## UNITED STATES GOVERNMENT MEMORANDUM

**DATE:** February 5, 2009

**REPLY TO** 

**ATTN OF:** Kathy McPeak

**SUBJECT:** 2008 Report of Prairie Grouse Breeding Ground Survey on Fort Niobrara NWR

**TO:** Steve Hicks, Todd Frerichs

<u>Objective</u>: To monitor trends in abundance of sharp-tailed grouse and greater prairie chickens on Fort Niobrara NWR.

Methods: Annual prairie grouse breeding ground counts were attempted/conducted 7 mornings April 5-29, 2008 on Fort Niobrara NWR. Refuge grasslands south and east of the Niobrara River were searched for displaying grouse using binoculars and listening equipment, beginning ~30 minutes before sunrise and continuing for 1-2 hours depending upon weather and bird activity. If birds were heard or seen, the ground was located and a count conducted. Leks located on private land within ½ mile of the refuge were also counted. Due to other work priorities and inclement weather, follow-up counts were not conducted on all grounds.

Results: A total of 187 sharp-tailed grouse males were counted on 9 grounds which is significantly higher than 2007 count results of 131 males on 9 grounds, however similar to historic high counts recorded in 1959, 1967, 1968, and 1980. It is not known if the increase in the number of males counted this year is an actual population increase/spike or birds moving between grounds. The 5-, 10-, 15-, and 20-year trends for sharp-tailed grouse are all positive suggesting an increasing population.

A total of 51 greater prairie chicken males were counted on 7 grounds which is similar to 2007 count results of 44 males on 7 grounds. Trend analyses of data collected the past 20 years suggest the prairie chicken population is stable on the refuge with the longer-term trend (1956-2008) positive.

Refer to attached map/graphs/tables for specific information.

<u>Discussion / Recommendations</u>: It is recommended that two complete counts of each ground be obtained in 2009 with a possible third count conducted if results vary greatly.