September 16, 2014

The Hon. Steve Bullock Governor, State of Montana P.O. Box 200801 Helena MT 59620-0801

Dear Governor Bullock:

The undersigned scientists acknowledge and appreciate the initial steps¹ that have been taken in Montana toward restoration of a wild herd of genetically sound² bison somewhere on Montana's Great Plains. Species restoration to formerly occupied habitats is an issue that incorporates a variety of perspectives that range from ecological to philosophical to economic and includes values as well as science. Many of these considerations are held to varying degrees by different people, including scientists.

We applaud your and Montana's decision to move beyond these initial steps and to proceed with development of a bison-management plan, prepared by the Montana Department of Fish, Wildlife and Parks, that will lead to the restoration of one or more wild herds roaming suitable habitat on Montana's Great Plains. In 2000, the Interagency Bison Management Plan was adopted, calling for maintaining a wild, free-ranging bison population in Montana with safeguards for Montana's livestock industry. It is now time to develop a collaborative process leading to a management plan yielding this result. Montana's management planning process will create the opportunity to bring ranchers and bison advocates to the table to work on finding solutions to concerns.

Historically, Montana's Great Plains teemed with an abundance and diversity of wildlife species not found elsewhere in North America. Arguably, the most definitive and iconic of these wildlife species was the American Plains bison. These bison formed the basis for the economies of the indigenous peoples of the Great Plains and the early settlers of European origin. Yet, through a series of disastrous choices made by the non-indigenous settlers in the 19th century, bison were virtually extirpated from the Great Plains, and a remnant population of wild bison survived only in Yellowstone. Although bison were nearly extirpated by 1889, the species was saved in what can be termed the first significant wildlife recovery effort in North America and perhaps the world. Although much success was evident up to the 1930s, there has been little subsequent progress to increase the number of wild bison in herds on the Great Plains.

The greatest challenge to recovery of this species is not biological but rather overcoming the common perception that bison, which have had a profound influence on human history and grassland

¹ These steps include adoption of an interagency Bison Management Plan (2000), preparation of a quarantine feasibility study EA 2005, preparation by the Department of Fish, Wildlife and Parks (FWP) of an informative background document on Plains Bison Ecology, Management and Conservation (June 2011), endorsement by the FWP Commission of moving ahead with an EA for bison restoration as a wild population (2011), FWP hosting of public scoping hearings on an EIS leading toward a statewide bison management plan (concluded in June 2012), maintenance of a quarantine facility to provide a stock of disease-free and genetically sound Yellowstone bison for restoration efforts, restoration of some of these quarantined bison to fenced areas on tribal lands (Fort Peck Reservation), and legal defense of Montana's right to restore bison to these tribal lands (2013).

ecosystems for over 10,000 years, no longer belong on these landscapes. Some think that bison should be managed as an ancient relic behind a fence to be viewed but not fully experienced. The biological future for bison is dismal if this view remains entrenched in the American psyche. The key to the ecological recovery of this species is recognition that the American bison is a wildlife species that needs to be conserved and managed as wildlife. We consider it socially and biologically unacceptable that the extirpation of the bison as a wildlife species on the Great Plains should persist to this day. Except for bison, Montana has done an outstanding job of restoring almost all other wildlife species that were decimated in the state during the 19th and early 20th centuries, including elk, mule deer, white-tailed deer, antelope, bears, wolves, bighorn sheep, and mountain goats.

The bison conservation story is complicated by the many herds of privately owned and fenced bison. Most of these privately owned bison have been intentionally contaminated with cattle genes during hybridization attempts at the turn of the 19th century, although Ted Turner's fenced Vermejo Ranch herd has genetically sound stock from Yellowstone. Outside of the Greater Yellowstone Area, the only unfenced herds are in Alaska (4), Utah (2) and Arizona (1). This status is insufficient to characterize bison as a restored wildlife species. Restoring bison as wildlife involves restoring their ecological function – not everywhere but at least in some places. There is no other native North American wildlife species for which the existing status of bison on the Great Plains would be considered acceptable. Plains bison cannot be considered restored until their most characteristic native habitat in the Great Plains contains at least some bison herds that are genetically, behaviorally, ecologically, and functionally similar to what existed when Lewis and Clark first crossed Montana in 1804.

We include "functionally" because these bison herds, once restored, can again play the cultural roles that were so important to Montana's indigenous peoples. Functionally also includes making these herds available to be hunted like other wildlife species using fair-chase principles. This function has not existed in Montana for 150 years, and it is past time for restoration of the important social and cultural functions played by wild bison.

