

Yellowstone National Park; NATIONAL)
PARK SERVICE, an agency of the U.S.)
Department of Interior; LESLIE WELDON,)
Regional Forester, U.S. Forest Service)
Northern Region; UNITED STATES FOREST)
SERVICE, an agency of the U.S. Department of)
Agriculture; MARY ERICKSON, Gallatin)
National Forest Supervisor,)
Defendants.)

DECLARATION OF SARA JANE JOHNSON

Pursuant to 28 U. S. C. § 1746, I, Sara Jane Johnson, hereby declare under penalty of perjury that the following is true and correct:

1. I obtained a bachelor’s degree in biology at the University of South Dakota in 1967, and a master’s degree in biology at the same university in 1969. In 1974, I obtained a Ph.D. in biology at Montana State University in biology. I worked as a wildlife biologist for the Targhee National Forest from 1974 to 1980, and as a wildlife biologist for the Gallatin National Forest from 1980 to 1988. In both positions, I was frequently involved in the review of livestock impacts on Forest grazing allotments, including allotments adjacent to Yellowstone National Park. Since 1988, I have been headquartered in Three Forks, Montana, where I work as director of Native Ecosystems Council (NEC). One of the primary objectives of NEC is to promote native ecosystems on public forest and range lands in Montana and Idaho. In this capacity I have been involved as a public citizen in the management of livestock grazing allotments on the Gallatin, Beaverhead-Deerlodge, Helena, and Caribou-Targhee National Forests.

2. I am interested in the value of wild bison because they historically provided an important component of ecosystems in the Greater Yellowstone area.
3. As a keystone species, bison were historically one of the primary consumers of native vegetation, and as a result, via carrion provided vast amounts of protein to a huge variety of other wildlife species, such as grizzly bears, wolves, wolverine, coyotes, ravens, and bald eagles. This historic ecosystem function of bison has been more recently limited by direct population control and restriction of bison to within the boundaries of Yellowstone National Park. However, the Greater Yellowstone Ecosystem boundary does not stop at the Park's borders, and agency attempts to restrict bison to within the Park clearly fragments the integrity of this ecosystem, with far-reaching consequences to many wildlife species other than bison.
4. One thing that has become increasingly clear over the past few decades is that the habitat diversity bison require to meet their year-long needs are no longer being provided, primarily because they are not allowed to re-inhabit areas outside the Park that are important to their over-all, long-term viability. This concerted action thus impairs not only bison, but other wildlife species as well that benefit from the protein via carrion that bison provide.
5. I also believe that the replacement of native bison with domestic livestock on public grazing allotments outside Yellowstone National Park is causing extensive impairment to untold wildlife species due to the damage and management practices that are required to maintain these nonnative species. For example:
 - The water developments created for cattle not only drown large numbers of birds every year, but create permanent weed patches. These weeds are then spread out across grazing allotments by cattle, further reducing the natural diversity of plant species that are already

- cumulatively impaired by managing these rangelands for cattle instead of natural resident species.
- Unlike bison, cattle also congregate and loiter along and within streams and riparian areas, and within aspen stands, destroying riparian shrubs and aspen regeneration. The soil compaction by livestock in these areas in turn has reduced the ability of the soils to absorb and hold water, which means that riparian landscapes are likely significantly reduced in total area in comparison to historical conditions.
 - The extensive network of barbed-wire fences that are required to manage the distribution of cattle also kill not only sage grouse and other birds due to direct hits and entanglement, but big game species as well via entrapment.
 - In order to maximize the forage available to livestock on grazing allotments, the Forest Service routinely destroys sagebrush habitat, one of the most important and diverse plant communities for wildlife, via burning and herbicide application intended to maximize forage favored by livestock. Not only is sagebrush killed in prescribed burning, but these burns increase and spread noxious weeds.
 - Finally, the heavy, continuous grazing pressure that cattle impose on native plants cumulatively has resulted in elimination of many species, as well as reduced density of many others. This removal of most accessible vegetation has also reduced the distribution and density of various small mammal species that are intolerant of grazing. These include vole species that are important winter prey for various raptor and mammalian predators, thus creating a cascading effect on diversity of plant and animal species.

6. I have been concerned about the adverse impacts of livestock grazing on public range lands for many years. Although most of my public involvement in livestock grazing has been on the adjacent Beaverhead-Deerlodge National Forest, I have also participated in the management of grazing allotments on the Gallatin National Forest. In the 1990s, I appealed grazing decisions on the Green Lake and Wigwam allotments near Gardiner, Montana.
7. More recently I was involved in grazing management on the Red Knob grazing allotment at the northern end of the Madison Range. I appealed the decision to continue livestock grazing on this allotment on October 27, 2003, and attended an appeal resolution meeting on 11/5/03. At that time, I requested to visit the Red Knob allotment to gain a better understanding of my concerns regarding weeds and riparian area damage. The following summer, on July 20, 2004, I rode out on this allotment with the Forest Service. Lengthy discussions regarding grazing management with the Forest Service range specialist improved my understanding of livestock impacts and management, but did not alleviate my overall concerns about the impacts of nonnative cattle on natural ecosystems. It is my intention to return to the Red Knob allotment periodically during the term of the permit to observe the continuing impacts of livestock management on the landscape where the allotment is situated, and I will definitely re-visit the allotment when the permit comes up for renewal.
8. I continue to be concerned about the impacts of nonnative cattle on range ecosystems of the Gallatin National Forest. It is my professional opinion that rangeland ecosystem health and biological diversity would be significantly enhanced by replacing domestic livestock with native grazing species, such as the bison, in many areas now dedicated to livestock

