD

- Bull failed pre breeding examination due to injury.
- Culled prior to turnout.
- Turnout occurs after the end of the risk period (July 15)
- Test history:
 - Movements out of DSA and livestock market testing.
 - No recent voluntary herd testing.

2025 BEAVERHEAD CO. AFFECTED HERD MANAGEMENT

- Detection occurred in the middle of breeding season with herd out on range.
- Because the animal had not run with cow herd during risk period and to minimize disruption to breeding cycle, herd was allowed to complete herd test when herd came off pasture in October.
- All adjacent herds were notified and given option to test ahead of October herd test.
- Herd completed a negative whole herd test in October 2025 and was released from quarantine.

Year	Affected Herd Size	# Index Test Reactors	Herd Prevalence	Species	Quarantine Status	Adjacent Herd animals	Location	Status of Positive Animal	Month of Detection	Reason for Test	Disposition
2010	3,250	4	0.12%	Bison	Ongoing	7,000	DSA		Oct.	Voluntary	Test Out
2011	275	7 (6 females, 1 bull)	2.55%	Cattle	7 mos.	3,000	DSA	5/6 Pregnant	Sept.	Sale	Test Out
2011	1,550	1 (bull)	0.06%	Bison	36 mos.	10,000	DSA	N/A	Oct.	Voluntary	Test Out
2013	1,100	3 females	0.27%	Cattle	8 mos.	3,000	DSA	Open	Sept.	Voluntary	Test Out
2013	700	1 (bull)	0.14%	Cattle	7 mos.	800	DSA	N/A	Sept.	Voluntary	Test Out
2014	2340	1	0.04%	Cattle	7 mos.	22,000	Seasonal DSA	Pregnant	Nov.	Voluntary	Test Out
2014	650	1 female	0.15%	Cattle	6 mos.	1,500	Seasonal DSA		Oct.	Voluntary	Test Out
2016	180	2 (bulls)	1.11%	Bison	9 mos.	4,000	DSA	N/A	Nov/Dec	Voluntary	Test Out
2017	1,100	1	0.09%	Cattle	8 mos.	450	DSA	Pregnant	Aug.	Voluntary	Test Out
2018	1,450	1	0.07%	Bison	Ongoing	4,970	DSA	Pregnant	Nov.	Voluntary	Test Out
2021	582	1	0.17%	Cattle	9 mos.	1300	DSA	Pregnant	Nov.	Voluntary	Test Out
2022	170	1	0.59%	Cattle	2 mos.	1,750	DSA	Pregnant	Jan.	Voluntary	Test Out
2023	90	1	1.11%	Cattle	15 mos.	1,650	DSA	Pregnant	April	Market Sale	Test Out
2025	1900	1 (bull)	0.05%	Cattle	4 mos.	27,000	DSA	N/A	July	Market Sale	Test Out



CONSIDERATIONS FOR HOW BRUCELLOSIS HERDS ARE MANAGED

- Sex of reactor
- Pregnancy status of reactor
- Previous test history for animal and herd
- Home location of affected herd (within or outside of DSA)
- Timing of detection



Montana Department of Livestock
Approximate Timeline* for an
Epidemiological Investigation
– Affected Herd

<u>Days</u>	<u>Action</u>	<u>Description</u>
0	Reactor found	Animal(s) test result in the reactor** range on a blood test for brucellosis.
	Producer Notification	DOL notifies the local veterinarian and owner/manager. Reactor(s) ID provided so animal(s) can be found and segregated.
	Verbal Quarantine	Issued for all sexually intact cattle and/or domestic bison.
1-4	Confidentiality	DOL is obligated to keep test information confidential per MCA 81-2-115.
	Confirmatory Test/ID Confirmation	A State or Federal Veterinarian will collect an additional sample(s) from the reactor animal(s) for retest. If retest results are the same (or similar) to the initial, then we are confident that we have the correct animal.
	Meet with producer	APHIS/DOL meet with the owner/manager: learn about operation, answer questions about what happens if the reactor animal cultures positive, introduce idea of herd plan, begin gathering neighbor and animal movement/epidemiologic information.
	Written Quarantine	DOL issues written quarantine.
5-6	Diagnostic Purchase	\$250 dollars is available from USDA. Salvage of meat possible if tissue collection for culture is done at an approved slaughter plant.
7-10	Culture attempt	Reactor animal is euthanized, tissues are collected and sent to the National Veterinary Services Laboratories (NVSL) in Ames, IA for culture attempt.
7-30	Whole Herd Test (Index Test)	If not already complete. Length of time to complete whole herd test will depend on the herd size, weather, available help, etc.
	Neighbor Identification	Continue work with the owner/manager to gather public grazing information. Additional information C be gathered from other agencies and data bases. Contact local veterinarians and DOL brands enforcement personnel.
	Gather Trace and Movement Information	Utilize DOL animal movement data (brand info, health certificates, etc.). Work with owner/manager to gather any additional information that may minimize the scope and impact of the epidemiological investigation.
	Culture Results	Culture of <i>B. abortus</i> It can take up to 4 weeks. If “No Growth” then the herd will likely be released from quarantine. If <i>B. abortus</i> is cultured the herd is designated as an affected herd.
14-60	Affected Herd Plan	Create with owner/manager. The Herd Plan outlines the quarantine and the testing plan to allow for release. The herd plan is signed by DOL, the herd owner/manager, and USDA.
60-74	Affected Herd Testing	1. Index test (Day 0) 2. Post-removal test: Cannot start until 30 days after reactor is euthanized for culture AND after index test is completed. This test is often done at the time that a scour vaccine is administered. 3. Peri-parturiant (around calving) test: Cannot begin until 30 days after post-removal test is completed. Often done at the same time as branding/spring vaccinations.
60+	Release Quarantine	If the peri-parturiant test is negative.
Post-calving	Assurance Test after Quarantine release	6-12 months following release of quarantine. Test of all sexually intact animals 6 months of age and older.
182-365		

VOLUNTARY WHOLE HERD TESTING

- Control when cattle are put through the chute
- Control when disease is found
- Find disease early
- Minimize risk of intra-herd spread
- Minimize impact (duration and cost) of quarantine

THANK YOU!

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Source: MT FWP