Bison are one of two North American wildlife species characterized, in their natural state, by huge herds roaming across vast areas (caribou are the other). The vast herds of wild bison that once moved across the Great Plains are not restorable, but it is desirable and feasible to re-create smaller herds in smaller areas that mimic the natural ecological states within which bison once existed. When this is done, it will benefit many species of animals and plants that co-evolved with bison, some of which are depleted today from loss of bison-influenced habitats. Bison were extirpated from their most important and characteristic habitats before the era of modern wildlife science, so not all of these relationships are understood. Species that would benefit, however, include black-footed ferrets; prairie dogs; and many bird species, including upland sandpiper, mountain plover, McCown's longspur, grasshopper sparrow, ferruginous hawk, sage grouse and long-billed curlew. Restoration of bison likely will have beneficial effects for other species with which they co-evolved, including pronghorn antelope, elk, mule deer and numerous carnivores and scavengers. Bison use landscapes differently than cattle and, ecologically, cattle are not a surrogate for wild bison.

The limited number and distribution of wild, genetically sound bison herds in America leaves the species vulnerable to catastrophic events – from climate-related habitat changes to disease or policy miscalculations and other events or actions that could deplete or extirpate existing populations. Restoring one or more herds of wild bison with suitable genetics increases the species' resiliency.

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This resiliency is necessary for sound wildlife and prairie-habitat stewardship and merits a significant measure of urgency.

We encourage the state, through your leadership, to hear from a wide range of interests and to broaden participation in a bison conservation dialogue among the various sectors of the Montana public. Especially important in this regard is the inclusion of Montana's Native Americans, who have a special cultural relationship with bison. Engaging a full range of public sectors, including Native Americans, hunters, recreationists, conservationists, local tourism businesses, landowners, and industry, in an effective dialogue is essential to ecological recovery of this species. The cultural lenses and personal perspectives through which different people view bison will provide important guidance and balance to the assessment of conservation opportunities and future management direction. We realize this will not be easy, but, just as the early champions for the first recovery of bison faced challenges, we are confident that thoughtful evaluation, civil public discourse and subsequent decision processes will lead to a significant recovery of this important wildlife species. We expect that no matter the geographic location or conditions placed on bison restoration there will always be some opposition. Yet, there will also be strong support and even some fortunate beneficiaries including recreation and tourism based businesses, hunters, wildlife watchers, and tribes. A significant conservation effort to recover this iconic species will improve our State reputation across this great nation and throughout the world demonstrating that Montanans take our wildlife heritage seriously.

Montana is fortunate to have a scientifically based wildlife-management agency that has previously undertaken or cooperated in successful restoration efforts that some found to be controversial, including recovery of grizzly bears and wolves. The skillful execution and success of these programs have benefited Montana in many ways, and we are confident that restoration of bison on Montana's Great Plains will similarly benefit Montana and North America. Montana has addressed many tough conservation challenges, and the people of Montana have always risen to these challenges, developing successful conservation strategies based on science and land stewardship. We are convinced they will do so again given the chance to engage and discuss the future of wild bison in Montana.

Sincerely,

INITIAL SIGNERS:

- Dr. Paul Krausman. Boone and Crockett Chair at the Univ. of Montana (Dept. of Ecosystem and Conservation Science) and former President of The Wildlife Society. Also was a professor at the Univ. of Arizona. Co-Editor of "Wildlife Management and Conservation: Contemporary Principles and Practices", Co-author of "Livestock Grazing, Wildlife Habitat, and Rangeland Values".
- Mr. Keith Aune, MS. Senior Conservationist and Bison Coordinator, Wildlife Conservation Society. MS from Montana State University. Retired bison and grizzly expert from Montana Fish Wildlife and Parks (MFWP) Dept., where he was Chief of Research.
- Dr. Harold Picton. Emeritus Professor of Wildlife Management (Ecology Department at Montana State University). Former MFWP biologist in eastern Montana. AAAS fellow. Author of "Buffalo" (Voyageur Press 2005) and "Montana's Wildlife Legacy: Decimation to Restoration" (and TV documentary on this topic with Terry Lonner). Instructor of "The Bison of Yellowstone" at the Yellowstone Institute for several decades.

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- Dr. Joel Berger. John Craighead Chair and Professor of Wildlife Conservation at the Univ. of Montana, Wildlife Conservation Society. Author (with Carol Cunningham) of "Bison: Mating and Conservation in Small Populations". Author of Wild Horses of the Great Basin. Co-author of Large Carnivores and Conservation of Biodiversity.
- Dr. Cormack Gates. Professor of Environmental Science and Planning, Faculty of Environmental Design, Univ. of Calgary. Co-author of "National Recovery Plan for the Wood Bison (*Bison bison athabascae*)", "The ecology of bison movements and distribution in and beyond Yellowstone National Park", and "A landscape Evaluation of Bison Movements and Distribution in Northern Canada., "American bison: Status Survey and Conservation Guidelines (IUCN), A Brief Review of the Status of Plains Bison in North America".
- Dr. Kerry Foresman. Professor Emeritus, Division Biological Sciences, Univ. of Montana. Author of "The Wild Mammals of Montana" and author of many papers on the prairie wildlife of eastern Montana with special focus on the CMR National Wildlife Refuge.
- Dr. Bruce L. Smith. USFWS (retired). Long time Yellowstone-area research biologist with special emphasis on elk, mountain goat, bison and wildlife diseases. (44 Duncan District Road, Sheridan MT 59749).
- Dr. Curtis Freese. Adjunct Professor, Univ. of Massachusetts-Dartmouth, Westport, MA.

