Chapter 35 Rule Proposal Comments

Ken Hamilton, Wyoming Farm Bureau Federation – **against**
Tracy Tomascik – **for**
Marty Zaluski, Montana Dept. of Livestock – **against**
Bill Barton, Idaho Dept. of Agriculture – **against**
Mark Boone, Montana Cattlemen's Association – **against**
Jim Logan & Leanne Correll, Wyoming Livestock Board – **against**
Jimmy Reed, Texas Farm Bureau – **for**
Darrell Stevenson, Stevenson Angus Ranch, Hobson, MT – **against**
Lee Bradshaw, Idaho Cattle Association – **against**
Errol Rice, Executive Vice President, Montana Stockgrowers Ass. – **Against**
Montana Elk Brucellosis Working Group – **Against**

Texas Animal Health Commission

July 9, 2013

Carol Pivonka, Executive Assistant
Texas Animal Health Commission
2105 Kramer Lane
Austin, Texas 78758

Dear Ms. Pivonka:

The Wyoming Farm Bureau Federation would like to provide the following comments to the proposed Chapter 35 to remove the permanent ID requirements and replace them with quarantine measures regardless of the location they are coming from within Idaho, Montana and Wyoming. First we will address Wyoming's current prevention efforts, second address our suggestions and finally the consequences of passing this ruling to the Texas, Wyoming, Montana, and Idaho producers.

Wyoming livestock producers have for a long time taken a very active role in insuring livestock in Wyoming are disease free so that these animals can move easily in interstate commerce. When the first scientific evidence that livestock could catch brucellosis from wildlife, namely wild bison and elk, came to light producers began working with the Wyoming Game & Fish Department to prevent opportunities for transmission of this disease from wildlife to livestock. First, the rule in chapter 2 of the Wyoming Livestock Board requires livestock producers to vaccinate all sexually intact female Bovinae over 12 months of age. The rules also provide for a mechanism for adult vaccination of adult cattle to increase the resistance to brucellosis. The rule requires that prior to movement from the Designated Surveillance Area all test eligible female Bovinae are required to be tested negative for Brucellosis prior to leaving the area.

In addition to the actions taken by livestock producers in the Designated Surveillance Area, the Wyoming Game & Fish Department has been active in moving elk off of feed grounds in Wyoming prior to elk calving to minimize opportunity for transmission from elk to livestock. The Department will also initiate a stronger hunter Brucellosis testing program to outside of the Designated Surveillance Area to better understand the possible Brucellosis infection rate in elk. The results of this testing program may require further modification of the Designated Surveillance Area by the Wyoming Livestock Board to enable safe disease free movement of livestock to out-of-state purchasers of livestock. Therefore we believe the current procedures by the livestock producers and the management efforts by the Wyoming Game & Fish Department make the proposed rules

for livestock from the state of Wyoming a redundant and an unnecessary cost to producers on both sides of the trades.

Thus, we would respectfully urge that the Texas Animal Health Commission reject the purposed amendment to Chapter 35 entitled "Brucellosis" for the state of Wyoming, Idaho and Montana at least as far as Wyoming is concerned.

Third, the ruling would have an impact on the business of every producer in Wyoming and could impact many producers in Texas. For those producers in Wyoming that are not currently within the surveillance areas for Brucellosis it damages their business by making their animals less appealing because of the costs of tests, and requirements of quarantine. This also potentially harms the producers in Texas as well because it limits their ability to move cattle to needed pastures in Wyoming in case of a drought if they anticipate bringing those animals back to Texas and increases cost for purchase high quality breeding cattle from Wyoming if they need replacement cattle.

We believe the proposed rule would put unnecessary costs on producers that would already be under the hardship of the drought.

The cost of the test for the animal is not the only cost a producer experiences but the additional handling costs can be significant. Texas producers will have to evaluate what cattle they can get to maximize their purchasing power, and may have to shy away from buying cattle from the implicated states by the rule. Again we reiterate that the risk to Texas producers for Brucellosis infection from Wyoming cattle is minimal and it is an unnecessary cost for either side of the buyer or seller of the breeding animal.

Next, the time requirements set forth by Texas could complicate the ability for Texas producers to purchase replacement breeding animals in a short timeframe. If their breeding stock has to be sold due to a natural disaster, and they need a replacement, it would be more difficult for the producers in Texas to acquire animals from Wyoming needed.

Thank you for the opportunity to comment.

Sincerely,

Ken Hamilton

Ken Hamilton
Executive Vice President

Cc Board
General Issues Chairmen
Texas Farm Bureau Federation
Wyoming Livestock Board

Sally Garcia

From: Carol Pivonka
Sent: Thursday, July 11, 2013 11:28 AM
To: 1-legal
Subject: FW: Brucellosis Amendments Support

Carol S. Pivonka
Executive Assistant for Dr. Dee Ellis
Carol.Pivonka@tahc.texas.gov

From: Tracy Tomascik [mailto:[redacted]]
Sent: Thursday, July 11, 2013 11:24 AM
To: comments
Subject: Brucellosis Amendments Support

To: Texas Animal Health Commission

I am writing to support the proposed amendments for entry permits and post arrival brucellosis testing of breeding cattle from the greater Yellowstone area in Montana, Wyoming and Idaho. I believe it is of good husbandry practice to test these animals prior to leaving their home state and after their arrival into Texas. The current testing requirements in those states do not satisfy my fear of reintroduction of brucellosis in the Texas beef cattle population. Texas beef producers have spent too many years and dollars to eradicate brucellosis from our herds to let potentially exposed cattle enter without affirmation of being brucellosis free.

Thank you for watching over the Texas beef cattle industry.
Tracy Tomascik

DEPARTMENT OF LIVESTOCK
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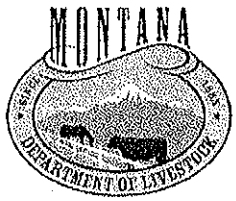
HELENA, MONTANA 59620-2001



DEPARTMENT OF LIVESTOCK (406) 444-7323
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July 11, 2013

Dear Texas Animal Health Commission:

As the state animal health official for Montana, I appreciate the opportunity to comment on proposed changes to TAHC rule §35.4 Entry, Movement, and Change of Ownership that require post-entry brucellosis testing of Montana origin breeding cattle. I have deep concerns over this proposal because it would require unprecedented, long-term government oversight on cattle which are of negligible risk of brucellosis.

Should this proposed rule be adopted, Texas as well as Montana livestock producers will be unnecessarily impacted; Texas cattlemen will be impacted by additional testing costs and quarantine on imported animals for up to 20 months after import, while Montana producers will be impacted by a dramatic decrease in the desirability of Montana cattle.

An explanation of Montana's brucellosis program and specific concerns regarding this TAHC rule include:

1. **Montana brucellosis surveillance efforts are extensive:** In 2008, Montana began an intensive testing program that focused on the southwest part of the state where diseased elk were known to exist. Through this program and the subsequently created Designated Surveillance Area for brucellosis (DSA), the state has tested over 350,000 cattle and domestic bison since 2007.

   Since 2007, Montana found 3 cattle and 2 domestic bison herds affected with brucellosis. Since testing was ramped up in 2008, all herds were found in the early stages of infection before the disease could spread to other herds or out of state. Only 30 reactors have been found cumulatively in all the affected herds to date.

   Montana's DSA includes 282 operations with 73,200 cattle and domestic bison. This fiscal year, 42,025 of the 73,200 animals have been tested to achieve a 99% confidence that the disease (if it exists) is present at a rate of less than 0.008%. The chance that any one Montana animal is brucellosis positive is 0.00024%.

   As an illustration of Montana's effectiveness of finding brucellosis affected herds, the average rate of infection at detection in Montana herds is 1.1%. This is significantly lower than has been found in affected herds historically in the national brucellosis program, and demonstrates that infected herds in Montana are rapidly identified.

2. **Montana producers follow a rigorous set of brucellosis requirements**: The state of Montana requires sexually intact cattle that utilize the DSA to be:
    a. Officially and individually identified (males and females, any age),
    b. Tested prior to sale or movement out of the DSA,
        i. Males and females of any age if for breeding, or 12 months of age for others, and
        ii. Cattle destined to slaughter ,
    c. Officially vaccinated for brucellosis (this requirement extends beyond the DSA and includes the entirety of 4 counties of Beaverhead, Madison, Gallatin, and Park).

    Herd plans are encouraged, but producers who do not have a herd plan are subject to all DSA regulations.

    To improve compliance, brucellosis tests required by DSA regulations are reimbursed from the legislatively appropriated general fund. In addition to covering the testing costs, Montana producers receive $2 per animal tested to cover staffing and equipment needs. 600 brand inspectors conduct inspections throughout the state for change of ownership and county-to-county movement.

3. **Strong partnership between animal health and brands enforcement ensures high compliance**: Brands Enforcement and Animal Health are divisions of the Department of Livestock. Cooperation between the two divisions is not only encouraged, but facilitated by the fact that the 18 district brand investigators (all law enforcement officers) report to 3 area supervisors who are paid jointly by Animal Health and Brands Enforcement divisions.

4. **Montana is conducting a multi-year wildlife capture study for brucellosis:** We are aggressively looking for brucellosis in wildlife by conducting a live-elk capture project that not only tests elk for brucellosis, but also monitors their subsequent movement to verify that seropositive elk remain within the cattle surveillance area. This effort: 1) addresses the problem of low sample return rates from hunter test kits, and 2) samples elk during the high risk time of the year (spring) as opposed to hunter-kill samples which are collected in the fall. Elk often travel dozens of miles between winter and summer range, and therefore, samples collected in the fall may not correctly reflect the cattle populations at risk.

5. **Montana is responsive to wildlife surveillance:**
    Montana has twice altered the DSA boundary (2011, 2012) after elk testing showed possible risk outside the existing DSA boundaries.

    In spring of 2013, Wyoming announced the finding that two samples submitted by hunters from elk harvested east of Wyoming's DSA during the 2012 hunting season tested sero-positive for brucellosis. While DOL previously consulted with Montana's game management agency (Fish, Wildlife & Parks - FWP) on the potential risk to Montana herds in this area, this new development in Wyoming caused DOL to immediately reassess the potential for cross-border movement. Montana and Wyoming game biologists confirmed the previous findings that "there is no known mixing of the Wyoming elk with Montana elk during the brief time the Wyoming elk come a short ways into Montana."

6. **USDA-APHIS rated Montana's DSA highly, and Montana has been responsive to the recommendations**: The USDA review states:

> Montana is commended for its proactive approach to addressing the brucellosis situation in DSAs and developing and implementing a BMP [Brucellosis Management Plan] reflecting requirements critical to mitigating the risk of spread of disease. The Montana Department of Livestock and the Montana APHIS-VS Area Office are commended for the placement of competent personnel in key positions. The forward thinking and progressive attitudes of these valuable employees will continue to help the Montana Department of Livestock and Montana VS accomplish their goals to the greater good of the cattle industry and the brucellosis eradication efforts in the GYA [Greater Yellowstone Area].

The USDA-APHIS review recommended that DSA cattle used for breeding be tested for brucellosis regardless of age. The Montana Board of Livestock adopted just such a rule which became effective April 12, 2013. This requirement applies to both males and females regardless of the age of the animal. Montana is also continuing to test all DSA origin cattle moving to slaughter. This ensures that the nation's scaled back MCI slaughter testing program does not hamper the state from finding infected herds.

A copy of the USDA-APHIS-VS review and Montana's response is included with these comments (enclosure).

7. **The risk to Texas is extremely low:** In most years, Texas imports fewer than 10,000 cattle from Montana (enclosed slide presentation). Per response #1, the chance of a Montana animal testing positive is 0.00024%. However, the risk to Texas is significantly lower because cattle from areas at risk are required to be tested for brucellosis prior to sale. So the number that may be expected to pose a risk to Texas is a small fraction of 0.00024% that test negative on the Montana test.

8. **The proposed rule does not take into account that brucellosis risk is regional**: Since 2008, brucellosis affected cattle and domestic bison herds have only been found in southwestern Montana. The extensive wildlife surveillance has further documented that the risk is regional, rather than state-wide. Unfortunately, the proposed TAHC rule does not focus on the population at risk in southwest Montana, but requires that all the state's breeding animals undergo extensive post-import testing.

9. **The proposed rule requires more extensive testing than would be required for Class B states under USDA's federal program:** States are classified as Brucellosis Class Free, Class A and Class B. States are classified Class B up to a herd infection rate of 1% (100 infected herds per 10,000). In comparison, the state of Montana has an annual infection rate of 0.007% with five affected herds over six years since 2007 (12,341 herds in MT, 2007 NASS) and already tests DSA-sourced cattle prior to export.

Therefore, the proposed rule would establish testing requirements that are disproportionate to the risk as established by USDA's brucellosis program requirements.

10. **Bulls do not spread brucellosis:** Breeding bulls do not contribute to the spread of brucellosis within a herd, however, the proposed rule includes breeding bulls for post-entry testing. There is no documented case of bulls spreading brucellosis. This is further supported by a recent study by USDA were semen from seropositive bull bison was cultured for brucellosis.

11. **Latent heifers are extremely rare**: During a phone conversation on June 7, 2013, the Texas state veterinarian explained that one of his main concerns is the "latent/sleeper heifer syndrome". This syndrome has been documented in heavily infected herds where female calves from infected dams initially test brucellosis negative and then turn positive at puberty or calving. Between 2 to 3% of female calves born from infected females may be latently infected. While this syndrome has been seen in heavily infected herds that sold breeding heifers, it has never been documented from the relatively few brucellosis affected herds in Montana because:

    a. Only three affected cattle herds and two bison herds have been found in Montana since 2007.
    b. The average herd infection rate at detection is 1.1%.
    c. Detection of the herd took place before any breeding animals were sold from infected herds and typically before any intra-herd transmission took place.

    USDA also agrees that the risk of latent heifer syndrome from Montana is minimal per email dated June 24, 2013 from the Associate Director of Western Region, USDA-APHIS-VS (enclosure).

    Therefore, Montana's standing requirement of testing DSA-sourced breeding females of any age and other key components of the state's program are sufficient to mitigate the already minimal risk of latent heifers.

12. **Adult females carry little risk:** Even if the "latent heifer syndrome" remains a concern to Texas animal health officials, the proposed TAHC rule also requires adult cattle to be tested after being imported into Texas. Because latency is not an issue with adult cattle, I suggest that existing regulations that require all DSA-sourced breeding cattle, and other DSA-sourced cattle over 12 months of age be tested is sufficient to mitigate the risk to the state of Texas.

13. **Burden of government oversight for over 20 months after import is prohibitive:** The proposed rule will require extended TAHC oversight for up to 20 months on breeding cattle originating from the three GYA states. For example, breeding heifers imported at six months of age will require a test 30-90 days after they calve at approximately 24 months if age. This 20 month quarantine (or similar regulatory action) will create a significant burden on TAHC, and on the Texas importer.

    Cumulatively, this type of burden will make Texas producers unwilling to import Montana breeding cattle to the detriment of both Texas and Montana.

14. **Other diseases have incubation periods**: This proposal attempts to address concerns over a long incubation period – the time between when an animal is infected until it tests positive for a disease.

    However, it should be noted that all communicable diseases have an incubation period. Unless future rule proposals by TAHC will require post-entry testing for diseases such as tuberculosis, trichomoniasis, and other diseases, I suggest that singling out brucellosis for this type of post-entry surveillance is inconsistent, and unjustified by risk as I described in the points above.

15. **Producer education may be enhanced in place of additional regulations:** Animal movements always present some level of risk. However, the risk of brucellosis to the Texas cattle herd from Montana is no greater than posed by other diseases from numerous sources. Producer education on the inherent risks of any herd animal additions to include DSA cattle and cattle from other sources is a more appropriate action.

In conclusion, this proposed rule will not benefit Texas or Montana producers. The additional costs and heavy burden of government oversight for up to 20 months after import on Montana origin cattle are not justified by the risk. The consequence will be that Texas producers will sustain significant inconvenience and costs or refuse to import Montana origin breeding cattle.

