



Highlights of GAO-08-291, a report to congressional requesters

## Why GAO Did This Study

Federal and Montana state agencies have long been entangled in controversy over bison leaving Yellowstone National Park. Some of these bison, as well as elk and other wildlife, have a contagious disease called brucellosis, which can cause pregnant animals to abort. Montana livestock owners and government officials fear that if bison are allowed to leave the park, the disease could spread to cattle, potentially threatening the economic health of the state's livestock industry. To help manage this issue, three federal and two state agencies have been implementing a bison management plan that they agreed to in 2000.

This report discusses (1) the progress made in implementing the bison management plan and (2) the plan's soundness and the effectiveness of the agencies' implementation of it for managing bison-related issues in and near Yellowstone National Park. GAO reviewed documentation and research on bison and brucellosis and interviewed federal and state officials and key stakeholders.

## What GAO Recommends

GAO is recommending that Agriculture and Interior—with the Montana state agencies—improve their accountability, transparency, and management of Yellowstone bison by developing measurable objectives and reporting yearly on progress, among other actions. The agencies, except for Montana Fish, Wildlife and Parks that provided no comments, generally concurred with GAO's recommendations.

To view the full product, including the scope and methodology, click on [GAO-08-291](#). For more information, contact Robin M. Nazzaro at (202) 512-3841 or [nazzaror@gao.gov](mailto:nazzaror@gao.gov).

March 2008

# YELLOWSTONE BISON

## Interagency Plan and Agencies' Management Need Improvement to Better Address Bison-Cattle Brucellosis Controversy

### What GAO Found

The federal and state agencies implementing the interagency bison management plan have made less progress than they originally anticipated. These agencies—the U.S. Department of Agriculture's Animal and Plant Health Inspection Service and Forest Service; the Department of the Interior's National Park Service; Montana Fish, Wildlife and Parks; and the Montana Department of Livestock—had expected to progress to step two of the three-step plan by winter 2002–2003. Each of the plan's three successive steps for managing bison is intended to incrementally increase tolerance of bison roaming outside the park. As of late 2007, however, the agencies remained in step one because they have yet to meet two important conditions for moving to step two—first, that no cattle graze on a ranch north of the park, and second, that a safe and effective remote brucellosis vaccine-delivery system be available for bison. Nevertheless, the agencies have completed a number of other tasks called for in the plan, including maintaining the separation of bison and cattle in space and time and conducting some scientific research. Combined, the agencies have spent more than \$2 million annually implementing the plan, with the federal government and state agencies funding about 95 percent and 5 percent of these expenditures, respectively. The agencies have no estimate regarding how long it will take to meet the conditions for starting step two, nor have they revised their estimated dates for reaching step three, which was expected by winter 2005–2006.

Key deficiencies in the plan, and the agencies' implementation of it, limit their effectiveness with regard to managing bison-related issues. The plan has two broadly stated goals: to "maintain a wild, free-ranging population of bison and address the risk of brucellosis transmission." The plan, however, contains no clearly defined, measurable objectives as to how these goals will be achieved, and the partner agencies have no common view of the objectives. As a result, the agencies have no way to determine the effectiveness of the plan or of their management efforts. Also, in developing the plan, the agencies adopted an adaptive management approach that promotes flexible decision making in the face of uncertainties as outcomes from management actions and other events become better understood. But the agencies have not adequately implemented adaptive management, in that they (1) have not established critical linkages among clearly defined objectives (which are absent from the plan), information about the impacts of their management actions obtained through systematic monitoring, and decisions regarding adjustments they make to the plan and their management actions; (2) have continued to act more as individual entities, rather than as a cohesive interagency group; and (3) have not adequately communicated with or involved key stakeholders, such as conservation groups, livestock industry groups, and private landowners. Consequently, their decision making more often resembles trial and error than adaptive management and also lacks accountability and transparency.