SUBSEQUENT SIGNERS:

- Dr. Michael E. Soule. Professor Emeritus, University of California, Santa Cruz, Paonia, CO. Co-founder and first president of the Society for Conservation Biology. Author of over 160 articles on conservation and 7 books in the field.
- Dr. Gordon Orians. Professor Emeritus of Biology, Univ. of Washington, Seattle.
- Mr. Mike Phillips, MS. Executive Director, Turner Endangered Species Fund & Turner Biodiversity Divisions, Bozeman, MT.
- Dr. Kate Schoenecker. Ungulate Population Ecologist, Colorado State University, Department of Ecosystem Science and Sustainability, Fort Collins, CO. Current Project Leader of the Ungulate Ecology Research Project and 17 years of experience studying bison, elk, and bighorn sheep with expertise in population estimation, population modeling, and grazing studies.
- Dr. Jon E. Swenson. Montana State University, Bozeman, MT on sabbatical from Department of Ecology and Natural Resource Management, Norwegian University of Life Sciences, Senior Advisor at the Norwegian Institute for Nature Research, Retired Wildlife Biologist from Montana Department of Fish, Wildlife and Parks.
- Dr. Jodi Hilty. Executive Director, North America Program, Wildlife Conservation Society, Bozeman, MT.
- Dr. Richard Reading. VP Conservation, Denver Zoological Foundation, Denver, CO.
- Dr. R. Terry Bowyer. Idaho State University, Pocatello, ID.
- Dr. David A. Manuwal. Emeritus Professor of Wildlife Science, College of the Environment & Forest Science, University of Washington.
- Dr. David Garshelis. Minnesota Dept. Natural Resources, Grand Rapids, MN.
- Mr. Steve Forrest, MS, JD. IUCN Bison Specialist Group, Bozeman, MT.
- Dr. Estella B. Leopold. Biology Department, Prof. Emeritus, Univ. Washington, Seattle WA.
- Dr. John W. Schoen. Wildlife Ecologist, Alaska Dept. Fish and Game (retired), Anchorage AK.
- Dr. Klaus O. Richter. King County Department of Natural Resources and Parks (retired), Kirkland, WA.

- Dr. Sterling Miller. Dunrovin Research, National Wildlife Federation (retired), Alaska Dept. Fish and Game (retired), Univ. of Montana (Affiliate).
- Dr. Charles C. Schwartz. Schwartz Consulting, UGSG grizzly bear recovery team leader (retired), Alaska Dept. Fish and Game (retired).
- Dr. Richard D. Taber. University of Montana Wildlife Professor (retired), Univ. of Washington Wildlife Professor (retired), Aldo Leopold Award winner (The Wildlife Society).
- Dr. Rich Fredrickson, PhD. Ecology, Evolution, and Genetics, Missoula, MT.
- Dr. Steve Zack. Senior Scientist and Coordinator of Bird Conservation, Wildlife Conservation Society (affiliation for identification only).
- Dr. Adrian Treves. Associate Professor, Nelson Institute for Environmental Studies, University of Wisconsin-Madison.
- Dr. Andrew E. Derocher. Professor, Dept. of Biological Sciences, University of Alberta, Edmonton, AB
- Mr. John S. Nishi, M. Sc. P.Ag., P.Biol., Wildlife and Landscape Ecologist, EcoBorealis Consulting Inc., Millarville, Alberta, Canada.
- Dr. Kent H. Redford. Archipelago Consulting, Portland, ME 04112
- Mr. William H. Geer, MS. Former Director (retired), Utah Division of Wildlife Resources.
- Dr. Diana Doan-Crider. PO Box 185, Comfort, TX.
- Dr. Kenneth Raedeke. Affiliate Professor, Wildlife Sciences Program, Univ. of Washington, Seattle, WA.
- Ms. Gloria Flora, BSLA. Landscape Architecture, USFS Forest Supervisor (retired), Lewis and Clark

National Forest, Executive Director, Sustainable Obtainable Solutions, Colville, WA.

- Mr. Lance Olsen, MS. Missoula, MT.
- Dr. Doug Inkley. Senior Scientist, National Wildlife Federation.

SCIENTISTS AND MANAGERS ASSOCIATED WITH TRIBES:

Mr. Jim Stone. Executive Director, Inter Tribal Buffalo Council, Rapid City, SD. Mr. Daniel W. Carney. Blackfoot Tribal Wildlife Biologist, East Glacier Park, MT.