The above comments notwithstanding, I commend the TAHC for striving to prevent introduction of diseases to the Texas livestock herd. Efforts to find disease in livestock are often worthwhile and can bear significant long term benefit. Likewise, Montana has similar priorities. Brucellosis, blood borne, intestinal and skin parasites such as chorioptic mange or fever ticks, equine piroplasmosis, Contagious Equine Metritis (CEM), and others diseases of horses and cattle pose a concern. Tuberculosis is of particular interest.

Montana has set a high standard for brucellosis surveillance and risk assessment, and I will look to Texas to provide a similar level of confidence for diseases of concern from Texas origin livestock imported into Montana.

Sincerely,

Marty Zaluski, DVM
State Veterinarian, Administrator
Montana Department of Livestock

Enclosures:

- Email from Dr. Don Herriott, Associate Director of Western Region, USDA-APHIS-VS on risk of latent heifers from Montana
- Montana response to USDA review of Montana's Brucellosis Management Plan (BMP)
- Presentation slides on Montana's brucellosis program with testing and export numbers
- USDA Review of Montana's BMP

Enclosure on following Page:

Email from Dr. Don Herriott,

Associate Director of Western Region, USDA-APHIS-VS

on risk of latent heifers

Zaluski, Martin

From: Herriott, Donald E - APHIS <Don.E.Herriott@aphis.usda.gov>
Sent: Monday, June 24, 2013 3:30 PM
To: Zaluski, Martin
Cc: Davidson, Mark L - APHIS; Belfrage, John B - APHIS; Clarke, Patrick R. - APHIS; Rhyan, Jack C - APHIS; Healey, Burke L - APHIS
Subject: Testing GYA State Cattle

Follow Up Flag: Follow up
Flag Status: Flagged

Hi Marty,

Subject: TAHC Rule on Testing GYA Cattle

We want to take this opportunity to support the work MT DOL is conducting with regards to Brucellosis management. It appears there is quite a bit of concern about the potential transmission of Brucellosis via the "heifer syndrome". Our analysis has determine the findings listed below.

1. Latent Heifer syndrome

    a. Cites this syndrome as the major reason for the rule changes. While there is some lack of clarity on which heifers are prone to be latent, the literature shows experimentally, that these heifers come from infected dams. Montana, for the state fiscal year ending June of 2012, tested ~ 42,000 head of the 73,000 head that populate their DSA. This gives them a 99% confidence level of finding these infected dams at prevalence as low as .0078%. Montana calculates "over the 6 years since 2007 an annual infection rate of 0.0077% (13,000 herds, 2004 NASS) " which is lower than necessary to qualify as a Class B or even A status. Dr. Zaluski points out, almost all the herds detected in Montana and, in our experience, in Wyoming have been found early enough, that the prevalence is quite low and within herd transmission does not seem to have taken place. The two herds that had within herd transmission were Morgan in Montana in 2007 and Roberts in Wyoming in 2008. Both herds were depopulated and all heifers were spayed.

    b. Therefore, we feel that the movement of latent heifers is unlikely and no more probable than allowed, by our rules, from a Class A or B state from herds not known to be affected.

Transmission from elk is a point source situation. We have been successful finding Brucellosis affected herds before almost any within herd transmission has occurred. The only exceptions that we know of are the two aforementioned herds. In the case of the Morgan herd, DSA rules now in place would have preempted the occurrence of the in-herd transmission.

We hope this information helps.

Donald E. Herriott
Associate Director
Western Region
2150 Centre Ave. Bldg B, MS 3E13

Ft. Collins, CO 80526
Phone: 970-494-7399
Cell: 970-556-8039
Email: don.e.herriott@aphis.usda.gov

Enclosure on following Page:

Montana response to USDA review of Montana's Brucellosis Management Plan (BMP)

Response to Review of Montana's Brucellosis Management Plan

July 10, 2013

In September of 2012 the United Stated Department of Agriculture Animal and Plant Health Inspection Service Veterinary Services (USDA-APHIS-VS) performed a review of Montana's Brucellosis Management Plan (BMP) which addresses the risk of brucellosis transmission from infected wildlife to domestic cattle and bison.

The Montana Department of Livestock (DOL) appreciates the hard work of the review team and is very pleased with the outcome and acknowledgment of the numerous effective and proactive management practices that are already in place. Nearly half (19 of 40) of the review team recommendations suggest to continue current practices.

Additionally, the DOL appreciates the review team's commendation in their final report and has already or is currently addressing all recommendations.

The USDA-APHIS-VS BMP review states:

The purpose of the USDA-APHIS-VS BMP *review was to evaluate the State's ability to prevent brucellosis-infected animals from leaving the designated surveillance area* [DSA] *and potentially putting the rest of the national domestic cattle and bison herd at risk.*

Key strengths of Montana's BMP include:

1. *Proactive actions leading to adjustments to the boundaries of Montana's DSA.*
2. *Cooperative efforts between Montana Department of Livestock's Animal Health Division and their Brand's Enforcement Division, including the implementation and use of an electronic brands software program at the livestock markets. Brand inspection plays a critical role in Montana's brucellosis management plan.*
3. *Wildlife surveillance activities, most notably the multiyear elk capture and surveillance project,*
4. *Testing and surveillance requirements for domestic cattle and bison in the DSA.*
5. *Use of individual herd plans for herds located in the DSA*

Montana is commended for its proactive approach to addressing the brucellosis situation in DSAs and developing and implementing a BMP reflecting requirements critical to mitigating the risk of spread of disease. The Montana Department of Livestock and the Montana APHIS-VS Area Office are commended for the placement of competent personnel in key positions. The forward thinking and progressive attitudes of these valuable employees will continue to help the Montana Department of Livestock and Montana VS accomplish their goals to the greater good of the cattle industry and the brucellosis eradication efforts in the GYA [Greater Yellowstone Area].

1. **RECOMMENDATION:** Increase the number of herds within the DSA on approved herd plans. Risk assessments should be conducted on each herd prior to developing an individualized herd plan.

   RESPONSE: Producers without a herd plan are subject to all DSA requirements. As of June 1, 2013, 156 of the 270 (58 percent) cattle herds which reside or graze in the DSA have approved herd plans.

   DOL prioritizes herd plan development:

   a) The highest priority herds are those that utilize the DSA for only part of the year. This ensures that herds are included in surveillance activities even if they are headquartered outside the DSA. Because of Montana's change of pasture permitting brands regulations, change of ownership, and county line movement brand inspection requirements, producers that fit into this category are recognized quickly.

      All of the 87 DSA utilizing herds headquartered outside the DSA are on herd plans and are subject to surveillance at a level determined by their herd plan (all test at some level).

   b) Also of high priority are herds that are known to have contact with potentially infected wildlife.

   c) DOL strives to review existing herd plans and establish new agreements.

2. **RECOMMENDATION:** Montana should continue performing risk assessments and developing herd plans with the producers in the DSA.

   RESPONSE: DOL appreciates the recognition and support of our current efforts which have contributed to the success of our program.

3. **RECOMMENDATION:** Continued educational efforts are needed to adequately mitigate the risk of disease transmission from elk.

   RESPONSE: DOL appreciates the recognition and support of our current efforts which have contributed to the success of our program. We will continue outreach and education.

4. **RECOMMENDATION:** Montana should establish a target that 100 percent of the producers with cattle and privately owned bison in the DSA at any given time have a risk assessment and an approved herd plan that mitigates the risk of transmission of brucellosis to herds and minimizes the likelihood of exposure to unidentified brucellosis infection from sources being shipped out of the DSA.

   RESPONSE: Montana continues to strive to have all DSA producers on a herd plan with a risk assessment. However, due to seasonal grazing within or out of the DSA, we prioritize the creation of herd plans for new seasonal herds as well as renewal for producers that stay within the DSA and are at the highest risk of exposure during the risk period. Please also see response to #1.

Movement and pre-sale testing continue to be pillars of the DSA program. It is important to note that if the producer does not have a herd plan then the cattle under that ownership are subject to all DSA regulations without exception.

5. **RECOMMENDATION:** Montana should continue monitoring all dairy herds using BRT surveillance.

   RESPONSE: We thank the review team for the recognition of our current efforts and its success. Dairy herds within the DSA perform the Brucellosis Ring Test (BRT) at least twice quarterly (up to 10 times per year). These herds also follow blood testing regulations for movement and change of ownership unless they have a variance written into a herd plan. Dairy herds outside of the DSA perform BRT quarterly.

6. **RECOMMENDATION:** Since cull slaughter cattle will likely not be tested via market cattle surveillance conducted at out-of-State slaughter plants, Montana should test all test-eligible slaughter cattle destined to slaughter plants out-of-State at their livestock markets or prior to any direct shipments to out-of-State slaughter plants.

   RESPONSE:
   - Montana has required by Administrative Rules of Montana (ARM) 32.3.435 the testing of cattle 12 months of age and older prior to slaughter if they are not tested by MCI.
   - Following the review, the rule language was further clarified, and producer education was enhanced in early 2013.
   - Montana recognized the inadequate slaughter testing of DSA cattle early and has been working with APHIS to continue surveillance through "preslaughter" testing which began in 2011.
   - The national MCI program augments the preslaughter surveillance that is focused on the DSA

7. **RECOMMENDATION:** Montana should acquire an FPA plate reader since one of the additional recommendations resulting from this review is to use the FPA to screen all blood samples from brucellosis-affected herds.

   RESPONSE: APHIS-VS Western Region transferred a FPA Synergy 2 instrument to the Montana State Veterinary Laboratory in September of 2012.

   DOL wants to thank APHIS-VS Western Region for the transfer of the FPA Synergy 2 to the Montana Veterinary Diagnostic Laboratory. We appreciate the support and will use FPA as recommended by the review team. FPA is the test used for all affected herd animals.

8. **RECOMMENDATION:** Develop a template for a formal brucellosis-affected herd plan and a template for approved DSA herd plans detailing the proactive risk mitigation actions in place.

   RESPONSE: Historically all affected and adjacent herds have immediately been placed under quarantine and herd plans developed rapidly with the goal of development within 15 days. Testing as well as continued surveillance of the affected herd has not been an issue in the past but a formal brucellosis-affected herd plan has been developed and will be utilized upon detection of an affected herd.

9. **RECOMMENDATION:** A herd plan should be developed with the herd owner within 15 days following the disclosure and classification as an affected herd. (title 9 *Code of Federal Regulations* (9 CFR) part 78.1 (b)(3)).

   RESPONSE: All affected and adjacent herds have immediately been placed under quarantine, after which, herd plans are developed rapidly with the goal of development within 15 days. Testing as well as continued surveillance of the affected herd has not been an issue in the past but a formal brucellosis-affected herd plan will be developed upon detection of an affected herd.

10. **RECOMMENDATION:** A brucellosis-affected herd plan template should be developed for brucellosis-affected and all adjacent and contact herds. These herd plans are required per 9 CFR part 78.

    RESPONSE: A template has been developed for affected herds. This template was modeled after Idaho's affected herd template which outlines testing timelines. Also see response #8.

11. **RECOMMENDATION:** The verbiage, *"This herd plan is voluntary, is subject to review and revision, and is not intended to represent a legal contract"* should not be included in any affected herd plans.

    RESPONSE: DOL appreciates the review team recommendation and has removed the voluntary verbiage from the affected herd plan template.

12. **RECOMMENDATION:** Herd plan should include a test schedule, including the number of negative herd tests required for quarantine release, requirements for the removal of reactor animals, a requirement for a post-quarantine assurance test, vaccination recommendations both adult and calfhood vaccination, requirements for herd additions, requirements for maintaining a herd inventory, requirements for movements out of the herd, and best management practices, including recommendations for cleaning and disinfection.

    RESPONSE: The affected herd plan template has been updated with a testing schedule table and will define the number of tests required for quarantine release. Also, please see responses to #8-#11

13. **RECOMMENDATION:** Documentation needs to be maintained for any waivers to requirements specified in the 9 CFR part 78 or the *Brucellosis Uniform Methods and Rules*. This should include documentation of waivers allowing variances to the number of negative herd tests and length of quarantine or required quarantine release protocols.

    RESPONSE: Any waivers or variances to requirements specified in the 9 CFR part 78 or the *Brucellosis Uniform Methods and Rules* have been discussed with and agreed upon by USDA-APHIS Western Region personnel. A record of decision has been kept in the Montana AVIC office.

14. **RECOMMENDATION:** The VS Form 1-27 should be used when restricted animals are moved.

    RESPONSE: DOL and USDA-APHIS-VS have always used the VS Form 1-27 for movement of quarantined animals to slaughter. Yellowstone National Park (YNP) bison moved from YNP for research will also be moved on a VS Form 1-27.

15. **RECOMMENDATION:** Since the FPA test has the highest sensitivity and specificity of all of the routine brucellosis serology tests, it should be used as the screening test on all animals tested as part of all brucellosis-affected herd tests. When the FPA is used, especially when used on the quarantine release test, it will provide the best assurance (albeit not 100 percent) that there are no remaining animals incubating brucellosis.

    RESPONSE: DOL again wishes to thank USDA for providing the FPA Synergy 2. Please also see response to #7

16. **RECOMMENDATION:** Increase surveillance on slaughter cattle coming out of the designated surveillance area, especially when going direct to slaughter.

    RESPONSE: Change of ownership testing has always been required on DSA cattle 12 months of age and older sexually intact which includes sexually intact cattle going directly to slaughter as described in ARM 32.3.435. This ARM was recently clarified to ensure the preslaughter testing of all test eligible cattle that have been within the DSA whether the animals ship from a ranch or a market.

    Additionally, all test eligible cattle that are owned by a producer that has utilized ground within the DSA, regardless of the time of year, are brucellosis tested prior to sale through a Montana market. Many of these tests are "pre-slaughter" tests because these cattle are often times cull animals and are sold for slaughter.

    DOL records ownership brands on a state level so that there is no duplication of brands within the state of Montana. Any livestock owners whose livestock reside in or travel into Montana's DSA have their brands flagged in this software. This brand information is available to all state employees, including animal health, field and market personnel. As a result, any livestock travelling through a livestock market bearing a flagged brand are

tested for brucellosis. Cattle require an inspection for change of ownership *and* movement across county lines. Local brands enforcement officials are educated on the testing requirements for cattle moving out of the DSA, even when the animals do not change ownership.

Additionally, Montana has three area supervisors who are law enforcement agents as well as seventeen additional law enforcement officials (district investigators) who work under the supervision of the three supervisors. The three area supervisors' salaries are paid half by Animal health and half by brand enforcement which allows for the animal health and brands divisions to work in concert.

17. **RECOMMENDATION:** Continue to develop the electronic process and data logger that records, stores, coordinates and retrieves all the herd and individual animal information together. This helps simplify and expedite identifying and tracing of animals through livestock markets and back to the appropriate herds of origin.

    RESPONSE: DOL appreciates recognition and support of our current efforts which have contributed to the success of our program. Additionally a pilot project is currently taking place that will allow for electronic capture of identification and creation of ICVIs. A constantly increasing number of Montana veterinarians are utilizing electronic systems. Please also see response to #16 (third paragraph)

18. **RECOMMENDATION:** Test eligible cattle with negative test results within the prior 30 days should have their individual identification verified for assurance that the cattle presented are the same cattle listed on the test chart.

    RESPONSE: If any doubt exists as to whether animals presented are on the test chart, the entire group is generally tested. However, as often as possible individual identification of animals on a test chart is verified. Electronic technology has simplified and increased the speed at which I.D. verifications can be accomplished.

19. **RECOMMENDATION:** Consider recording official identification for test eligible cattle that move through Montana's livestock markets to assure future traceability.

    RESPONSE: Official individual identification is always recorded on the official test chart. Official identification is then recorded at the State veterinarian's office and stored in a searchable database.

