



# United States Department of the Interior

## FISH AND WILDLIFE SERVICE Mountain-Prairie Region



IN REPLY REFER TO:

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DEC 02 2005

Dr. James N. Derr  
Department of Veterinary Pathobiology  
Texas A&M University  
Veterinary Research Building  
College Station, Texas 77843-4467

Dear Dr. Derr:

The U.S. Fish and Wildlife Service (Service) participated in a study of the genetics of bison managed by the Department of the Interior (DOI). The National Park Service took the lead; however, the Service provided funding (\$28K in 2001; \$25K in 2002) to complete analyses of our Refuge bison resources. Those studies were to provide us information on the presence of cattle gene introgression into bison, degree of genetic diversity, and some information on allelic richness. All Service herds participated in the study, including four in our Region (Ft. Niobrara National Wildlife Refuge (NWR), National Bison Range, National Elk Refuge (shared resource with Grand Teton National Park), and Sully's Hill National Game Preserve) and two additional refuges (Neil Smith NWR and Wichita Mountain NWR).

We are experiencing problems with obtaining the contracted data and return of the unconsumed samples taken from the Service herds. Specifically:

1. Sully's Hill samples were lost in your laboratory. We followed up the next year (December 2004) and resampled the herd. After a year, analyses completed thus far at Sully's Hill include only those related to cattle gene introgression. The Service also needs analyses complementary to other Refuges and you agreed to provide those analyses (indices of genetic diversity and allelic uniqueness). The Refuge is completing their Fiscal Year 2005 Comprehensive Conservation Plan, and the data are essential to complete that required management document. We have not seen any data and have no timetable for expected completion.
2. Ft. Niobrara has provided over 450 samples to Texas A&M University (TAMU). Ongoing research required 294 of these samples. After frequent delays and many requests, your lab finally provided a single 6mm blood card punch from each sample for those studies at UC Davis, requiring UC Davis to spend additional effort to re-punch them to their needed size. Fiscal year 2005 and 2006 funding at the Refuge were adversely affected by the continual delays and TAMU continues to be unresponsive regarding return of all unconsumed samples.

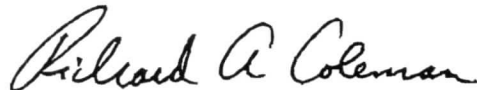
3. The National Bison Range has provided over 580 samples on the recent contract of which analysis of mitochondrial DNA has been provided to the Refuge from about 544 samples and summary nuclear DNA hybridization data for 152. We had to request individual animal data several times, and finally received those (for approximately 600 plus animals) in October 2005, after our annual roundup. The individual animal data you provided, though, include only locus and the base-pair lengths of alleles. To make the data useful, Refuge staff have to review the Halbert thesis and figure out which alleles at the various loci are domestic cattle and which are bison, and further have to explore the Halbert tables to find out which alleles are unique or rare to their refuge. The data could have been made considerably more useful by directly identifying hybridized bison and those with unique characteristics. In the first dataset based on mtDNA your data summary provided exactly that information. Dating back to year 2000, our records show TAMU has about 688 samples from the National Bison Range herd.
4. The sampling of the Jackson herd has been termed "inadequate" in DOI bison meetings and other meetings that included discussion of bison genetics. Yet yearly collections from hunter-killed bison in the Jackson area by Grand Teton National Park, and additional research samples collected by us on the National Elk Refuge, have resulted in hundreds of samples provided to TAMU. Data from the Jackson bison herd are lacking or the samples have not been processed.

These issues persist even though we have made repeated requests for promised data and samples. The continual delays, lack of responsiveness from you, and our inability to obtain Service biological archived samples has reached a point where we now must firmly request from you and your department chair the following:

1. Return all remaining, unconsumed biological samples collected from Refuge wildlife resources. These samples are to be transferred to Dr. Thomas Roffe's lab in Bozeman, Montana.
2. Provide animal specific data for all Refuges that have yet to receive that information. Some Refuges have received these raw data, others have not.
3. Complete the laboratory analyses, summary report and animal specific data on the Sully's Hill bison population.

Thank you for your immediate attention to these issues. We look forward to hearing from you and when you will provide the items requested above.

Sincerely,



Richard A. Coleman, Ph.D.  
Assistant Regional Director  
National Wildlife Refuge System

12/19/2003 11:28 AM 010001110  
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cc:

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