

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF MONTANA
MISSOULA DIVISION

WESTERN WATERSHEDS PROJECT,)	Case No.: 9:09-cv-00159- CCL
et al.,)	
)	
Plaintiffs,)	DECLARATION OF P.J. WHITE
v.)	
KEN SALAZAR, Secretary of the Interior;)	
et al.,)	
)	
Defendants.)	
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Declaration of P.J. White

1. My name is P.J. White and I am the Chief of Aquatic and Wildlife Resources in Yellowstone National Park. I have worked at the park for nine years. I serve a lead role in supporting the Superintendent’s office to implement the Interagency Bison Management Plan (IBMP).
2. Plaintiffs refer to a new study by Thomas H. Pringle (Widespread mitochondrial disease in North American bison. Nature Precedings 07 February 2011) that concludes Yellowstone bison have deleterious genetic mutations and, as a result, “are predicted significantly impaired in aerobic capacity, disrupting highly evolved cold tolerance, winter feeding behaviors, escape from predators and competition for breeding.”
3. Biologists at Yellowstone National Park were not aware of this study and were not contacted by Dr. Pringle regarding these conclusions until February 8, 2011, the date the Plaintiffs filed their reply brief.
4. The rigor of the genetic analyses and validity of the conclusions by Dr. Pringle regarding deleterious mutations in a single bison haplotype will need to be subject to peer review by expert geneticists to judge their reasonableness based on the scientific evidence.
5. However, there is direct evidence that even if Yellowstone bison have some sort of genetic deficiency, it has not been manifested through any biologically significant effect on their ability to survive. Fuller et al. (2007) reported an estimate of annual survival

rates for adult female Yellowstone bison based on 53 instrumented animals (and excluding management culls) of 0.92 (95% confidence interval = 0.87-0.95) during 1995-2001. Likewise, Geremia et al. (2009) reported consistently high survival of approximately 0.91 for 2- to 11-year-old female bison during 1995-2006, based on 153 bison-years of age-specific survival observations during summer and 150 bison-years during winter. These survival rates are quite high given the severe, prolonged, high-elevation winter conditions (e.g., temperatures at times below -40° Fahrenheit; snow often more than 3-4 feet deep) and predator-rich (bears, wolves, mountain lions) environment in and near Yellowstone National Park.

6. The NPS will continue to consider all relevant, new scientific information about bison and brucellosis once findings and inferences are peer reviewed and/or generally accepted as reasonable based on the evidence.
7. The literature referenced in this declaration includes the following sources already included in the administrative record.

Literature Cited

- Fuller, J. A., R. A. Garrott, P. J. White, K. E. Aune, T. J. Roffe, and J. C. Rhyan. 2007. Reproduction and survival in Yellowstone bison. *Journal of Wildlife Management* 71:2365-2372.
- Geremia, C., P. J. White, R. A. Garrott, R. Wallen, K. E. Aune, J. Treanor, and J. A. Fuller. 2009. Demography of central Yellowstone bison: effects of climate, density and disease. Pages 255-279 in R. A. Garrott, P. J. White, and F. G. R. Watson, editors. *The ecology of large mammals in central Yellowstone: sixteen years of integrated field studies*. Elsevier, San Diego, California.

This Declaration is made under 28 U.S.C. § 1746. I declare under penalty of perjury that the foregoing is true and correct to the best of my current knowledge.

Executed on February 10, 2011 in Gardiner, Montana.

PS Wht