20. **RECOMMENDATION:** Because of the abbreviated national slaughter surveillance, all direct consignments of test eligible cattle originating from premises in the DSA that are destined to slaughter should have a negative brucellosis test within 30 days prior to shipping.

    RESPONSE: All of Montana's federally and state inspected slaughter plants collect samples from test eligible cattle and bison for brucellosis testing. Regardless of

destination, if test eligible animals are sold to slaughter, a negative "pre-slaughter" brucellosis test is required. Also, please see response to #6.

21. **RECOMMENDATION:** "Continue wildlife surveillance activities and studies to expand the knowledge base about brucellosis in elk."

    RESPONSE: DOL appreciates recognition and support of our current efforts which have contributed to the success of our program. DOL has a strong working relationship with Montana Department of Fish Wildlife and Parks (FWP) as well as their department's commission. The 5 year live elk capture study began in February 2011 and will continue into the foreseeable future. This study continues to produce a great deal of information such as; elk movement data, abortion period and helps to define the risk period.

22. **RECOMMENDATION:** The APHIS VS cooperative agreement funding runs out at the end of January, while the window of time pertinent to conducting testing and research project activities extends through June. Consequently, the opportunity for obtaining relevant calving and abortion location data may be seriously hindered.

    RESPONSE: The current "umbrella" cooperative agreement with APHIS-VS terms start April 1 through the following March, and therefore, this issue has been addressed.

23. **RECOMMENDATION:** Continue hunter-kill elk surveillance in addition to the ongoing elk project collar studies.

    RESPONSE: Montana does not rely heavily on hunter-kill test kits because of the poor rate of return, low percentage of usable samples and cost. The cost per usable sample of a hunter returned test kit has been estimated to be $100. Therefore, this effort has been limited to select areas, late hunts and upon request from hunters. Additionally, elk locations have been documented to be very different during hunting season (low risk period) and late winter and spring (high risk period) locations.

    The multi-year elk capture study has been implemented to address the shortcomings of hunter collected samples.

24. **RECOMMENDATION:** Allow late-season elk hunts in geographic areas where elk pose a risk to cattle. Late-season elk hunts will facilitate mitigating elk-cattle commingling during the season of higher risk of disease transmission. In addition, late-season hunts will provide Montana FWP greater opportunity to collect samples from hunter harvested elk for brucellosis evaluation.

    RESPONSE: The Montana FWP commission sanctioned the elk-brucellosis citizens' working group to develop elk management options in areas where the transmission of brucellosis between elk and livestock is a concern. This group is made up of multiple different interests such as; livestock producers, wildlife enthusiasts, hunters, and veterinarians. It met multiple times in 2012 and presented recommendations to the FWP commission in early 2013. Some of the recommendations included use of late-season

hunting, fencing, and or hazing of wild elk to prevent or stop commingling of livestock and elk during the risk period. The recommendations were accepted by the commission with a commitment to review results, in the summer of 2013, following their implementation. Thus far, involved producers feel that the late season dispersal hunts were a success.

25. **RECOMMENDATION:** A prospective study consisting of collaring young seronegative females in high prevalence areas to determine the rate of seroconversion in each age group, immediate outcomes of infection, number of abortions following seroconversion, and other factors in the epidemiology of the disease would be extremely valuable.

    RESPONSE: DOL appreciates that USDA recognizes the benefits of the live capture study conducted by FWP. The study aims to answer a number of the questions that are being asked in this recommendation.

26. **RECOMMENDATION:** There is need for better animal-side diagnostic tests.

    RESPONSE: DOL agrees that better animal side diagnostic tests would further help mitigate the risks of brucellosis from wildlife and would support any effort to develop such technologies.

27. **RECOMMENDATION:** The cooperative agreement funding period should be adjusted to accommodate surveillance activities.

    RESPONSE: The current "umbrella" cooperative agreement with USDA-APHIS–VS terms are April 1 through the following March, and therefore, this issue has been addressed.

28. **RECOMMENDATION:** Work[ing] with APHIS to develop a State-specific (or DSA specific) slaughter cattle surveillance plan that would provide for sampling and testing "pre-slaughter."

    RESPONSE: DOL strives to test 100% of test eligible cattle prior to slaughter regardless of subsequent MCI testing. The brands computer program has been instrumental to brands and market personnel to readily recognize animals that have testing requirements. Also, please see response to #6 above.

29. **RECOMMENDATION:** Continue the use of RFID tags. Additional discussion should be had with the APHIS Traceability Program regarding availability of program provided RFID tags and flexibility in the use of traceability funding (i.e. allow use to purchase software).

    RESPONSE: DOL appreciates recognition and support of our current efforts which have contributed to the success of our program. Montana requires that all sexually intact cattle, regardless of age, are officially individually identified prior to leaving the DSA.

In the past 4 years, MDOL has ordered approximately 65,000 840 RFID tags, of which about 18,000 have gone into DSA cattle. Additionally, DOL has placed hand held computers and electronic identification reading devices at veterinary clinics throughout the State with the majority in the control of veterinarians that service the largest number of DSA producers.

30. **RECOMMENDATION:** Continue first-point testing at livestock markets and encourage, where and when more appropriate to better mitigate risk, testing before cattle and domestic bison leave the ranch. Brucellosis-infected animals are being identified by these proactive activities.

    RESPONSE: DOL appreciates recognition and support of our current efforts which have contributed to the success of our program.

31. **RECOMMENDATION:** Require a test on female cattle of any age intended for use as breeding stock.

    RESPONSE: DOL agrees with this recommendation and has published ARM 32.3.435 which now includes the testing of all sexually intact cattle and domestic bison of any age that are sold for breeding from the DSA.

32. **RECOMMENDATION:** APHIS should lead efforts (perhaps a task for the Regional Brucellosis Epidemiologist) to harmonize elk testing protocols (laboratory testing protocols) between all three GYA States.

    RESPONSE: DOL agrees with this recommendation which would minimize the three states from varying interpretation of the same serologic information from wildlife.

33. **RECOMMENDATION:** The State and Federal Regional, Area, and Designated Brucellosis Epidemiologists are encouraged to network with appropriate State and Federal wildlife agencies to pursue ideas for projects to assess the role other wildlife species may play in maintaining (possible sentinel populations) and transmitting brucellosis to other domestic and wildlife species (i.e. cattle and elk).

    RESPONSE: DOL supports improved communication and research to address this difficult issue.

34. **RECOMMENDATION:** Alternative slaughter surveillance sampling strategies that will meet the intended level of MCI program surveillance for states with *B. abortus* in wildlife need to be developed specific for slaughter cattle moving out of the GYA States and more specifically out of the DSAs in the GYA states. "Pre-slaughter sampling" was proposed as an opportunity to meet the intended level of MCI program surveillance. DOL personnel indicated the desire to work with APHIS to develop and implement a State-specific "pre-slaughter surveillance plan" for cattle originating from the designated surveillance are to meet this need. Such a plan should be incorporated into and funded through the national bovine brucellosis slaughter surveillance plan.

RESPONSE: DOL agrees with this recommendation to improve slaughter surveillance and, as stated by the review team, specifically out of the DSA. Please also see response to #6.

35. **RECOMMENDATION:** Strengthen seasonal grazing activities by developing a current list of producers moving into the DSA, limit issuing of permits to the District, and any producers partaking of seasonal grazing to have approved herd plans, which identifies the permits being used, animal identification, and testing requirements.

    RESPONSE: Montana continues to monitor for and place high priority herds on herd plans as well as the enforcement of DSA and brand regulations (Please also see response to #1). Individual identification is a requirement and has been made readily available at low or no cost to many producers (Please also see response to #29).

36. **RECOMMENDATION:** Maintain calfhood vaccination requirement and recommend booster and adult vaccination in herds with known or suspected elk exposure. Prioritize use of Federal funds to support these activities. Also suggest monitoring vaccination data and comparing with calf crop data, especially for herds in the DSA, as a way of assessing compliance with vaccination requirements.

    RESPONSE: DOL agrees with this recommendation, and will maintain the calfhood vaccination requirement and in many cases does recommend calfhood booster and Adult Vaccination (AV) of cattle, especially those that utilize the DSA. 1916 animals have been adult vaccinated so far in this fiscal year to date.

37. **RECOMMENDATION:** APHIS should lead efforts to continue discussion regarding the need for vaccination tattoos. An evaluation of the current need for a vaccination tattoo should be explored – what is the current "function" of the vaccination tattoo?

    RESPONSE: DOL supports these efforts as the concern over misidentifying an animal previously vaccinated with RB 51 does not carry the same consequences as it once did when strain 19 was widely used.

38. **RECOMMENDATION:** The Montana Department of Livestock and the Montana VS Area Office are encouraged to assess current field-testing equipment (such as chutes and gate panels) and upgrade as appropriate to assure the safety of personnel and animals when testing herds.

    RESPONSE: Private/local veterinarians conduct the majority of testing on Montana's DSA cattle. Veterinarians have been able to upgrade their equipment in a large part through continued testing reimbursement.

39. **RECOMMENDATION:** Continuing producer education and outreach using a variety of venues through which to deliver and disseminate information about Montana's brucellosis surveillance program.

RESPONSE: DOL appreciates recognition and support of our current efforts which have contributed to the success of our program. DOL intends to continue producer outreach throughout the State regarding the brucellosis surveillance program. Methods of outreach have included, but have not been limited to, news releases, producer mailings, work with producer groups and associations, an up to date MTDOL website and other methods. DOL works closely with FWP and their commission to continue outreach and education. Additionally, FWP works to educate their stakeholders including Montana land owners, livestock producers, wildlife enthusiasts, and hunters.

Enclosure on following Page:

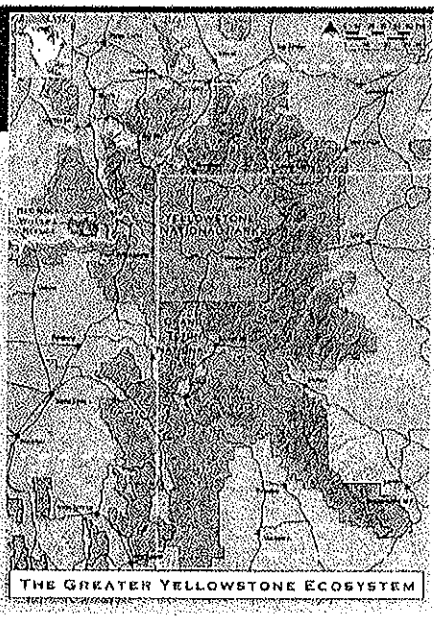
Presentation slides on Montana's brucellosis program with testing and export numbers

MONTANA'S BRUCELLOSIS PROGRAM

Marty Zaluski, DVM

WHAT'S COVERED?

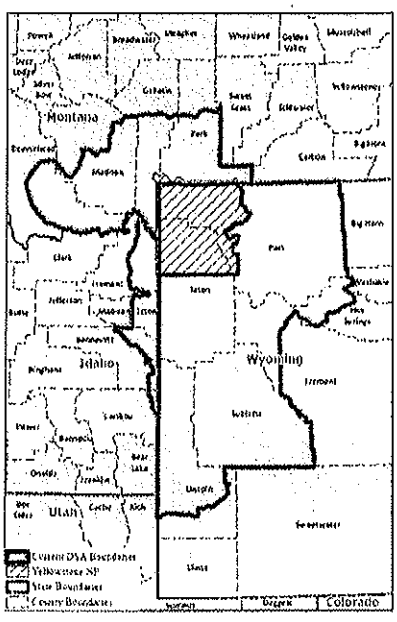
- Background
- Summary of affected herds
- Elk surveillance
- Brucellosis surveillance programs



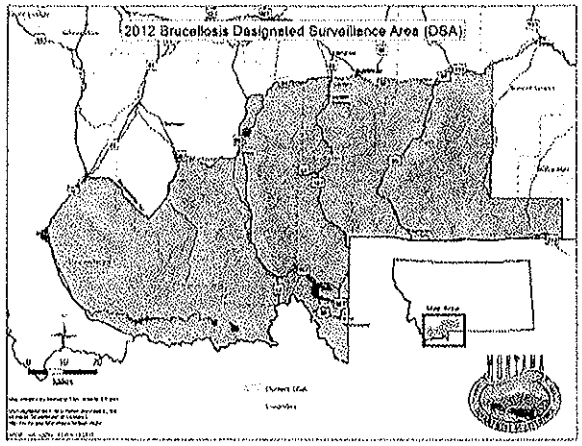
HISTORY OF BRUCELLOSIS IN MONTANA

- 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

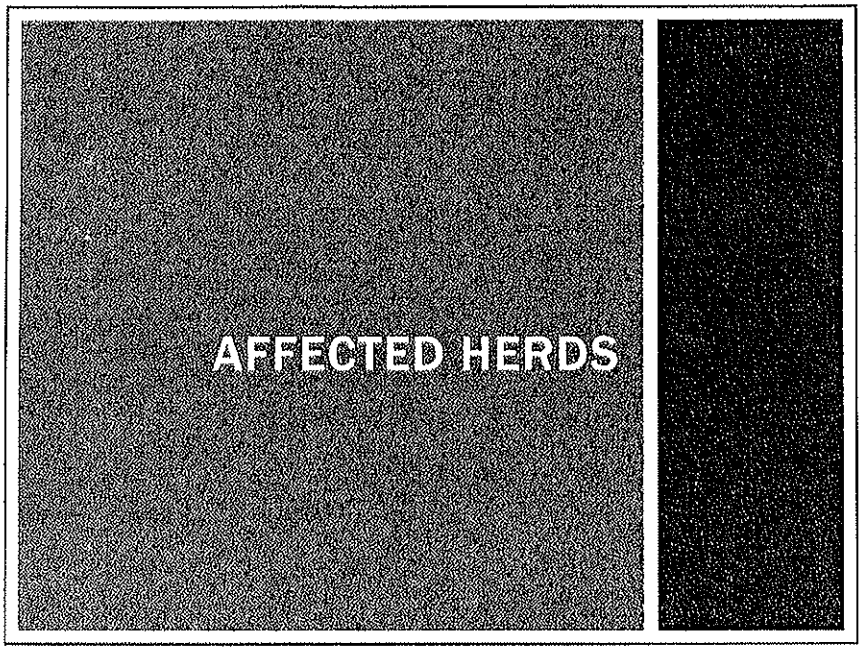


- DSA ARM Change: June 22, 2012
  - Boundary change to include area inside Sweetwater Rd and I-15 south of Dillon following second phase of Elk Study



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



EPI INVESTIGATIONS BY YEAR OF DETECTION

	2007	2008	2010	2011	2011
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

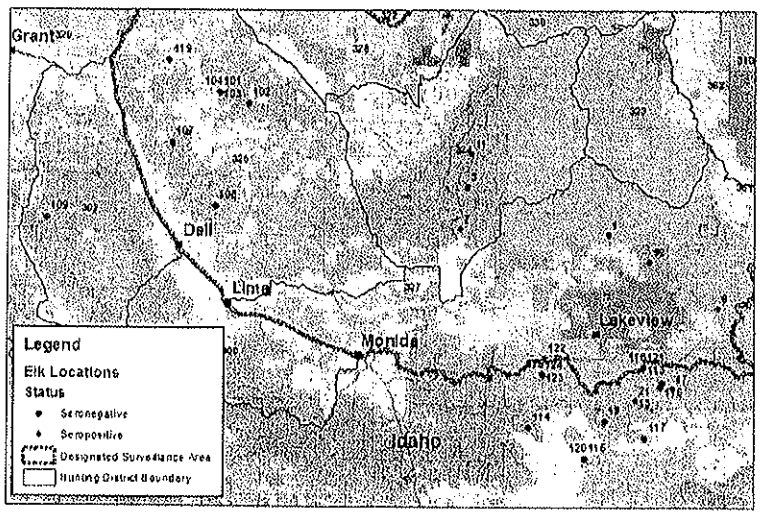
ELK SURVEILLANCE

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



Description of Activities	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]
Testing			
Test Eligible (Objective Teams #1 and #3)	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 epi investigations) Any age if used for breeding	All sexually intact female cattle 18 months of age and older
Movement Testing (Objective Teams #2 and #4)	If the 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
Change of Ownership (Objective Team #2)	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
Whole herd testing (Objective Team #3)	Voluntary unless known contact with elk	Voluntary, only the cow/calf pair resided in the DSA if the herd is located outside the DSA. Required for epi investigations (≥ 6 months of age sexually intact)	Voluntary based on risk assessment and herd plan agreement
Slaughter cattle (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 ranch or at sale yard. State and Fed slaughter plants in state continued MC)	All cattle 12 months of age and older
Dairy Testing (Objective Team #2)	Quarterly testing using DAT	2 or more times / yr for DSA dairies, quarterly for non DSA	Annual Ring testing
Identification (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 intacts female cattle in DSA and sexually intact cattle 12 months and older in the rest of the state

Description of Activities (Objective Team #3 needs to confer with all other Objective Teams to confirm if the State is adhering to their DMA's)	Idaho (Updated by D. Lawrence 08/27/2012)	Montana (Updated by M. Zaluski 05/30/2013)	Wyoming (No updates submitted as of 08/31/2012)
Mitigations			
Vaccination (Objective Team #6):	Required Statewide	Required within the 4 counties which the DSA lies within.	Required in DSA
Calfhood vaccination (Objective Team #6)	Yes	Yes	Yes
Adult vaccination (Objective Team #6)	Yes, boostering 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 Team #5 and #6)	Voluntary	Voluntary, may include testing variances in low risk areas. Herds not on herd plans are subject to all requirements.	Voluntary
Elk Mitigations (Objective Team #5)	Elk fencing around haystacks and other cattle areas to discourage elk, depredation tags 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 of cattle into pastures where commingling 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 dates/abortion, out of season hunts and hazing, feed storage (fencing, spacial and temporal) seperation
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 encompass the known extent of seropositive elk	Based on consultations with WY Livestock Board and WY Game and Fish Department, to include a buffer zone of 0% elk seroprevalence. Increased elk/cattle interactions in buffer areas considered.

