

Briefing Statement

AGENCY: National Park Service, Yellowstone National Park
ISSUE: Recommended Adjustment to the Adaptive Management Plan for the Interagency Bison Management Plan (IBMP)
DATE: April 24, 2013

Recommended Adjustment

Change the target haze-back date for bison from the Hebgen basin into Yellowstone National Park (YNP) from May 15 to June 1 to reduce repetitive hazing (with the associated funding, logistical, staffing, and wildlife disturbance costs), and focus hazing in April and May on keeping bison off areas that will be occupied by cattle in summer.

Management Objective 3.2: Prevent cattle/bison interactions, with an emphasis on the likely bison birthing and abortion period each year.

Management Action 3.2c – Haze bison from the Hebgen basin into YNP with a target date of ~~May 15~~ June 1.

Background

Each year the IBMP managers develop a plan of action to move bison from the western management area in Montana back into Yellowstone National Park by a target date of May 15. Data presented in the annual reports indicate the agencies are rarely successful in accomplishing this task because bison hazed into the park in mid-May return to the Horse Butte peninsula and adjacent habitat shortly thereafter. As a result, management agencies have to repeat intensive hazing actions to return bison to the park—often for many weeks. In 2011, haze-back operations were delayed until the June 1, which resulted in a substantial reduction in the amount of resources needed to manage bison to prevent overlap on cattle summer ranges, and a reduction in the amount of helicopter time needed to move the bison back into the park.

Rationale for Adjustment

A reduction in the risk of brucellosis transmission from bison to cattle has been successful under the IBMP (White et al. 2011). To date, no documented transmission of brucellosis from Yellowstone bison to cattle has occurred due, in part, to successful efforts by federal and state agencies to maintain separation. Conversely, numerous transmissions from elk to cattle have occurred since 2000 (Beja-Pereira et al. 2009, Higgins et al. 2012). Currently, the risk of brucellosis transmission from bison to cattle is low during winter and spring because few cattle are in areas where bison are tolerated north and west of the park (Kilpatrick et al. 2009, Schumaker et al. 2010). By the time more cattle are released onto public and private lands north and west of the park during mid-June and July, Yellowstone bison are usually following the progressive green-up of grasses back into the park interior as snow melts at higher elevations (Thein et al. 2009), and any bison that remain outside the park are hazed back into the park (USDI et al. 2008). Brucellosis transmission risk is limited due to the combined effects of (1) management to maintain separation between cattle and bison, (2) synchrony of most bison parturition events into a short period and areas separate from cattle summer ranges, (3) the cleaning of birth sites by female bison and the relatively quick environmental degradation of *Brucella* bacteria in late spring weather, and (4) scavenger removal of potentially infectious birth tissues that makes it unlikely that viable *Brucella abortus* bacteria would remain for cattle to encounter (Jones et al. 2010). Thus, transmission risk to cattle is low by June 1 and extremely low by June 15 (Jones et al. 2010, Aune et al. 2012).

References

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