

Pilot Project: Progressive Management Area– Proposed GYA Brucellosis Solution

I. Introduction to Current Situation

In Montana, Wyoming, and Idaho domesticated livestock have been infected from the Yellowstone National Park (YNP) wildlife brucellosis pool. These infections have resulted or will result in each of these states losing their brucellosis Class Free status. The loss of this status has substantial impact on domesticated livestock producers. As a result of the brucellosis infections, area producers are currently bearing substantial financial costs and dramatic changes in their management protocols.

The diseased wildlife not only threatens domesticated livestock but also wildlife welfare. The Greater Yellowstone Area (GYA) is the home of a large and valuable wildlife population. The health and vitality of this population is diminished by brucellosis.

Unless there is an effective management plan, there will be continuously reoccurring infections jeopardizing the wildlife, the brucellosis Class Free status, and the livestock economy of the GYA states. Currently, management focuses on the immediate crisis rather than developing a long term solution to eradicate the brucellosis threat. The management plan must not only focus on domesticated livestock but also on infected wildlife. Therefore, since elk and bison are the primary reservoirs of brucellosis in the GYA, the plan must effectively manage the potential of bison and elk to infect domesticated livestock and for the disease to further proliferate among their own populations.

The goals are to preclude infection, maintain grazing of domestic livestock in the GYA, and have a healthy wildlife population in a manner as unencumbered as possible. The long run intent is to develop a vigorous brucellosis free eco-system that provides for healthy livestock and wildlife co-existence. To accomplish the goals there must be a coordinated effort among managers of cattle, bison, and elk that will require the cooperation of multiple groups and government agencies.

Montana producer organizations are supporting and providing this proposal to enhance cooperation with federal and state agencies to resolve the brucellosis problem. Input from federal and state agencies and/or other livestock or wildlife groups is welcome. The proposal developed herein may serve as a model for other states facing similar types of problems in developing management plans. For this management plan to be widely accepted, all affected animal species and interested parties must provide fair and equitable investment in the process. To the extent reasonably possible, affected animal species are treated similarly within this proposal.

Summary of Objectives

The overall goal is to maintain a healthy wildlife and cattle population in the GYA and the health of that population be recognized by the public. This should result in broad public support and meliorate adverse market reaction to brucellosis outbreaks.

Short-Term Objectives

- Regain brucellosis Class Free status
- Implement separate but complementary brucellosis management plans for bison, cattle, and elk
- Minimize economic impact of the brucellosis infections on producers

Long-Term Goals

- Eradicate brucellosis in the GYA and US
- Maintain livestock grazing in the GYA
- Safeguard wildlife and livestock from further infection
- Maintain a vigorous, healthy wildlife population

II. Proposed Pilot Progressive Management Area Overview

Progressive Management Area

It is the intent that these management plans will apply to Progressive Management Areas(PMA.) PMA are defined as “The county wherein the brucellosis positive cattle were identified and any county within ten (10) miles of the premise on which the infected cattle were discovered.” Furthermore, if the positive tested cattle were moved to or from another area, that area may be subject to PMA designation.” PMA designation is removed in accordance with the UM&R. However APHIS may require continued plans.

PMA Adjacent Areas

As soon as possible after the sero positive cattle is identified, all cattle in counties adjacent to the PMA Areas will be 840 tagged and tested. All adjacent area cattle not previously vaccinated would be vaccinated in accordance with Uniform Methods and Rules (UM&R) . If there are no sero positives, these adjacent areas would require no further brucellosis related increased management and would be treated in a manner similar to the remainder of the state more distant from the PMA except for 840 tagging. All cattle in the adjacent areas must be tagged with an APHIS approved 840 tag until the PMA designation is removed. If any cattle test sero positive, the PMA is expanded to include that county. Counties that are physically adjacent to the PMA county but all parts of that county are over 50 miles from all known locations of the sero positive cattle would not be considered a PMA adjacent area and would be exempt from the protocol in this paragraph. A location within the adjacent area may be exempt from testing if 1) all cattle are previously tagged with an APHIS approved 840 tag, 2) documentation that all cattle not originating on but entering the location within the last five (5) years were brucellosis tested negative 30 days prior to entry, and 3) all cattle were vaccinated according to UM&R.

Cattle Transport

Cattle that are trucked as quickly as reasonably possible through the PMA are not subject to PMA cattle management. These cattle must remain on the truck while in the PMA.