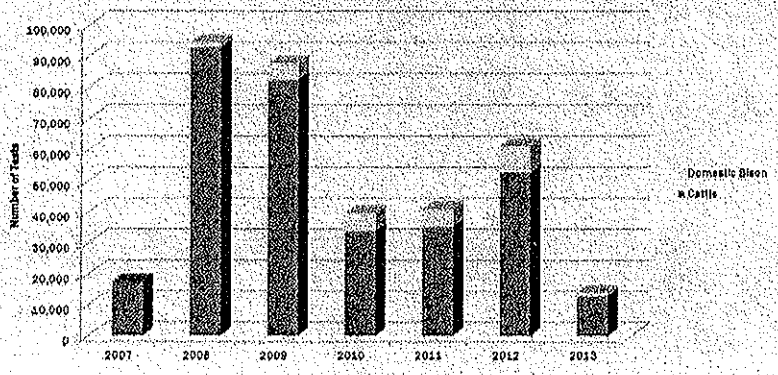
Description of Activities (Objective Team #3 needs to confer with all other Objective Teams to confirm if the State is adhering to their DMA's)	Idaho (Updated by D. Lawrence 08/27/2012)	Montana (Updated by K. Liska 08/29/2012)	Wyoming (No updates submitted as of 08/31/2012)
Wildlife Surveillance			
State 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 collars used for movement data focused primarily on where elk are during the risk period (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 hunters with antlerless tags within survey area (90 hunting districts)	Yes - Bison 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*%

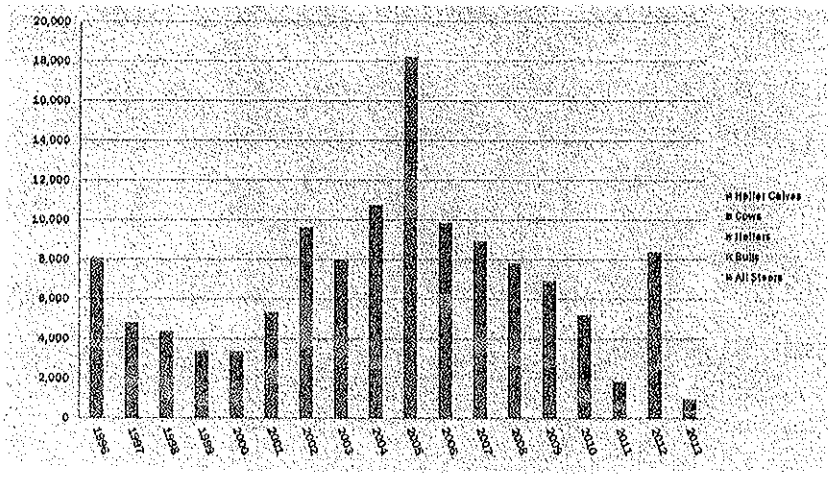
* Note: Testing per state fiscal year (June 30). (*) represents partial year testing results.

BRUCELLOSIS TESTS ON CATTLE AND DOMESTIC BISON IN MT SINCE 2007



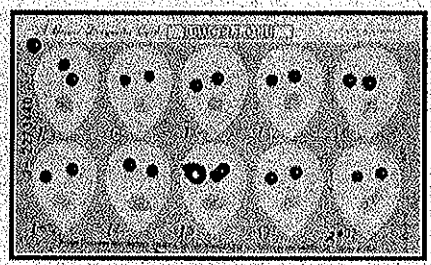
Over 350,000 brucellosis tests run since 2007

NUMBER OF CATTLE IMPORTED BY TEXAS FROM MONTANA BY YEAR



THANKS

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



Enclosure on next Page:

USDA Review of Montana's Brucellosis Management Plan

United States Department of Agriculture (USDA), Animal and Plant Health Inspection Service (APHIS), Veterinary Services (VS)

Review of Montana's Brucellosis Management Plan

A Review to Assess the Specific Disease Management and Disease Mitigation Activities Currently in Place within Montana's Designated Surveillance Area.

Compilation of Observations, Findings, and Recommendations from the Review Team of APHIS VS and State Animal Health Officials.

Evaluation of Montana's
Brucellosis Management Plan Activities

Review Team members:

- Gary Brickler: Team Leader
- Debbi Donch: National Brucellosis Program Staff
- Leonard Eldridge: State Veterinarian
- Don Evans: Area and Designated Brucellosis Epidemiologist
- Debra Lawrence: Idaho Greater Yellowstone Area (GYA) State representative
- Eric Liska: Montana GYA State representative
- Bob Meyer: Wyoming GYA State representative
- Terry Milligan: VS Animal Identification Coordinator
- Jack Rhyan: Western Region Wildlife Staff

Dates of the Review:

- Thursday, September 13, 2012
- Friday, September 14, 2012

Locations visited during the Review:

- Montana Department of Livestock Office, Helena, Montana
- Montana Department of Fish, Wildlife and Parks Office, Bozeman, Montana
- Headwaters Livestock, Three Forks, Montana
- USDA APHIS VS Area Office, Helena, Montana

Executive Summary

Since the publication of the brucellosis interim rule in December 2010, the GYA States have been working with APHIS VS to develop a memorandum of understanding (MOU) that describes their respective brucellosis management plan (BMP). The BMP described in the MOU defines the State's designated surveillance area and further describes the surveillance and mitigation activities the State conducts to identify occurrence and prevent the spread of *Brucella abortus (B. abortus)* in domestic livestock and wildlife within and from the designated surveillance area.

This report reflects VS' review of Montana's current BMP activities. The focus of the review was to assess the specific disease management and disease mitigation activities currently in place within the designated surveillance area. The purpose of the review was to evaluate the State's ability to prevent brucellosis-infected animals from leaving the designated surveillance area and potentially putting the rest of the national domestic cattle and bison herd at risk.

The goal of the review was to assess the adequacy of Montana's BMP in preventing the spread of brucellosis from the designated surveillance area (DSA). The specific objectives developed for this review included:

1. Determine if the States are adhering to their BMPs.
2. Determine if the current surveillance of cattle and privately owned bison is effective.
3. Evaluate if protocols for testing used for epidemiological investigations, test and remove protocols, and quarantine release are documented and being followed.
4. Determine if adequate regulations are in place to prevent the movement of brucellosis-infected cattle or domestic bison out of the DSA; if compliance with these regulations is being adequately monitored; if animal identification requirements are in place, and are animals traceable to the DSA.
5. Determine if wildlife surveillance is sufficient to allow for rapid adjustment of the boundaries of the DSA.
6. Determine if mitigations are in place that reduce exposure to infected sources and reduce the risk of infection if exposure occurs.

Montana's BMP is comprised of pertinent State regulations detailing required actions and activities associated with their designated surveillance area. Montana's designated surveillance area was incorporated into the *Administrative Rules of Montana* (ARM 32.2.433-32.3.437) effective January 2011 and revised in July 2011.

Montana initially developed a brucellosis action plan, a short-term plan reflecting the actions and strategies aimed at regaining Brucellosis Class Free State status, in January 2009. Once the brucellosis action plan expired, Official Order 10-01-D went into effect in January 2010, establishing Montana's designated surveillance area. This Official Order outlines Montana's continued brucellosis surveillance and mitigation actions to address the risk of spread of brucellosis between livestock and brucellosis-infected wildlife. Actions implemented through this Official Order include official calfhood vaccination requirements and individual animal identification requirements in counties in the designated surveillance area. ARM 32.2.433-

32.3.437 describes Montana's current designated surveillance area, animal identification requirements, testing, and vaccination requirements for domestic cattle and bison residing in the DSA.

Key strengths of Montana's BMP include:

- Proactive actions leading to adjustments to the boundaries of Montana's DSA.
- Cooperative efforts between Montana Department of Livestock's Animal Health Division and their Brand's Enforcement Division, including the implementation and use of an electronic brands software program at the livestock markets. Brand inspection plays a critical role in Montana's brucellosis management plan.
- Wildlife surveillance activities, most notably the multiyear elk capture and surveillance project,
- Testing and surveillance requirements for domestic cattle and bison in the DSA.
- Use of individual herd plans for herds located in the DSA.

Key recommended enhancements to Montana's BMP include:

- Increasing the number of herds within the DSA on approved herd plans. Risk assessments should be conducted on each herd prior to developing an individualized herd plan.
- Developing a template for a formal brucellosis-affected herd plan and a template for approved DSA herd plans detailing the proactive risk mitigation actions in place.
- Increasing surveillance on slaughter cattle coming out of the designated surveillance area, especially when going direct to slaughter.
- Continuing wildlife surveillance activities and studies to expand the knowledge base about brucellosis in elk, which will lead to better disease management practices and risk mitigation efforts.
- Working with APHIS to develop a State-specific (or DSA specific) slaughter cattle surveillance plan that would provide for sampling and testing "pre-slaughter."
- Continuing producer education and outreach using a variety of venues through which to deliver and disseminate information about Montana's brucellosis surveillance program.

Montana is commended for its proactive approach to addressing the brucellosis situation in DSAs and developing and implementing a BMP reflecting requirements critical to mitigating the risk of spread of disease. The Montana Department of Livestock and the Montana APHIS VS Area Office are commended for the placement of competent personnel in key positions. The forward thinking and progressive attitudes of these valuable employees will continue to help the Montana Department of Livestock and Montana VS accomplish their goals to the greater good of the cattle industry and the brucellosis eradication efforts in the GYA.

The GYA BMP Review Team thanks all the State and Federal personnel that took time out of their busy schedules to provide the plethora of information and data requested and to make sure we were in the right place at the right time. We commend them for their dedication in addressing the unique brucellosis situation in the GYA.

Background Information

In December 2010, the USDA APHIS published an interim rule amending the brucellosis regulations to allow the program to meet the circumstances and needs of today's livestock producers. The underlying premise of the interim rule was to transition the national bovine brucellosis program from one based on geopolitical boundaries to one based on boundaries determined through sound science, epidemiology, and risk assessment.

Amendments reflected in the interim rule that are germane to this review include:

1. Removing the provision for automatic reclassification of any Class Free State or area to a lower status if two or more herds are found to be infected with brucellosis within a 2-year period or if a single brucellosis-affected herd is not depopulated within 60 days.
2. Adding a requirement that any Class Free State or area with *B. abortus* in wildlife must develop and implement a BMP approved by the Administrator in order to maintain Class Free status.
3. Reducing the age at which domestic cattle and bison are included in herd blood tests.

Under the interim rule, a State may retain Class Free status if affected herds are maintained under quarantine, an individual herd plan, including a test-and-remove schedule, is developed and implemented for each affected herd to prevent the spread of brucellosis, and appropriate surveillance is conducted to detect brucellosis in other herds or species. Such States must also continue to conduct as many brucellosis ring tests per year as are necessary to ensure that all herds producing milk for sale are tested at least twice per year at approximately 6-month intervals, and all recognized slaughtering establishments in the State or area must participate in the market cattle identification (MCI) program, with blood samples being collected from at least 95 percent of all cows and bulls 2 years of age or over and subjected to an official test. The regulations continue to describe specific procedures for epidemiologic surveillance and epidemiologic investigations associated with affected herds.

The interim rule allows APHIS to utilize a risk-based approach that protects producers in an entire State from unnecessary regulation for what is, in fact, a local problem. The interim rule also provides greater flexibility in managing affected herds because a State will not be at risk for automatic downgrade of status and will not be forced to depopulate entire herds. Instead, the interim rule allows a State to create a brucellosis-affected herd management plan that includes test-and-remove options specific to the situation.

Most relevant to this review is the requirement that "any State in which the Administrator has determined wildlife are infected with *B. abortus* must develop and implement a BMP. The BMP reflected in the MOU must:

1. Define and explain the basis for the geographic area in which a disease risk exists from *B. abortus* and to which the BMP activities apply.
2. Describe epidemiologic assessment and surveillance activities to identify occurrence of *B. abortus* in domestic livestock and wildlife and potential risks for spread of disease.
3. Describe mitigation activities to prevent the spread of *B. abortus* from domestic livestock and/or wildlife, as applicable, within or from the brucellosis management area.

The GYA holds the last known reservoir of the *B. abortus* in the country. This area remains problematic because of the persistence of brucellosis in wild bison and elk and the continued threat of disease transmission between livestock and wildlife. Several recent brucellosis cases have been detected among livestock herds in the GYA, with epidemiological and genetic evidence often indicating infected elk as a source. The recent detections of brucellosis-affected domestic cattle and bison herds in Montana and the likelihood of further spread of brucellosis presents a significant challenge to livestock owners and regulators, as well as land and wildlife managers within the region.

The State of Montana has been dedicated and committed to efforts to eradicate brucellosis from the State's cattle herd, achieving brucellosis Class Free State status in June 1985. The Montana livestock industry benefited from this status for more than two decades. In May 2007, a single brucellosis-affected cattle herd was disclosed in Carbon County pursuant to a test of animals intended for interstate movement. Following Federal brucellosis regulations in place at the time, this brucellosis-affected cattle herd was depopulated with indemnity and Montana successfully completed the epidemiologic investigation, including all required testing, within the 60-day timeframe, thereby maintaining the State's Class Free classification for brucellosis. However, in June of 2008, a second brucellosis-affected cattle herd was disclosed within a 24-month period resulting in reclassification of Montana' status to brucellosis Class A in accordance with federal brucellosis regulations. This herd, located in Park County, was tested as part of Montana's efforts to test and develop brucellosis risk mitigation herd plans for herds near the GYA. The herd was depopulated with indemnity and a thorough epidemiologic investigation conducted. No additional brucellosis-affected cattle herds were disclosed. Brucellosis-infected free-ranging elk were determined to be the most likely source of infection.