management. In fact, it is difficult to fully appreciate the cumulative impact on biological diversity in the Gallatin National Forest of excluding bison and aggressively managing their natural habitat for livestock. This is clearly a significant environmental issue that should have been analyzed in the Environmental Impact Statement supporting adoption of the Gallatin forest plan. While the Gallatin National Forest is a highly valued and varied environmental mosaic of forest, shrubland and grassland vegetation, the only thoroughly analyzed impact of grazing management on wildlife considered in adopting the forest plan seems to have been the impact on elk of sharing forage with cows. That is an unduly narrow scope of environmental impact analysis for such an environmentally destructive forest use.

9. One kind of habitat that I am particularly interested in is sagebrush habitat. The Gallatin National Forest has a practice of burning sagebrush to promote cattle grazing that pre-dates the adoption of their forest plan. During my tenure with the Gallatin National Forest, a time when the forest plan was being formulated, this practice was controversial within the ranks of the Forest Service, with myself and others concerned over the impacts it was having on the many species that depend upon sagebrush habitat. In spite of this disagreement within the agency, and the concerns with the cumulative impacts on biological diversity, the forest plan was subsequently adopted without any disclosure whatsoever of even the existence of sagebrush habitat on the Gallatin National Forest, and to my knowledge the Forest Service never subjected the practice of burning sagebrush habitat to disclosure and analysis under NEPA until very recently.
 10. According to Van Dyke, "Conservation Biology: Foundations, Concepts, Applications," 2d Ed., McGraw Hill (2008), at p. 110, the effects of bison activities favor increased diversity of prairie vegetation rather than invasion
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by non-prairie vegetation. Managing for cattle, by comparison, favors decreased diversity of prairie vegetation and invasion by non-prairie vegetation, which in turn has had a significant adverse impact on sagebrush obligates like sage grouse, pygmy rabbits, Brewer's sparrow, sage thrashers, and many other species.

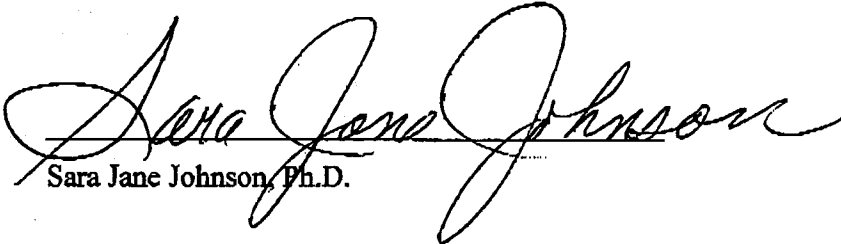
11. Although I have not personally monitored any grazing allotments near Yellowstone National Park in recent years, I have no doubt that adverse impacts by livestock are continuing. In addition, grazing practices that have adverse impacts on other livestock also still being planned adjacent to the Park. For example, the Gallatin National Forest recently proposed to burn extensive areas of sagebrush habitat in the Cinnabar Basin area, only several miles south of the Park. The scoping notice for this proposal was released on February 15, 2006 (called the Cinnabar Restoration Project), and I submitted comments on the proposal on 2/27/06. It is obvious that the primary benefactor of sagebrush removal will be the domestic livestock for the affected allotment. If domestic livestock were replaced with native bison in the Cinnabar Basin, there would be no need to burn sagebrush habitats to create forage for cows, plant diversity would increase over time, and the biological diversity associated with sagebrush would obviously benefit, as the bison co-evolved with sagebrush obligates like the Greater Sage Grouse. The Cinnabar "Restoration" Project leaves little doubt in my mind that the management approach of the Forest Service on the Gallatin has changed very little over the years in this regard, and does not reflect the best available science in the field of conservation biology.

12. Although I have not visited the Cinnabar Basin area since the mid-1990s, I intend to return there for a site visit when a draft proposal for the Cinnabar Restoration Project is released by the Gallatin National Forest. This may be

in the summer of 2010, or later. At that time, I will also make another drive through Yellowstone National Park, going from the Gardiner entrance and exiting at West Yellowstone. This is a drive that I take regularly not only to observe wildlife, but to view the re-growth of the Park's forests since the 1988 fires. Although I have viewed Yellowstone Bison dozens of time, it is always a pleasure to see them again. After all, Yellowstone National Park is one of the few areas in the nation where wild, free-roaming bison can be observed.

13. It is my professional opinion that the Gallatin National Forest could quite easily provide much of the habitat bison need beyond the boundaries of Yellowstone National Park in order to insure the long-term viability of bison, and to restore the natural diversity of plant and animal species in the Gallatin National Forest as well. Bison is a keystone species, and as long as it is prevented from re-colonizing its natural habitat on the Gallatin, I do not believe the forest, and the rangeland in particular, will ever recover the naturally abundant diversity of plant and animal species associated with this particular ecosystem. Sagebrush habitat, just by way of example, has been characterized by at least one Forest Service research scientist as the "mother" of biological diversity, with more plant and animal species associated with it than any other habitat in our national forests system.

Respectfully Submitted this 1st day of July, 2010,



Sara Jane Johnson, Ph.D.