

National Park Service  
U.S. Department of the Interior

Yellowstone National Park  
Idaho, Montana, Wyoming



# **The Use of Quarantine to Identify Brucellosis-free Yellowstone Bison for Relocation Elsewhere**

Environmental Assessment

January 14, 2016

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## Environmental Assessment

### Summary

Yellowstone bison (*Bison bison* or *Bos bison*) were infected with the nonnative disease brucellosis by cattle or wild elk in the early 1900s. This bacterial disease causes abortions and can be transmitted back to cattle and elk if they contact infectious tissues. If cattle become infected there are economic costs from killing infected animals, additional testing requirements, and possibly, restrictions on interstate and international trade. The distribution of Yellowstone bison has been limited to Yellowstone National Park and portions of adjacent winter ranges in Montana and their dispersal or relocation elsewhere has been precluded primarily because of concerns regarding brucellosis transmission to cattle; though competition with cattle for grass, human safety, and property damage are also issues.

Many scientists consider Yellowstone bison to be the only ecologically and genetically viable population of plains bison within their original range in North America. To preserve the species, there is a need to establish additional wild, wide-ranging populations that are subject to forces of natural selection. Yellowstone bison are a valuable source population for restoration efforts because they represent a unique genetic lineage, have high genetic diversity compared to many other populations, are one of only a few bison populations with no evidence of interbreeding with cattle, have adaptive capabilities honed by natural selection factors such as competition for food and mates, predation, and survival under substantial environmental extremes, and have special significance to many Native American Tribes as the last living link to the indigenous herds of bison which once roamed across North America.

Yellowstone bison are managed pursuant to the Interagency Bison Management Plan, as adjusted, which was signed in December 2000 by the Secretaries of Agriculture and Interior and the Governor of Montana. Under this plan, numbers of Yellowstone bison are supposed to be managed towards an end-of-winter guideline of 3,000 animals. The bison population is prolific, however, with high reproduction and survival. As a result, the harvest and culling of bison is necessary to decrease abundance toward this guideline. Currently, many culled bison are shipped to meat processing facilities; a practice which managers would like to curtail.

The National Park Service is developing a plan to consider a quarantine program for Yellowstone bison at one or more new quarantine facilities, which could be located within Yellowstone National Park, on tribal lands, or elsewhere. The purpose of quarantine would be to (1) augment or establish new conservation and cultural herds of plains bison, (2) enhance the culture and nutrition of Native Americans, (3) conserve a viable, wild population of Yellowstone bison, (4) maintain the low risk of brucellosis transmission from bison to cattle, and (5) reduce the shipment of Yellowstone bison to meat processing facilities.

A decision regarding whether to implement quarantine is needed because:

- The Interagency Bison Management Plan indicated additional analyses of quarantine processes and facilities would be conducted if the agencies later determined quarantine was a desirable component of the bison management program.
- The National Park Service would like to reduce the number of Yellowstone bison shipped to meat processing facilities under current management.
- A recently completed quarantine feasibility study conducted with Yellowstone bison demonstrated that bison repeatedly testing negative for brucellosis exposure through pregnancy and calving could be considered brucellosis-free.
- The Secretary of the Interior directed the National Park Service to explore options for quarantine for Yellowstone bison.

This Environmental Assessment includes both programmatic and site-specific analyses, consistent with guidance issued by the Council on Environmental Quality in 2014. The evaluation of a quarantine program is conducted at a broad, programmatic level of detail and the evaluation of potential quarantine locations is conducted at a site-specific level of detail for two sites. If an alternative is selected under which the National Park Service would implement a quarantine program, the site-specific analyses of two quarantine locations would allow the agency to implement quarantine at one of those locations without additional National Environmental Policy Act review.

The preferred alternative is to establish a quarantine program for Yellowstone bison and send bison testing negative for brucellosis exposure to the facility on the Fort Peck Reservation for further testing pursuant to the criteria and best practices described herein. This alternative would cause minimal damage to the environment, while conserving and enhancing cultural and natural resources. The risk of brucellosis transmission from bison to livestock, people, or other wildlife would be negligible.

### **Public Comment**

If you wish to comment on the Environmental Assessment, you may post comments online at <http://parkplanning.nps.gov/BisonQuarantine>, hand-deliver during normal business hours to the mailroom in the Park's Administration Building, or mail comments to: Quarantine Relocation Program for Yellowstone Bison, P.O. Box 168, Yellowstone National Park, Wyoming 82190. This Environmental Assessment will be on public review for 30 days. All comments must be received by February 15, 2016. Before including your address, phone number, e-mail address, or other personal identifying information in your comment, you should be aware your entire comment – including your personal identifying information – may be made publicly available at any time. Although you may request to have your personal identifying information withheld from public review, we cannot guarantee we will be able to do so. Comments will not be accepted by fax, e-mail, or in any other way than those specified above. Bulk comments in any format (hard copy or electronic) submitted on behalf of others will not be accepted.