Pursuant to reclassification to Class A status for brucellosis, the Montana Department of Livestock developed and implemented a Brucellosis Action Plan in May 2009. This was a short-term plan aimed at regaining Montana's Class Free State status. After completing a 12- month period without finding any additional brucellosis-affected cattle herds and meeting all requirements specified in the Federal regulations, Montana successfully regained brucellosis Class Free State status in July 2009.

Recognizing the continued risk of exposure to brucellosis from infected wildlife in the GYA, Montana continued to proactively address the threat of brucellosis by implementing Official Order 10-01-D in January 2010. This Official Order established a designated surveillance area within the State and implemented requirements for official calfhood vaccination and individual animal identification in the counties in which the designated surveillance area is located. In January 2011, Montana incorporated these regulations into the Administrative Rules of Montana (ARM 32.2.433-32.3.437). These administrative rules describe Montana's current DSA, animal identification requirements, and testing and vaccination requirements for domestic cattle and bison residing in the DSA.

One additional brucellosis-affected cattle herd and two brucellosis-affected privately owned bison herds were disclosed in Montana in 2010 and 2011, all located within Montana's DSA. Brucellosis-infected elk in the area are the most likely source of infection in each of these cases,

which were found pursuant to testing required for animals in the DSA. All three herds were quarantined and brucellosis-affected herd management plans, which included additional herd tests and movement controls, were put in place. The two brucellosis-affected privately owned bison herds remain under quarantine; periodic complete herd testing continues.

Review of Montana's Brucellosis Management Plan Activities: Observations, Findings, and Recommendations

Objective 1: Determine if the State is adhering to its BMP.

Findings and Observations:

Montana formally created a BMP in March 2012, pursuant to the publication of the Federal brucellosis interim rule. The plan outlines Montana's "efforts to address the risk of brucellosis exposure in domestic livestock." Components of Montana's BMP include:

- Administrative Rules of Montana (ARM 32.2.433-32.3.437) revised and effective in January 2011. These rules address:
  - 32.3.433 DSA
  - 32.3.434 Animal Identification within the DSA
  - 32.3.435 Testing within the DSA
  - 32.3.436 Vaccination within the Counties in which the DSA is Located
  - 32.3.437 Penalties

The requirements of Montana's BMP are categorized and summarized as follows:

Identification:

- Official identification is required on all sexually intact cattle and privately owned bison leaving the DSA.

Testing:

- Test eligible animals are defined as all sexually intact cattle and privately owned bison 12 months of age and older (≥ 6 months for epidemiologic investigations).
- Movement testing: All test eligible animals must be tested within 30 days prior to leaving the DSA unless moved to an approved livestock market or directly to a slaughter facility that will test on arrival. Tests completed July 16, or after are acceptable until February 15, of the following year.
- Change of ownership testing: All sexually intact cattle and privately owned bison must be tested within 30 days prior to change of ownership. ARM allows for a negative test July 15, or after to be accepted through February 15, of the following year.
- Whole herd testing is voluntary; only the cohort that resided in the DSA if the herd is located outside the DSA. Whole herd testing is required for epidemiologic investigations (≥ 6 months of age and sexually intact).
- All sexually intact cattle from the DSA are tested either on ranch or at the sale yard prior to going to slaughter. State and Federal inspected slaughter plants in-State continue to conduct MCI slaughter surveillance.
- Annual brucellosis ring testing (BRT) is conducted two times quarterly on all dairy herds located in the DSA and quarterly on all dairy herds located outside the DSA.

Mitigations:

- Trigger for changing the boundaries of the DSA: Based on consultation with Montana Department of Fish, Wildlife, and Parks with the goal to encompass the known extent of seropositive elk.
- Vaccination: Calfhood vaccination is required within the entirety of the four counties in which the DSA is located. Adult vaccination is encouraged (and is free of charge for designated surveillance area producers) if the animal was not officially calfhood vaccinated.
- Herd plans: Herd plans to reduce contact with elk in the DSA are voluntary and may include testing variances in low risk areas.
- Elk mitigations: Montana conducts the following mitigation actions specific to elk: 1) fencing of feed storage areas if they become an attractant to elk, 2) delay turn out of cattle into pastures where commingling is likely to occur, 3) some hazing, and 4) State, Federal, and private feeding is prohibited.

Wildlife Surveillance:

- Montana conducts surveillance on wildlife within the DSA and areas surrounding the DSA. Wildlife surveillance has focused primarily on areas just outside the DSA.
- State elk trapping: Montana is currently conducting a 5-year elk project encompassing the trapping of 100 elk each year within and around the DSA and placing radio/GPS collars on a limited number of elk to collect movement data (focused primarily on where elk are during the risk period of February through May).
- Hunter surveillance: Kits are provided to hunters with antlerless tags within the survey area (30 hunting districts).

Montana producers expressed general support for Montana's BMP and specifically noted the following:

- Expressed appreciation to the Montana Department of Livestock for their proactive and hands-on efforts to work with APHIS in support of the interim rule and are very glad that mandatory depopulation of brucellosis-affected herds has been eliminated.
- Are encouraged by the fact that brucellosis-affected herds are handled on an individual basis (e.g. testing schedules, etc.).
- Indicated support for mandatory herd plans as they are critical to making the program work and are instrumental in proactively detecting disease and doing something about it.
- Feel the program reflected by Montana's brucellosis management plan is necessary and that it is important that all other States know the extent of Montana's efforts to mitigate the risk of spread of brucellosis; feel that the State has done a great job in "standing the ground" for Montana producers.
- Are supportive of the on-going 5-year elk study and would like to see it extended.
- Producers are much more aware of the presence of elk and are aware of the need to implement mitigation actions to prevent elk interaction with their cattle.
- Wish to see further progress in traceability efforts and the use of radio frequency identification (RFID) tags; producers need to better understand that identification and traceability is key to all activities and need to share information openly.

- The brucellosis situation needs to be recognized as a "whole State" problem; loss of State status will have far-reaching impacts to producers statewide.
- Research is needed to develop better vaccines for cattle to prevent infection but are aware of the limitations of research since *B. abortus* is on the select agent list.
- From the producers' perspective, major factors impacting the brucellosis situation in the GYA include: 1) mother nature and drought conditions causing mingling of species of animals, 2) lack of understanding on the part of some producers and the need to continue producer education and outreach, 3) lack of an effective vaccine, and 4) lack of recognitions and emphasis on elk as the problem.

Recommendations:

- Tap into the cadre of supportive producers and use them to educate and encourage their peers to develop herd plans.
- More specific observations, findings, and recommendations regarding specific activities germane to Montana's brucellosis management plan are discussed in more detail in objectives 2 through 6.

Objective 2: Determine if the current surveillance on cattle and privately owned bison is effective.

Findings:

- Montana has identified 264 cattle herds that reside or graze in the State's DSA. There are 150 (57 percent) of the herds in the DSA that have completed risk assessments and have approved herd plans. There are 81 herds that are headquartered outside of the DSA; 25 of these herds do not graze in the DSA until after June 15, each year based on their herd plans.
- Montana's rules require test eligible cattle leaving the DSA to be tested. Surveillance of cattle in the DSA from August 12, 2010 through August 11, 2011 consisted of testing 29,000 of the estimated 34,500 cattle owned by 217 producers.
- Based on findings of infected elk outside of the DSA, Montana expanded the area in August 2011. The expanded area, known as the Dillon adjustment, changed the DSA boundary. This change was estimated to increase the total number of DSA producers to 234 with 46,300 cattle and bison. Montana has tested close to 32,000 animals from the DSA since the Dillon adjustment.
- Pursuant to finding additional infected elk outside of the DSA during the 2011through 2012 winter, Montana further expanded the DSA in June 2012. This expanded DSA now includes an estimated 282 producers with 73,200 test-eligible animals. Montana estimates that they will test approximately 54,900 test-eligible animals annually.
- Montana defines test eligible animals as all sexually intact cattle and privately owned bison 12 months of age and older. These animals must be tested within 30 days prior to leaving the DSA unless they are moving to an approved livestock market or slaughter plant that will test them upon arrival. Testing that is completed on or after July 16, is acceptable until February 15, of the following year.

Observation:

- One negative test 30 days prior to movement out of the DSA allows test eligible cattle to move interstate on a certificate of veterinary inspection without restrictions.

Recommendation:

- States receiving cattle from the DSA should be provided the information necessary to feel confident that risks have been mitigated concerning latent and incubating infections.

Observation:

- All brucellosis-affected herds found since January 1, 2011, had the risk of elk mingling with the herds during the high risk exposure period.
- A review of herd risk assessments and herd plans revealed that, based on the risk assessments, the herd plans developed appropriately address the herd specific risks through recommended mitigation measures and herd testing schedules commensurate with the identified risks of exposure.

Recommendations:

- Montana should continue performing risk assessments and developing herd plans with the producers in the DSA.
- Continued educational efforts are needed to adequately mitigate the risk of disease transmission from elk.
- Montana should establish a target that 100 percent of the producers with cattle and privately owned bison in the DSA at any given time have a risk assessment and an approved herd plan that mitigates the risk of transmission of brucellosis to herds and minimizes the likelihood of exposure to unidentified brucellosis infection from sources being shipped out of the DSA.

Findings:

[Note: It is recognized that the most recent MCI slaughter data available for review may be incomplete due the transition to the Surveillance Collaboration Services database.]

- There were 3,158 test-eligible slaughter animals from Montana slaughter plants sampled and tested during fiscal year 2011.
- All eligible cattle from the DSA are tested prior to sale outside the DSA, either through on-farm tests or at the livestock market.
- All Montana slaughter plants (both State-inspected and custom) test all bovinae aged 12 months and over for brucellosis.
- There were 106,046 head of Montana cattle tested from out-of-State slaughter during fiscal year 2011.
- Since the in-State slaughter plants obtain samples from all animals aged 12 months and over, review of data from calendar year 2011 and 2012 year-to-date show collection percentages above 100 percent for all but one slaughter plant. This slaughter plant is slaughtering low

numbers of cattle and had an incident where some samples froze in transit and were unfit for testing by the Laboratory.

Observations:

- BRT is conducted twice quarterly on the five Montana dairy herds located in Montana's DSA and quarterly on the 71 Montana dairy herds located outside Montana's DSA. The BRT samples are collected by the Montana Milk and Egg Bureau and tested by the Montana State Veterinary Laboratory.

Recommendations:

- Montana should continue monitoring all dairy herds using BRT surveillance.
- Since cull slaughter cattle will likely not be tested via market cattle surveillance conducted at out-of-State slaughter plants, Montana should test all test-eligible slaughter cattle destined to slaughter plants out-of-State at their livestock markets or prior to any direct shipments to out-of-State slaughter plants.

Findings:

- Brucellosis testing for all species is performed at the Montana State Veterinary Laboratory in Bozeman, Montana. The laboratory performs most of the standard brucellosis serology tests.
- The Montana State Veterinary Laboratory tested a total of 44,527 samples in fiscal year 2011 and 50,841 samples in fiscal year 2012.
- *Brucella* culture is also performed at the Montana State Veterinary Laboratory. All laboratory technicians have passed the latest annual proficiency testing conducted by the National Veterinary Services Laboratories (NVSL).
- This year, the laboratory has seen an increase in the numbers of samples to test because of the expansion of the Montana's DSA. All testing has been completed by current personnel, who believe they could handle most surges in testing activity.
- Laboratory personnel consider the laboratory resources to be sufficient at this time to conduct any program testing; however since the laboratory only has a single well Fluorescence Polarization Assay (FPA) reader, additional personnel or an FPA plate reader (Synergy 2) would be needed if more samples require FPA testing.

Recommendation:

- Montana should acquire an FPA plate reader since one of the additional recommendations resulting from this review is to use the FPA to screen all blood samples from brucellosis-affected herds.
    - Followup – APHIS VS Western Region has transferred a FPA Synergy 2 instrument to the Montana State Veterinary Laboratory.

Objective 3: Evaluate if protocols for testing used for epidemiological investigations, test and remove protocols, and quarantine release are documented and being followed.

Findings and Observations:

- Montana has had three brucellosis-affected herds on test-and-remove herd plans since the publication of the brucellosis interim rule:

  Ranch 1, a brucellosis-affected privately owned bison herd was disclosed in November 2010. This herd was detected as via Montana's DSA herd management plan testing. The herd is currently under quarantine with an affected herd management plan in place. Complete herd testing is ongoing with a second complete herd test scheduled for fall 2012. All initial testing and assurance testing of adjacent herds and all testing of trace-out herds in Montana has been completed with all negative test results. Approximately 7,600 tests have been performed on adjacent herds with negative results. The brucellosis-affected herd plan includes an annual herd test, but does not specify a post-quarantine assurance test.

  Ranch 2 was determined to be a brucellosis-affected herd in September 2011 when six yearling heifers in a group of 65 animals tested serologically positive on a change of ownership test for movement out of the DSA (Park County). Four of the six heifers were culture positive for *B. abortus* biovar 1. A 10-month-old bull tested serologically positive in November, however *Brucella* were not isolated on culture. A post-calving herd test has been completed and all animals tested negative. This was the second consecutive negative herd test on this herd which was subsequently released from quarantine in April 2012. The post-quarantine assurance test for this herd is scheduled for October 19 through 20, 2012. Testing of trace-out herds in Montana has been completed; all trace-out herds tested negative. The brucellosis-affected herd plan for this herd included the sentence, *"This herd plan is voluntary, is subject to review and revision, and is not intended to represent a legal contract."* The herd plan included a provision for the quarantine to be released with the completion of the third negative whole herd test post-calving. Following the post-calving herd test, an assurance-test herd plan was put in place.

  Ranch 3, a brucellosis-affected privately owned bison herd located in Madison County within Montana's DSA, was disclosed in November 2011. A whole herd test was conducted in October 2011 because of an epidemiological link to Ranch F. This test detected a singleton 2-year-old bison bull as a reactor. *Brucella abortus* biovar 1 was isolated from a single lymph node from this bull. Testing of all adjacent herds has been completed with approximately 9,868 animals tested, all with negative test results. All trace-ins (1) and trace-outs (6) have been located and were either determined to be destined for slaughter or have been assigned for testing. Six hundred heifers from this brucellosis-affected herd tested negative for brucellosis in early May 2012. The second complete herd test for this herd is scheduled for fall 2012. The *Brucellosis Quarantine and Surveillance Herd Management Plan* for this herd calls for annual testing to occur, but does not specify conditions for quarantine release nor does it specify a requirement for any assurance testing.

- Most adjacent and contact herds identified during brucellosis-affected herd epidemiologic investigations are identified and tested in a timely manner and assurance testing is applied based upon risk.

- A review of the MCI investigations for cattle found positive on slaughter surveillance testing during the last two years found the investigations and case closures for each case to be timely and appropriate.
- There have been no suspicious BRT investigations in the last two years.

Recommendations:

- A herd plan should be developed with the herd owner within 15 days following the disclosure and classification as an affected herd. (title 9 *Code of Federal Regulations* (9 CFR) part 78.1 (b)(3)).
- A brucellosis-affected herd plan template should be developed for brucellosis-affected and all adjacent and contact herds. These herd plans are required per 9 CFR part 78.
- The verbiage, *"This herd plan is voluntary, is subject to review and revision, and is not intended to represent a legal contract"* should not be included in any affected herd plans.
- Herd plan should include a test schedule, including the number of negative herd tests required for quarantine release, requirements for the removal of reactor animals, a requirement for a post-quarantine assurance test, vaccination recommendations both adult and calfhood vaccination, requirements for herd additions, requirements for maintaining a herd inventory, requirements for movements out of the herd, and best management practices, including recommendations for cleaning and disinfection.
- Documentation needs to be maintained for any waivers to requirements specified in the 9 CFR part 78 or the *Brucellosis Uniform Methods and Rules*. This should include documentation of waivers allowing variances to the number of negative herd tests and length of quarantine or required quarantine release protocols.
- The VS Form 1-27 should be used when restricted animals are moved.
- Since the FPA test has the highest sensitivity and specificity of all of the routine brucellosis serology tests, it should be used as the screening test on all animals tested as part of all brucellosis-affected herd tests. When the FPA is used, especially when used on the quarantine release test, it will provide the best assurance (albeit not 100 percent) that there are no remaining animals incubating brucellosis.