III. Proposed Montana PMA Management Plan

All cattle, elk, and bison within the PMA will be subject to a management plan. An effective management plan must include the identification and removal of infected animals. It should be noted that there is no treatment or cure for brucellosis infected animals. Therefore, animals must be identified, tested, and traced.

The first step is to identify the animals. The identification proposal is ear tags that may need to be species specific as discussed later. The tags need to be installed in all cattle, as well as bison and elk that are captured outside of YNP. Eventually elk and bison within YNP need to be identified and tagged leading to eradication of brucellosis in YNP by 2029. All animals must be vaccinated with an effective vaccine. Animal movement will be traced to determine current feeding, calving, and other patterns pertinent to brucellosis management. All animals are subject to testing and those testing positive must be terminated or disposed of in a manner consistent with APHIS practices. Those animals closely associated with a positively tested animal may also be subject to disposal.

Cattle

Cattle tags will be an APHIS approved 840 tag that will also serve as a brucellosis vaccination indication and will replace the current metal brucellosis tags. All cattle leaving the area must be tested within 30 days prior to shipment and all cattle must be tested at least annually. Cattle within the PMA must be tracked and traced during PMA designation. All eligible cattle must be vaccinated and tested in accordance with the Uniform Methods and Rules (UM&R). The intent is to manage brucellosis so that the market will treat APHIS 840 compliant cattle originating from PMAs similarly to cattle from outside the PMA.

Bison

This bison proposal is intended to be consistent with the IBMP. However, certain additional requirements are necessary due to the recent cattle infections. All bison leaving YNP must be captured and tagged with a high frequency electronic tag that can be read from at least 100 feet. If such tags are not feasible, then a panel tag may be used. All captured bison will be tested and sero negatives will be vaccinated. Bison movement will be tracked. Since the current vaccine is less effective in bison than cattle a further step is required. Until a more effective vaccine for bison is available, all bison cows captured outside YNP testing negative for brucellosis will receive contraception (or be sterilized.)

Elk

This elk proposal is intended to be consistent with the Montana Elk Population Objective but will not be accomplished using only recreational management tools. Additional requirements are necessary due to the recent cattle infections. A primary elk management brucellosis concern is the seasonal concentration of elk populations. The

management of these areas must be modified to reduce the infection of brucellosis in elk. Currently, no effective vaccine for brucellosis in elk exists. Elk leaving the YNP must be aggressively sampled. When an effective vaccine is developed, these elk must be vaccinated. Elk sampled will be tagged with a high frequency electronic tag that can be read from at least 100 feet. If such tags are not feasible, then a panel tag may be used. All captured elk must be tested. Elk movement will be tracked. Currently, a full set of DNA fingerprints for elk brucellosis is not available, thus, tissue samples should be taken to complete the DNA fingerprint collection.

Recovery of Brucellosis Class Free Status

The portion of the state not designated as a PMA would recover the brucellosis free status six (6) months after the last sero positive cattle test or six (6) months after all cattle are tested in the PMA and adjacent areas, whichever is later. PMA would receive the same brucellosis status as the rest of the state after the PMA status is removed. Of course the recovery of the brucellosis Class Free status is dependent on following the components of the plan that directly address cattle management.

Data Management Needs

A data management system with an approved ranch level (not back) age and source PVP certificate from USDA will manage and record data that must be collected in the above animal management plans.

Compensation

APHIS or the appropriate wildlife agency will be responsible for the management plan and the associated cost. Producers in the PMA will be compensated for the tag, test, and vaccination costs, and tracing and tracking of livestock annually until the PMA designation is removed. Producers in the PMA adjacent areas will be compensated for the tag, test, and vaccination costs annually until the PMA designation is removed.

Immediate Response

The implementation of these management plans will not occur for several months and so more immediate action is necessary to address the close term infection potential. In the immediate term, spatial separation of livestock should be used to reduce infection potential.

IV. Coordinated Action Plan Summary

The plan would be developed and implemented on three parallel tracks and all tracks would begin as soon as possible. The action plan is as follows:

1. Short term: Montana Action Plan
2. Mid term: Coordinate state level (MT,WY,ID) harmonized approach
3. Long term: Re-engage on and rewrite the GYIBC MOU and IBMP for long term solution

Achieving the goals of precluding infection, maintaining grazing of domestic livestock in the GYA, and having a healthy wildlife population in a manner as unencumbered as possible are attainable through the above action plan. It should be noted that brucellosis eradication will be expedited by prioritizing the development of a more effective vaccine that inoculates all species.