Alaska Department of Fish and Game Wildlife Restoration Grant

GRANT NUMBER: AKW-10 Wildlife Restoration FY2016

PROJECT NUMBER: 10.0

- **PROJECT TITLE:** The Status of Wood Bison and Factors Influencing Their Populations
- **PERIOD:** July 1, 2015 June 30, 2016

PROJECT LOCATION: Statewide

REPORT DESCRIPTION: This performance report describes wood bison survey and inventory activities. Activities are listed by game management unit.

The Status of Alaska Wood bison and Factors Influencing Their Populations in Region III

Region wide Activities: Unit 21E, 21D, 18

- 1. Completed population studies. In the first 12 months after release, 25 known mortalities occurred, and 33 wild born calves were recruited into the population, leaving a population estimate of 138 animals by end of calving, summer 2016.
- 2. Completed population sex and age composition surveys. In mid-June 2016, several groups of bison were accessed from the ground via float plane. The groups had congregated for pre-rut behavior. 45 bison were comped, with a bull:cow ratio of 0.77 and a calf:cow ratio of 0.27. Calves in groups are counted on every radiotracking flight. 16 calves were recruited into the population in 2016, and 17 in 2017.
- 3. Progress was made on range resource assessments. Greater than 100 fecal samples were collected summer, fall, and winter to document plant composition of the wood bison diet. Plant and soil samples were also collected to be analyzed for forage quality and trace minerals. Hundreds of photos have been taken of wood bison during radiotracking flights which will illustrate their small scale habitat choices over time.
- 4. Distribution and movements were studied. 28 GPS collars were deployed in spring 2015, and 13 remained active by end of June 2016. Many radiocollars were built to fall off of growing animals with a breakaway cotton section that was designed to

degrade in the sun and rain. Also, bulls tended to tear off their collars during late summer rut activities. 46 radiotracking flights were completed, obtaining distribution and movement information on the bulk of the herd via the deployed VHF and GPS collars. Since release, 2540 VHF and 54,000 GPS collar locations have been obtained.

- 5. There were no open hunting seasons during this reporting period. There is no evidence to suggest that there has been any mortality from infectious disease, poaching, or predation during this reporting period. 9 wood bison died from falling through ice in spring 2015. At least 5 more died from the stress of making the transition from captive to wild in spring 2015. Throughout summer 2015 and winter 2015-2016, the normal mortality for a wild bison herd was experienced. No known mortalities occurred after April 2016.
- 6. Two bison were captured in the wild in February 2016. Blood, fecal, and mucus membrane samples were taken and tested for parasites and disease. No parasites or disease were detected.
- 7. No hunting seasons were open during this reporting period, so no hunter questionnaires were solicited. However, many local public meetings and presentations were held where ADF&G answered the public's questions about wood bison and the public answered ADF&G's questions about their opinions and knowledge regarding wood bison.
- 8. The Management Report cycle has not been initiated for wood bison. However, many other forms of information on the herd have been produced to inform the public such as periodic Facebook posts, Wood Bison News issues, several education curricula, and dozens of in-person presentations.
- 9. In the publicly written management plan, "Wood Bison Management Plan for Lower Innoko/Yukon River in west central Alaska, 2015-2020", the population objective was set to support "growth and expansion of wood bison into adjacent areas where suitable habitat exists." As the years go by, ADF&G will be monitoring the way bison use their habitat to better understand carrying capacity. At this time it appears that the habitat accessible from the release area (up and down the Yukon River drainage) could hold thousands of wood bison. More solid population objectives will be built upon habitat use and the will of the people as wood bison build in number.

Submitted by: C. Tom Seaton, Wood Bison Project Biologist