Objective 4: Determine if adequate regulations are in place to prevent the movement of brucellosis-infected cattle or domestic bison out of the DSA; if compliance with these regulations is being adequately monitored; if animal identification requirements are in place, and are animals traceable to the DSA.

Observations regarding Movement, Inspections, and Compliance:

- Montana Department of Livestock has adequate regulations in place to prevent the movement of brucellosis-infected cattle or domestic bison out of the DSA.
- Compliance is monitored by brand inspectors and compliance enforcement officers employed by the Montana Department of Livestock.
- Routine patrol stops of livestock movements are performed to monitor compliance.
- All test-eligible cattle and domestic bison must be tested within 30 days prior to leaving the DSA unless they are moving to an approved livestock market or directly to a slaughter facility where they will be tested.

- Tests completed July 16, or after are acceptable until February 15, of the following year.

Observations regarding Livestock Markets:

Interviews were held at the Headwaters Livestock Auction with three livestock market managers and producers, the livestock market veterinarian, a livestock market association representative, and a Montana Department of Livestock brand inspector.

- Montana Department of Livestock Brand Enforcement Division demonstrated the use of the Archer handheld electronic device they are now using when performing brand inspection duties at the livestock markets located in Montana's DSA. The software package in use with this device provides for highlighting herds located in Montana's DSA in orange, thus alerting the brand inspector that the animals presented originate from the DSA. Within the software program is an animal health icon that when clicked, provides updates and requirements concerning the disposition of that particular herd from the DSA.
- The electronic Archer system was reviewed with the brand inspector and the livestock market manager. Both use the Archer handheld electronic device to record consignment information and to record test information respectively. This information, as well as additional market information, can all be married together using Certificate of Veterinary Inspection software from Fort Supply. Documentation can then be produced that displays the back tag, the color and sex of the animal, the animal's brand and the brand location, the check-in slip reference number, the blood sample test tube number, and official identification device information.
- Trip permits are required for producers to transport livestock to market without a brand inspection. The brand inspector at the livestock market is notified that a trip permit, which is valid for 36 hours, has been issued.
- Cattle consigned to the Headwaters Livestock Auction that originate from the DSA are penned off separately. The paperwork accompanying these cattle is reviewed by the brand inspector and then again by the livestock market veterinarian to confirm that the cattle do originate from the DSA. This procedure provides for review by three decision makers before the cattle are marketed. If there is any question by any one of them regarding the origin of the cattle, the cattle are tested.
- If test eligible cattle accompanied by proof of test within 30 days prior to sale are consigned, individual animal identification is not verified by the livestock market veterinarian. If the test chart presented does not represent a full herd test then a market blood test is required. The market veterinarian, market management, and the brand inspector all concur that if in doubt, blood samples would be collected.

Recommendations:

- Continue to develop the electronic process and data logger that records, stores, coordinates and retrieves all the herd and individual animal information together. This helps simplify and expedite identifying and tracing of animals through livestock markets and back to the appropriate herds of origin.

- Test eligible cattle with negative test results within the prior 30 days should have their individual identification verified for assurance that the cattle presented are the same cattle listed on the test chart.
- Consider recording official identification for test eligible cattle that move through Montana's livestock markets to assure future traceability.

In candid discussion during a meeting with livestock market managers, a livestock market association representative, and producers at Headwaters Livestock, the following comments were shared:

- Concern was expressed about seropositive elk being turned back out with collars for tracking; however, there was support to continue the elk study project.
- After being informed about changes to national slaughter surveillance sampling, support was expressed for requiring all slaughter cattle to be tested prior to shipping to slaughter.
- Counties with a split DSA status should test all test eligible cattle marketed within those counties.
- The brand inspector is the only line of defense in monitoring cattle moving from ranch to slaughter.
- More research is needed to develop a better vaccine that protects against the disease.

Observations regarding Identification, Vaccination, and Testing:

- All sexually intact cattle and privately owned bison in the DSA are required to be officially identified with an approved identification device.
- Montana uses State issued location identifiers (LIDs) and NAIS premise identification numbers for premises in the designated surveillance area. Records are maintained in the Montana Department of Livestock office. The Montana Department of Livestock Brucellosis compliance specialist produced test records and assisted with a successful mock trace.
- According to interviews, Headwaters, Ramsey and Billings (Pays) livestock markets pre-sale test all DSA test eligible cattle.
- Pre-slaughter testing is conducted but not in rule.

Recommendations:

- Because of the abbreviated national slaughter surveillance, all direct consignments of test eligible cattle originating from premises in the DSA that are destined to slaughter should have a negative brucellosis test within 30 days prior to shipping.
- There are several advantages to pre-slaughter testing, including the ease of tracing any suspect or reactor animals and the opportunity to conduct additional diagnostic testing or collect milk samples or tissue samples for culture.
- Require testing of all sexually intact cattle and domestic bison, regardless of age, intended to be used for breeding purposes.

Objective 5: Determine if wildlife surveillance is sufficient to allow for rapid adjustment of the boundaries of the DSA.

Findings and Observations regarding:

Time frames for conducting wildlife surveillance around the DSA:
Note: The Montana Fish, Wildlife & Parks defines a Brucellosis Surveillance Area comprised of hunting districts. This brucellosis surveillance area should not be confused with the Montana Department of Livestock's DSA, which encompasses a smaller area.

- Hunter test kits have been distributed in 30 hunting districts (the brucellosis surveillance area) in southwestern Montana near Yellowstone National Park and the Idaho and Wyoming borders during the fall general hunting season since 2008. General distribution of hunter test kits was discontinued in the 2011 season due to the low return rate of usable samples and funding limitations.
- Between 2008 and 2010, 829 female and 234 male elk were tested for exposure to brucellosis. A total of 562 tissue samples were collected from hunter killed elk during this period. *B. abortus* biovar 1 was isolated from 18 animals in 10 elk herd units in 10 hunting districts.
- A 5-year elk surveillance project was initiated in 2010. This project is conducted primarily with groups of 100 net gun captured female elk, which are serologically tested for brucellosis using the card test and FPA. If seropositive, the elk are pregnancy tested and a vaginal implant transmitter (VIT) is installed. The study is focused on following seropositive elk but seronegative elk are also followed. A total of 30 animals receive GPS collars annually. Animals are captured each year during January and February. Each year a different surveillance area is chosen in coordination with the Montana Department of Livestock based on several criteria; the focus is on surveillance areas on the margins of the Montana's DSA. This project includes re-capture of seropositive elk each year to monitor serological status and determine pregnancy. Expelled VITs are recovered to provide information on calving (or abortion) times and locations. If fetal material is available, it is cultured. The objective of this 5-year elk surveillance project is to gather information on brucellosis distribution in elk populations, elk migration, herd fidelity, calving locations, *B. abortus* shedding during abortions or birth events, and elk proximity to cattle.
- Discovery of a new brucellosis-affected wildlife herd could take up to 5 years or more, depending on the location and size of the outbreak. Additional factors impacting identification of new brucellosis-affected wildlife herds include altered migration patterns, herd distributions, and other factors that cause elk or bison to change their migration habits.
- During the first 2 years of the elk surveillance project, the DSA boundary line was moved as a result of detecting brucellosis exposed elk in new areas.
- Montana Fish, Wildlife, and Parks has maintained a surveillance effort adequate to detect infected elk migrating from the DSA and to allow for the rapid adjustment of its boundaries. This was evidenced by the recent expansion of the DSA on the west side when seropositive elk were detected outside of the designated surveillance boundary.
- Of some concern is the lack of adequate surveillance, due largely to landowner resistance, immediately outside the eastern extent of the DSA.

Laboratory activities, testing protocols, culture activities, etc.:

- Card and FPA tests are run in the field on captured elk. There are some inherent problems with conducting these tests in the field. Examples of such problems include false negative card test results and the need for FPA re-calibration, both precipitated by environmental conditions. These issues prolong the time required to complete the tests before the elk recovers from anesthesia. Alternatives are resolutions for these problems are being sought.
- Field-tested serum samples are re-tested at the Montana Veterinary Diagnostic Laboratory, where an expanded panel of serology tests, including the Buffered Acidified Plate Antigen, Rivanol, FPA, and SPT are run on all samples. Any samples with reactor test results to these tests are then subjected to the Complement Fixation and Card tests. The Western Blot had been run in previous years but Montana Fish, Wildlife and Parks personnel understand that the test is no longer being officially offered by Louisiana State University. Results from the western blot test in the past have been suspect.
- Preliminary bacteriologic cultures on tissues are performed at the Montana Veterinary Diagnostic Laboratory and suspect cultures are sent to NVSL for confirmation of *B. abortus*.
- Laboratory services and testing is considered adequate.

Other information:

- The elk population in Montana is estimated at 150,000 animals. The elk population inside the DSA is approximately 30,000. From 1988 until 2004, the statewide elk population generally increased. Since 1997, the northern Yellowstone herd, which migrates into Montana, has decreased.
- Elk in the Madison Valley prior to 2004 had a seroprevalence of approximately 2 percent or less. In 2004, it was approximately 6 percent, and in 2005, jumped to approximately 23 percent. Some of the seroprevalence in 2005 was attributed to *Yersinia* infection, based on a western blot test. Since then, some doubt has arisen about the accuracy of the western blot test.
- Population objectives have been met in some areas but other areas are above objective. Factors that influence populations and population management in the DSA include changing landowner values (no hunting allowed), fire, weather patterns, predators, population sizes themselves, urbanization, and regulatory and political constraints.

Concerns expressed related to wildlife surveillance activities, based on interviews with Montana Department of Fish, Wildlife and Parks personnel, Montana Department of Livestock animal health officials, and producers:

- The APHIS VS cooperative agreement funding runs out at the end of January, while the window of time pertinent to conducting testing and research project activities extends through June. Consequently, the opportunity for obtaining relevant calving and abortion location data is seriously hindered.
- Late hunts, depredation hunts, and landowner kill permits have been curtailed or are difficult for some producers to obtain. These producers are very frustrated by this policy. Reasoning for curtailing the late hunts according to Montana Fish, Wildlife, and Parks officials is that

the late hunts detract from regular season hunting (i.e. hunters with late hunts generally don't hunt during the regular season) and the agency wants to encourage regular season hunting.

Recommendations:

- Continue hunter-kill elk surveillance in addition to the ongoing elk project collar studies.
- Allow late-season elk hunts in geographic areas where elk pose a risk to cattle. Late-season elk hunts will facilitate mitigating elk-cattle commingling during the season of higher risk of disease transmission. In addition, late-season hunts will provide Montana FWP greater opportunity to collect samples from hunter harvested elk for brucellosis evaluation.
- A prospective study consisting of collaring young seronegative females in high prevalence areas to determine the rate of seroconversion in each age group, immediate outcomes of infection, number of abortions following seroconversion, and other factors in the epidemiology of the disease would be extremely valuable.
- There is need for better animal-side diagnostic tests.
- The cooperative agreement funding period should be adjusted to accommodate surveillance activities.

Objective 6: Determine if mitigations are in place that reduce exposure to infected sources and reduce the risk of infection if exposure occurs.

Findings:

In addition to the risk-mitigation activities discussed in objectives two through five, the following items were identified by Montana Board of Livestock personnel and Montana's APHIS VS personnel as being most significant and integral to successfully executing Montana's BMP:

- Traceability is critical. The RFID tags provided by APHIS have been used extensively in identifying Montana cattle and domestic bison. Identification is generally applied to the animals at the time of vaccination or testing.
- Brand inspection plays a critical role in Montana's brucellosis management plan. Montana's Brand Enforcement Division, through local and department brand inspectors, is responsible for ensuring compliance with DSA regulations. Brand inspectors are familiar with and report animal health violations.
- Required testing (e.g. testing at the livestock markets, change of ownership testing, etc.) is supported by funds appropriated by the legislature (also reflected in the Governor's budget) and funds received from APHIS through cooperative agreements. Receipt of these funds provides for reimbursement to private practitioners for testing costs and a "per head" stipend to producers.
- Maintaining temporal and spatial distances is an important risk mitigation strategy. This is an important consideration when identifying and prioritizing herds that should develop herd plan.
- Wildlife surveillance activities are vital to the success of Montana's BMP.
- Strong producer participation has been garnered by the changes reflected in the brucellosis interim rule (more flexibility) and by developing and maintaining communication with

producers. Producers have seen first-hand the impacts to their industry due to loss of State status and actions taken by other States. States that imposed Montana-specific regulations lifted them once Montana instituted the requirements reflected in Montana's ARMs 32.2.433 through 32.3.437.

- Slaughter surveillance is a concern. Since many cattle from the DSA go to slaughter at several out-of-State slaughter plants, the general feeling is that there will not be adequate slaughter surveillance of Montana cattle to alleviate concerns of other States. In addition, Montana Department of Livestock officials indicated that savings from the changes to the national brucellosis slaughter surveillance plan have not been directed back to the GYA States. APHIS is reminded that current Federal brucellosis program regulations require that *"States that have B. abortus in wildlife must carry out the following surveillance testing requirements: MCI program: All recognized slaughtering establishments in the State or area must participate in the MCI program. Blood samples shall be collected from at least 95 percent of all cows and bulls 2 years of age or over at each recognized slaughtering establishment and subjected to an official test."* When the majority of slaughter cattle go to out-of-State slaughter plants, the intended level of MCI program surveillance on cattle from such States will not be achieved.
- Producers need access to seasonal use of pastures in the DSA. This is currently accomplished by issuance of "pasture permits" and brand permits.
- Calfhood vaccination is required in all four counties of the DSA.
  Vaccination data, for both calfhood and adult vaccination, was provided and discussed. It is recognized that due to problems with the SCS database, data for 2012 is underestimated.
- Good discussion was had on the need for tattooing RB51 vaccinates, as the need to apply the vaccination tattoo can be a hindrance.
- Field personnel have developed excellent working relationships with the producers in the DSA and at the livestock markets. These efforts allow them to garner producer cooperation, especially when herds need to be tested. Field personnel indicated producers will be more cooperative when using good quality equipment such as hydraulic portable chutes which make testing herds easier, safer, and faster.

Recommendations:

- Continue the use of RFID tags. Additional discussion should be had with the APHIS Traceability Program regarding availability of program provided RFID tags and flexibility in the use of Traceability funding (i.e. allow use to purchase software).
- Continue first-point testing at livestock markets and encourage, where and when more appropriate to better mitigate risk, testing before cattle and domestic bison leave the ranch. Brucellosis-infected animals are being identified by these proactive activities.
- Require a test on female cattle of any age intended for use as breeding stock.
- As previously recommended, but worth repeating, increase the number of producers on herd plans.
- APHIS should lead efforts (perhaps a task for the Regional Brucellosis Epidemiologist) to harmonize elk testing protocols (laboratory testing protocols) between all three GYA States.
- The State and Federal Regional, Area, and Designated Brucellosis Epidemiologists are encouraged to network with appropriate State and Federal wildlife agencies to pursue ideas for projects to assess the role other wildlife species may play in maintaining (possible

sentinel populations) and transmitting brucellosis to other domestic and wildlife species (i.e. cattle and elk).

- Alternative slaughter surveillance sampling strategies that will meet the intended level of MCI program surveillance for States with *B. abortus* in wildlife need to be developed specific for slaughter cattle moving out of the GYA States and more specifically out of the DSAs in the GYA States. "Pre-slaughter sampling" was proposed as an opportunity to meet the intended level of MCI program surveillance. Montana Department of Livestock personnel indicated the desire to work with APHIS to develop and implement a State-specific "pre-slaughter surveillance plan" for cattle originating from the designated surveillance are to meet this need. Such a plan should be incorporated into and funded through the national bovine brucellosis slaughter surveillance plan.
- Strengthen seasonal grazing activities by developing a current list of producers moving into the DSA, limit issuing of permits to the District, and any producers partaking of seasonal grazing to have approved herd plans, which identifies the permits being used, animal identification, and testing requirements.
- Maintain calfhood vaccination requirement and recommend booster and adult vaccination in herds with known or suspected elk exposure. Prioritize use of Federal funds to support these activities. Also suggest monitoring vaccination data and comparing with calf crop data, especially for herds in the DSA, as a way of assessing compliance with vaccination requirements.
- APHIS should lead efforts to continue discussion regarding the need for vaccination tattoos. An evaluation of the current need for a vaccination tattoo should be explored – what is the current "function" of the vaccination tattoo?
- The Montana Department of Livestock and the Montana VS Area Office are encouraged to assess current field-testing equipment (such as chutes and gate panels) and upgrade as appropriate to assure the safety of personnel and animals when testing herds.

A final general observation and recommendation:

Observation:

The GYA States are making a good faith effort to comply with their BMPs and the regulations per 9CFR part 78. However, some language is ambiguous enough that it might be seen as a moving or invisible target.

Recommendation:

The results of this review and the effective risk mitigating measures that the GYA States are currently taking should be incorporated into a set of GYA specific standards so that they and all other States are knowledgeable of the minimum standards to which animals moving out of the DSAs are being held.

Respectfully,

The GYA BMP Review Team

STATE OF IDAHO

C.L. "BUTCH" OTTER
Governor
Celia R. Gould
Director

DEPARTMENT OF AGRICULTURE
DIVISION OF ANIMAL INDUSTRIES

2270 Old Penitentiary Rd.
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July 12, 2013

Texas Animal Health Commission,

The Idaho State Department of Agriculture (ISDA) appreciates the opportunity to comment on the proposed changes to TAHC rule **§35.4 Entry, Movement and Change of Ownership.** Per this proposed rule change, post entry brucellosis testing will be required on breeding cattle originating from the Greater Yellowstone Area (GYA) states of Idaho, Montana and Wyoming. This proposed change will have significant negative impacts on not only the GYA states but on Texas cattle producers who import breeding cattle from the GYA.

All three GYA states have strict Brucellosis Management Plans (BMP) in place to ensure that the cattle we export are free from brucellosis. In 2011 Idaho made significant changes to our Rules Governing Brucellosis including:

- **Individual Identification Requirements.** All intact cattle and domestic bison, regardless of age, that leave the DSA must be identified with official individual identification.
- **Testing Requirements Within The DSA.** The following official brucellosis test requirements apply to all test eligible cattle and domestic bison that are or have been located within the DSA at any time between January 1 and June 15 of any calendar year.
    - a. All test eligible cattle and domestic bison must have a negative brucellosis test within thirty (30) days prior to a change of ownership, interstate movement or prior to leaving the DSA, except cattle or domestic bison moving directly to an approved Idaho livestock market or a federally-inspected slaughter plant that will test the animals for brucellosis on arrival.

The purpose of these rule changes was to ensure the prompt diagnosis of brucellosis, should it exist in Idaho cattle, and appropriate management of the affected herd to eliminate the disease while preventing movement of potentially affected animals. As noted above, Idaho has a mandatory identification requirement for all intact cattle **of any age** that leave Idaho's Designated Surveillance Area (DSA).

In 2012 following the diagnosis of an affected herd five (5) miles outside of our DSA, the DSA was expanded to include the entire county in which the herd was located.

Idaho is a mandatory brucellosis vaccination state. All breeding cattle must be official brucellosis vaccinates and all female calves must be officially calfhood brucellosis vaccinated or placed in an Idaho Approved Feedlot to be fed to slaughter only or shipped to a state that will receive non-vaccinated cattle. All female cattle imported into Idaho must be officially vaccinated for brucellosis.

Following the April 2012 implementation of the mandatory testing requirement for cattle leaving Idaho's DSA, 5539 head of the 17,516 head of cattle that utilize Idaho's DSA were tested for brucellosis with all results being negative. Even though the testing requirement had only been in place for 7 months, surveillance for 2012 provides 99% confidence that the disease is present at a rate of less than 0.07% if present at all. Testing numbers will be much greater in 2013 which will undoubtedly lower that rate even further.

The recent review of Idaho's Brucellosis Management Plan by USDA APHIS Veterinary Services pointed out strengths as well as weaknesses in our program. We continue to make changes to our brucellosis rule as appropriate. Public meetings are currently being held on a proposed rule change, to be heard during the next legislative session, that will require cattle producers living in or utilizing Idaho's DSA to obtain a movement permit from the ISDA no less than twenty four (24) hours prior to moving cattle out of the DSA. This rule change, included as a recommendation in the federal review, will enhance enforcement of the testing requirement for cattle leaving the DSA.

As proposed, the TAHC rule does not take into account that the brucellosis risk in Idaho is limited to the eastern part of our state within our defined DSA, but instead applies to cattle statewide. This despite years of wildlife surveillance that shows the risk is limited to the wildlife within our current DSA. Wildlife surveillance will continue throughout Idaho and should a risk be identified outside of our current DSA boundary, appropriate adjustments will be made. To penalize Idaho cattle producers far removed from the DSA is onerous and unnecessary.

In reviewing the TAHC proposed rule, it is unclear what specific, objective criteria prompted the decision to undertake this proposed rule change. For instance, the proposed rule change requires the post entry testing of bulls as well as females yet it is widely acknowledged that bulls do not contribute to the spread of brucellosis. Also unclear is whether or not there is a method in place to rescind the testing requirement in the future should the rule be deemed, rightfully so, unnecessary.

Idaho cattle producers take the risks associated with potential brucellosis transmission from wildlife seriously. Risk mitigation practices are commonplace on ranches not only within our DSA but outside as well. The ISDA takes enforcement of its rules governing brucellosis seriously. The marketability of disease free cattle is paramount to our cattlemen's success as well as the economic viability of our state. Unwarranted restrictions on cattle from the GYA states will not prove beneficial to Idaho, Montana, Wyoming or Texas cattlemen.

Again, thank you for the opportunity to comment on this proposed rule change. Should the Commission have any questions regarding Idaho's brucellosis management activities, please feel free to contact me.

Sincerely,

Bill Barton, DVM
Administrator/State Veterinarian

Gene Snelson

From: Carol Pivonka
Sent: Monday, July 15, 2013 2:44 PM
To: 1-legal
Subject: FW: new bruc. testing requirements

Carol S. Pivonka
Executive Assistant for Dr. Dee Ellis
Carol.Pivonka@tahc.texas.gov

From: Mark Boone [mailto:[redacted]
Sent: Monday, July 15, 2013 2:39 PM
To: comments
Subject: new bruc. testing requirements

To: Texas Animal Health Commission

Montana Cattlemen's Association is adamantly opposed to any additional requirements put on cattle originating from the Greater Yellowstone Area (includes the states of Montana, Wyoming and Idaho). The established protocol is more than sufficient to maintain healthy live cattle shipments to any state. The established Designated Surveillance Area (DSA) surrounding Yellowstone National Park and the animal health requirements that it imposes on the cattle within its boundaries are not only approved by APHIS but have a proven track record of finding and containing brucellosis infected cattle to their home state. I urge the Texas Animal Health Commission to reconsider imposing any new requirements on cattle from Montana, Wyoming or Idaho.

Sincerely,

Mark Boone
President
Montana Cattlemen's Association

Wyoming Livestock Board

"To represent and serve Wyoming's livestock industry through protecting livestock health and verifying livestock ownership"

1934 Wyott Drive, Cheyenne, Wyoming 82002-0051
Phone: (307) 777-7515 ■ Fax: (307) 777-6561 ■ Web Site: http://wlsb.state.wy.us

Matthew H. Mead
Governor

Jim Logan, DVM-State Veterinarian

Leanne Correll
Director-Chief Executive Officer

July 15, 2013

Texas Animal Health Commission
2105 Kramer Lane
Austin, Texas 78758

Dear Commissioners:

The Wyoming Livestock Board (WLSB) appreciates the opportunity to provide our perspective and comments in regards to proposed changes you are considering in your animal health import requirements for breeding cattle entering Texas from Idaho, Wyoming, and Montana. We concur with your proposal to require a prior import permit; however we have concerns related to the proposed requirement to retest these cattle following importation. We believe that the marketability of Wyoming breeding cattle will be severely compromised as Texas buyers will likely not purchase our cattle based on the risk imposed by the proposed restrictions rather than the actual risk of purchasing diseased animals.

We ask that you consider the following:

1. **Effective surveillance of brucellosis test-eligible cattle in the Wyoming Designated Surveillance Area (DSA) provides a negligible risk of exporting infected cattle.**

   The WLSB has adopted and strictly enforces rules that require all female breeding cattle regardless of age and all test-eligible cattle to be brucellosis tested prior to movement from the DSA or prior to change of ownership. Testing is now also required on cattle being moved direct to slaughter, to address our concerns with the reduction in the federal slaughter test surveillance program. Much of this testing is conducted at markets in Wyoming, Montana, and Idaho that receive Wyoming DSA-origin cattle. The balance of testing is conducted by private practitioners who collect samples at the ranch of origin and submit them to the Wyoming State Veterinary Laboratory. All tests run at Wyoming markets are also subsequently verified by testing at the state lab. The WLSB has authority to pay for surveillance testing of cattle on the ranch if a valid herd plan is established. Additionally, the WLSB pays for mandatory change of ownership and movement testing of cattle whether a herd plan is in place or not.

   During 2012 alone, at least 32,638 adult cattle or 20.9% of the approximately 155,900 adult cattle residing in the Wyoming DSA were brucellosis tested at markets or on home ranches. Such levels of surveillance testing not only allow Wyoming officials to identify and quarantine infected herds quickly, but also provide 99% confidence that the prevalence of brucellosis in cattle in the WY DSA does not exceed 0.01% if it exists at all. Based on these statistics, the odds of Texas receiving an infected cow, much less a latently-infected breeding heifer, are negligible, and, in our view, do not warrant the additional quarantine and retest measures being proposed. Wyoming producers have concerns about

the spread of brucellosis from the DSA also, which is reflected by their overwhelming support of such stringent testing requirements.

2. **Effective livestock movement control at the county level protects the health of the entire WY cattle industry.**

Brucellosis infection in cattle has not been detected in areas of Wyoming outside the current boundaries of the DSA for at least 20 years. A significant part of the credit for keeping the disease contained can be attributed to the efficient and effective brand inspection program that has functioned in Wyoming for over 100 years. The Wyoming brand program requires an inspection permit to be issued for cattle moving across county boundaries, and official brand inspectors are well acquainted with the animal health requirements to move cattle within and outside of the DSA. They are instructed to refrain from issuing any movement permits if all WLSB brucellosis rules and regulations are not met prior to movement.

As a result, portions of the WY cattle industry not located within the DSA enjoy an even greater level of negligible brucellosis risk as compared to DSA-origin producers. Therefore, please understand our concern that application of requirements for WY cattle originating in herds located hundreds of miles from the WY DSA is not warranted nor can it be justified based on the demonstrated negligible risk established over many years. In other words, if Wyoming's processes and procedures had not been working effectively then many more additional herds throughout Wyoming would surely have been detected by now.

3. **Continual wildlife surveillance provides the necessary data for analyzing changing patterns of brucellosis infection in free-ranging elk populations throughout Wyoming.**

The Wyoming Game and Fish Department has conducted annual surveys for brucellosis in free-ranging elk populations throughout Wyoming for many years for the purposes of establishing disease prevalence, and to monitor for changes in disease distribution. Thousands of elk have been tested using hunter-kill sampling methodologies, and by researchers trapping and sampling elk near winter feed grounds and in other areas of the state. Data received from these samplings provide state game and fish and animal health officials alike the necessary information to make timely disease-management decisions for both elk and cattle, and provide the necessary justification for policy or program adjustments that may be needed to better manage the wildlife-livestock interface. For example, in 2011 brucellosis surveillance data collected from free-ranging elk indicated increasing disease prevalence in the northeast corner of the DSA. As a result, the WLSB acted quickly and deliberately to enlarge the boundaries of the existing DSA to include an enlarged "buffer" zone. This resulted in more cattle herds located in the newly included area required to undergo required surveillance, and served to provide producers and animal health officials in neighboring counties and states continuing confidence in the Wyoming brucellosis program. Such action demonstrates Wyoming's commitment and resolve to do whatever is necessary to continue efforts to contain brucellosis within the boundaries of the DSA, and protect the marketability of our disease-free cattle.

4. **Wyoming received high marks for conducting brucellosis program activities in a recent USDA-APHIS program management review.**

In the fall of 2012, USDA-APHIS formed a group of technical experts that visited Wyoming to review the various components of our brucellosis program. Wyoming was given high marks and many compliments in regards to program management and functionality. Recommendations for further improvement were provided, and Wyoming continues to address them. For example, one recommendation addressed the need for additional surveillance of out-of state commuter cattle grazing in Wyoming's DSA during periods of extremely low-risk for contact with infected elk. As a result, Wyoming, Idaho, and Utah animal health officials and cattle producers from each state met in early 2013

to discuss and implement particular surveillance requirements which will be effective in the fall of 2013. Again, actions in this respect demonstrate Wyoming's willingness to respond to science-based recommendations that serve to contain the disease within a restricted area.

5. **Bulls pose no brucellosis risk.**

The proposed rule includes bulls for additional post-entry testing. Considering the epidemiology of brucellosis within a cattle herd, and recognizing that breeding bulls do not contribute to the spread of brucellosis, we do not understand the scientific basis or need for bulls to be included in the requirement.

6. **Lack of objective criteria triggering the need for proposed rule-making.**

Upon reviewing the supporting documentation accompanying this proposed rule-making, we were not able to find any specific, objective criteria such as a significant or increasing number of infected cattle herds being recently detected in states having brucellosis-infected wildlife, lack of sufficient surveillance in cattle or wildlife, etc. as forming the basis of need for such rule-making. This concerns us since it "leaves the door open" for interpretation and conjecture as to what is really driving the need for rule-making in the first place. We ask that you provide us with the more objective criteria that were considered by the TAHC in deciding that the proposed rule was needed, and request that you not take any further action in implementing these proposed rules until such time we are provided the opportunity to more specifically comment on the objective criteria that were used.

Additionally, we do not see any provisions in the proposed rule that would provide a basis for the rule to be rescinded for a particular state once it becomes effective. Short of ridding the entire Greater Yellowstone Area of wildlife brucellosis, the potential or possibility for the rule to no longer apply to a particular state saddled with a problem for which they have no realistic ability to control in the wildlife is not provided for in the rule-making. As such, the marketability of Wyoming livestock will forever be impacted – a situation we hope we will never face.

Thank you for understanding and considering our perspectives regarding this very important issue for Wyoming's cattle industry. If you have questions, please don't hesitate to contact us at (307)-857-4140.

Best regards,

Jim Logan DVM.

Dr. Jim Logan, State Veterinarian
Wyoming Livestock Board

Leanne Correll

Leanne Correll, Director
Wyoming Livestock Board

Gene Snelson

From:	Carol Pivonka
Sent:	Monday, July 15, 2013 9:29 AM
To:	1-legal
Subject:	FW: Brucellosis Testing requirements

Carol S. Pivonka
Executive Assistant for Dr. Dee Ellis
Carol.Pivonka@tahc.texas.gov

From: Jimmy Reed [mailto:reedfarmwelding@yahoo.com]
Sent: Sunday, July 14, 2013 9:51 PM
To: comments
Subject: Brucellosis Testing requirements

Dear TAHC,

I am writing to support the proposed amendments for entry permits and post arrival brucellosis testing of breeding cattle from the greater Yellowstone area in Montana, Wyoming and Idaho. I believe it is of good husbandry practice to test these animals prior to leaving their home state and after their arrival into Texas. The current testing requirements in those states do not satisfy my fear of reintroduction of brucellosis in the Texas beef cattle population. Texas beef producers have spent too many years and dollars to eradicate brucellosis from our herds to let potentially exposed cattle enter without affirmation of being brucellosis free.

Thank you for watching over the Texas beef cattle industry,

Jimmy Reed
Texas Farm Bureau
Beef Cattle Advisory Committee Member

Sent from my iPad

Sally Garcia

From:	Carol Pivonka
Sent:	Monday, July 15, 2013 3:09 PM
To:	1-legal
Subject:	FW: Comments to Brucellosis Rule Change and Consideration
Attachments:	2013-1.07.11 SUBMITTED DOL Comments on proposed TAHC rule copy.pdf

Carol S. Pivonka
Executive Assistant for Dr. Dee Ellis
Carol.Pivonka@tahc.texas.gov

From: Darrell Stevenson [mailto:stevenson.darrell@yahoo.com]
Sent: Monday, July 15, 2013 3:06 PM
To: comments
Cc: Christian Mackay; MZaluski@mt.gov; Jan French
Subject: Comments to Brucellosis Rule Change and Consideration

To Whom it May Concern:

The Montana State Veterinarian and Montana Board of Livestock submitted the attached concerns to the Texas Animal Health Commission this week. These considerations are viewed in grave concern from Montana's cattle industry especially when considering all of the effort, time and expense the Greater Yellowstone Area (MT, WY and ID) has put into managing and controling Brucellosis. As you can see the rate of incidence is extraordinarily low and our policing system has proven to manage with superb efficiency.

I can't help but think that long term Montana/Texas relations will be hindered with such mandates and that more specifically the movement of breeding cattle will slow or cease. None of us want this to be the case. The follow-up testing period alone is costly and time consuming. Since the proof of science has already been reviewed by Dr Zaluski in the formally submitted statement, I would like to offer questions from a producers perspective;

- Why isn't the science trusted? As reviewed in the attached, incident rate in Montana is low and imported cattle to Texas become even lower with a pre-shipment test?
  - With no documented case of bulls spreading Brucellosis, why are they bundled into the concern?
- Why would the State of Texas choose to self impose long term quarantines and testing programs for cattle of such low incident rates?
  - In a time of tightening budgets and USDA overhauls, why would Texas put more pressure on staff obligations and commitments when Montana has already extended and covered these concerns?
  - Are we not using the same science/USDA protocol?
- Why would Texas choose to tighten or restrict access to a large supply of quality breeding stock, especially when the prospect of rebuilding the Texas cow herd looks to be in the near future?
- Why are these mandates being targeted at the Greater Yellowstone Area states rather than all state's of Class B status?

- Why is this a blanket policy with no regard to the actual region of risk? We can all admit that Southwestern Montana and the area near Yellowstone National Park is of consideration, but why Lewistown, Sidney and Miles City or other areas outside of the Designated Surveillance Area? These shouldn't be areas of concern at all. Our State recognizes this as well as the USDA, why doesn't Texas?

As an active livestock exporter, I also have concern. I was finally able to shift vessel loading interest last year to Galveston, TX instead of Wilmington, DE or Eastport, ME. For me and being a westerner, I would much prefer working with the same USDA region and loading cattle in Texas. Once again, I can't help but think that such protocol will shift all interest back to the East Coast.

- With much of the current breeding stock for export being sourced, quarantined and health tested in MT, WY and ID . . .
  - How are we to continue import negotiations with any foreign market as clean regions of health, when one of our own State's has self imposed restrictions?
  - When said cattle are to be exported, what is the benefit or possibility of transporting, laying-over and loading in Texas?
    - IF they don't qualify to be in Texas, how can they be exported to any other market (foreign or domestic)?
      - Where are the standards with this?
    - With such concerns, is there any choice but to look back East to Delaware and Maine.

Counter protocols . . . why would Texas be openly willing to restrict their own livestock industry marketing? I'm not a politician and don't wish to be, however we all know in this realm that counter measures are common. Whether it be intrastate movement, export potential or loss of Port use in Galveston, I'm concerned by such repercussions especially when they are not based on reasonable protocol with sound science and can be avoided.

At the end of the day and from my perspective, I'm asking the final question of "why is this being considered?" To me, the scientific and economic sense is lacking and the risk of backlashes are unneeded and unwelcome by all.

This is not intended to be brash in nature, just genuine in concern and question. Thank you for your consideration.

Sincerely,

Darrell Stevenson
American phone: 406 350 5443
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Stevenson Sputnik - Shestakovo Village, Voronezh, Russia
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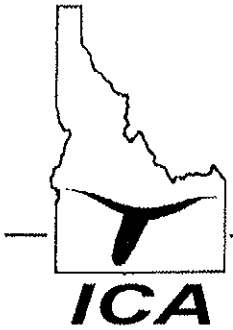


Idaho Cattle Association

July 15, 2013

Texas Animal Health Commission
P.O. Box 12966
Austin, Texas 78711-2966

To Whom It May Concern:

The Idaho Cattle Association (ICA) is a member-driven trade organization, who represents all segments of the beef cattle industry in the state of Idaho. ICA appreciates the opportunity to comment on the Texas Animal Health Commission's (TAHC) proposed elements to the state's regulations regarding Entry, Movement and Change of Ownership.

As proposed, TAHC's proposal would require post-entry brucellosis testing of cattle originating from Montana, Idaho and Wyoming. These proposed rules greatly concern ICA, as they will dramatically impact the market for breeding animals entering Texas. These regulations will virtually eliminate imports of breeding heifers to Texas from Idaho (and other states in the Greater Yellowstone Area), due to the extended government oversight and additional testing requirements. As an industry, we must work together to facilitate trade among our states, rather than create rules which will hinder such abilities.

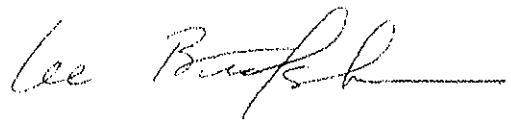
In addition to the above, these proposed regulations do not take the United States Department of Agriculture's (USDA) national brucellosis eradication program into consideration, which focuses testing efforts on the area at risk—an area referred to as the Designated Surveillance Area (DSA). As it now stands, USDA's brucellosis rules have been extremely effective in eliminating brucellosis from the nation's livestock; therefore, we see no reason to implement a more stringent set of regulations.

Another flaw we find with these proposed rules is that the risk to livestock from infected wildlife is a regional issue, and should not be treated as though it is a statewide problem. Cattle residing and grazing inside of Idaho's DSA have been risk-assessed and are meeting all of the proper requirements for brucellosis testing. Testing a state's entire cattle population is not a sufficient way to locate something that comes from a very specific area. Currently in Idaho, individual identification requirements apply to all DSA sourced breeding males and females of any age and DSA sourced intact animals over 18 months of age require a negative brucellosis test within 30 days prior to leaving Idaho's DSA. Based on the low level of risk posed by cattle of Idaho origin, requiring post-entry testing is unjustified. Since the April 2012 implementation of the mandatory testing requirement for cattle leaving the DSA, 5,539 head of cattle that utilize Idaho's DSA were tested for brucellosis, and all results came back negative. After being in place for a short seven months, Idaho's testing requirements and surveillance provides a 99 percent confidence that the disease is present at a rate of less than 0.07 percent.

2120 Airport Way • P.O. Box 15397 • Boise, Idaho 83715 • 208 / 343-1615 • Fax 208 / 344-6695 • www.idahocattle.org

The Idaho Cattle Association greatly appreciates being given the opportunity to comment on the topic at hand. If you have any questions regarding these comments, please feel free to contact our office at (208).343-1615. Thank you for your time and consideration.

Sincerely,



Lee Bradshaw
President

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Montana Stockgrowers Association

July 15, 2013

Carol Pivonka
Texas Animal Health Commission
2105 Kramer Lane
Austin, Texas 78758

Re: Proposed amendments to the Brucellosis chapter (§35.4) concerning entry, movement and change of ownership of cattle.

Dear Ms. Pivonka,

Thank you for the opportunity to provide comments regarding the Texas Animal Health Commission's (TAHC) proposed rule changes for cattle entering the state of Texas from Montana due to risk of brucellosis. My comments today are made on behalf of the membership of the Montana Stockgrowers Association (MSGA). Our association has reviewed and carefully considered the proposed rule changes to determine the potential implications for ranchers in Montana. MSGA has several concerns with the proposal to require an entry permit and post-entry brucellosis testing of breeding cattle originating from Montana and opposes these proposed changes as we believe they are not supported by scientific, risk-based analyses, will unnecessarily burden trade of Montana's high quality breeding cattle with Texas producers, and will set a dangerous precedent for other states to unjustifiably restrict import of Montana cattle.

There is an extremely low risk of brucellosis transfer posed by cattle coming out of Montana. While a small area of Montana in the Greater Yellowstone Area (GYA) is affected by rare transfers of brucellosis from wildlife, the state of Montana has proven highly effective in its efforts to mitigate the spread of brucellosis. The state's testing provides for a 99% confidence of finding brucellosis at a level of less that 0.008%. Montana has found only three infected cattle herds (and two bison herds) since 2007. A total of 30 reactor animals have been found in all of the affected herds in six years.

The proposed changes to §35.4 disregard the monumental efforts of the Montana Department of Livestock, USDA, and Montana cattle producers to zero in on higher risk areas and focus resources to prevent brucellosis from spreading from a regional (not statewide) wildlife threat. Montana is operating under requirements of the USDA's national brucellosis eradication program which has been successful in the progressive elimination of the disease from U.S. livestock. The requirements implemented by USDA have ensured the safety of U.S. cattle in all

states and have been effective in treating higher risk areas, with the implementation of Designated Surveillance Areas (DSAs). Montana has adhered to the stringent rules and procedures outlined by USDA and has implemented its own comprehensive rules.

Montana requires that all female cattle four months of age or older within Beaverhead, Gallatin, Madison and Park Counties (which are partly contained within Montana's DSA) must be official brucellosis vaccinates by January 1 of every calendar year. Montana also requires that all cattle and domestic bison must be tested for brucellosis within 30 days prior to change of ownership or movement out of the DSA if they are sexually intact and 12 months of age or older or any age intended to be used for breeding purposes. Montana has an official DSA identification requirement with the capability to trace imported animals back to the DSA.

These regulations have proven successful and effective for both the state of Montana, as DSA-origin cattle move to other areas of Montana, and for other states that have imported cattle from Montana. Montana's DSA requirements have been effective in rigorously monitoring herds for brucellosis and preventing spread of the disease. USDA confirmed this in a September 2012 review of Montana's Brucellosis Management Plan: "Montana is commended for its proactive approach to addressing the brucellosis situation in DSAs and developing and implementing a BMP [Brucellosis Management Plan] reflecting requirements critical to mitigating the risk of spread of disease."

The Montana Department of Livestock is also working with the Montana Department of Fish, Wildlife and Parks to monitor the incidence of brucellosis in GYA elk, and the subsequent movement of positive elk in and around the DSA. Montana has twice adjusted the DSA boundary in 2011 and 2012 based on information gathered during elk brucellosis surveillance efforts to ensure that higher risk areas are included within the boundary and regulations of the DSA.

The proposed TAHC regulations are a step backward from USDA's progressive and effective focus on scientific, risk-based efforts to rules that are more restrictive than the old Class B brucellosis eradication program requirements. Per the draft rule "(3) Requirements for cattle entering Texas from Idaho, Wyoming, and Montana. (A) All breeding bulls and sexually intact female cattle entering Texas for purposes other than immediate slaughter or feeding for slaughter in a feedlot shall be tested for brucellosis 60 to 120 day post entry. (B) Sexually intact female cattle entering Texas that have not calved must be held until tested negative 30 to 90 days after calving (post parturient)." These stipulations are onerous and unnecessarily duplicative, and will drastically affect trade of Montana's high quality breeding stock with producers in Texas.

The proposed rule changes to require post-entry brucellosis testing of cattle originating from Montana is superfluous and will deter Texas producers from importing high quality breeding cattle from Montana. There is an extremely low risk posed by cattle coming out of Montana. The continuous efforts of USDA, the Montana Department of Livestock and producers in Montana's DSA have reflected the urgency and importance of this issue. Effective rules and procedures are already in place to protect Texas, as well as the rest of the state of Montana and other states, from the spread of brucellosis from wildlife in the Greater Yellowstone Area. We urge you to reconsider this drastic, unprecedented, and unnecessary effort.

Sincerely,

Errol Rice, Executive Vice President

Gene Snelson

From:	Carol Pivonka
Sent:	Monday, July 15, 2013 4:45 PM
To:	1-legal
Subject:	FW: Chapter 35 Brucellosis
Attachments:	Texas Animal Health Commission submitted comments 07152013.doc

Carol S. Pivonka
Executive Assistant for Dr. Dee Ellis
Carol.Pivonka@tahc.texas.gov

From: Kujala, Quentin [mailto:qkujala@mt.gov]
Sent: Monday, July 15, 2013 4:18 PM
To: comments
Subject: Chapter 35 Brucellosis

Texas Animal Health Commission:

In response to the proposed rule to increase brucellosis testing requirements for cattle from Montana, attached please find short comment letter submitted by staff on behalf of listed citizen members of Montana's Elk Management Guidelines in Areas with Brucellosis Work Group. In the same representative light, the work group members thank you for the opportunity to submit comment.

Regards,
Quentin Kujala
bureau coordinator, Montana Fish, Wildlife and Parks
(406)444-5672

July 15, 2013

Texas Animal Health Commission:

The Montana *Elk Management Guidelines in Areas with Brucellosis Working Group* (EBWG) was first assembled in January 2012 to explore and recommend elk management actions to reduce the risk of brucellosis transmission between elk and livestock. Submitted by members of this citizen working group, this comment letter is in response to the proposed rule requiring additional testing for brucellosis in cattle entering Texas from Montana.

The EBWG represents a broad involvement of veterinarians, hunters, conservationists, and livestock producers with a goal of proposing practical and socially acceptable management to reduce the chance of brucellosis transmission between elk and livestock. In late 2012, the EBWG presented management tools for consideration by the Montana Fish, Wildlife & Parks (FWP) Commission that included dispersal hunts, spatial separation through fencing, and herding/hazing at critical times of the year.

These recommendations were adopted and rapidly implemented in winter/spring 2013 with significant success as determined by FWP personnel, the Montana Department of Livestock, and landowners. The EBWG deliberations have been enhanced by the ongoing live capture elk study that identifies the range of positive elk to define the cattle populations at risk. This ongoing scientific study measures not only the range of seropositive elk but elk movements and distribution at critical times of the year within and adjacent to Montana's Designated Surveillance Area (DSA). Alongside livestock management efforts described within the regulatory framework of the DSA, this contemporary elk information is being used to identify and decrease commingling and potential transmission between elk and livestock via the EBWG recommendations.

In conclusion, these significant and effective efforts by Montana citizens, the livestock industry, and governmental agencies are made in good faith to address potential brucellosis transmission and other states' concerns and have proven not only effective relative to brucellosis transmission and detection but also nimble in administrative response to new information. The EBWG recommendations are a critical piece of Montana's comprehensive management plan which not only addresses livestock surveillance activities but also the dynamics of elk and cattle interaction. The proposed Texas rule essentially dismisses these considerable efforts by Montana. In this light, members of the EBWG identified below respectfully request a "do not pass" on the proposed rule for additional testing of Montana cattle entering Texas.

Submitted by EBWG staff on behalf of those members of the Montana *Elk Management Guidelines in Areas with Brucellosis Working Group* listed below (in alphabetical order):

Mark Albrecht, Bozeman MT
John Anderson, Alder MT
Ed Bukoskey, Rosebud MT
Joe Cohenour, East Helena MT
Rick Douglass, Butte MT
Ken Hamlin, Bozeman MT
Ray Marxer, Twin Bridges MT
Dick Raths, Lewistown MT
Tom Rice, Dillon MT