

**Alaska Department of Fish and Game
Wildlife Restoration Grant**

GRANT NUMBER: AKW-10 Wildlife Restoration FY2016

PROJECT NUMBER: 9.0

PROJECT TITLE: The Status of Plains Bison and Factors Influencing Their Populations

PERIOD: July 1, 2015 – June 30, 2016

PROJECT LOCATION: Statewide

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

**The Status of Plains Bison and Factors Influencing Their Populations in
Region III**

Region III (Units 19C, 19D and 20D)

1. Prepare biennial plains bison management reports.

Compiled information and data for 2 Plains Bison Management Reports and Plans for Units 19 and 20D.

2. Monitor harvest from permit hunts and analyze harvest data.

Monitored harvest from the Delta bison herd (Unit 20D) by 102 hunters. Monitored harvest from the Farewell herd (Unit 19) by 40 hunters. Harvest data were analyzed and the results were applied to management planning and ongoing population assessment.

3. Provide bison management information to State and Federal regulatory processes.

Communicated and coordinated with and attended meetings of 3 local Fish and Game Advisory Committees, the Alaska Board of Game, local village councils, and Native corporations, about plains bison management and to review and analyze regulation proposals for the Alaska Board of Game and the Federal Subsistence Board.

4. Maintain a sample of radio collared bison to monitor herd distribution and movements.

Units 19 and 20D: Approximately 20 radiocollared bison were monitored to determine distribution and movements of the herds. Radio collars were purchased and planning began for bison captures in in FY17.

5. Conduct surveys to assess population distribution, size and sex and age composition.

Multiple aerial surveys were conducted monthly from April to the start of the hunting season to estimate the fall pre-hunt herd size. Sex and age composition surveys were also accomplished from ground in Unit 20D by locating groups containing radiocollared bison during the end of rut in August and September, when the entire herd tends to be aggregated together.

6. Collect biological samples from hunter-killed bison to conduct genetics analysis and disease screening.

Delta (Unit 20D): Skeletal muscle tissue was collected from 46 harvested bison for genetics research. We conducted health surveillance by examining lungs and carcasses when available. Any lungs that were deemed abnormal were sampled and sent to the lab for further disease screening, specifically respiratory system surveillance.

7. Assess range conditions and work with fire control agencies to improve habitat.

Habitat where bison are frequently found in Units 19 and 20D were monitored during aerial survey flights. Range condition of the Delta Junction Bison Range was also monitored during ground surveys and when conducting habitat projects and providing mineral and water to bison on the DJBR.

8. Conduct a Delta Junction Bison Range program that includes: monitoring movements to and from the range; planting and fertilizing preferred bison forage species and controlling invasive, non-desirable species; providing trace mineral and water supplements; and monitoring forage quality.

Delta Junction Bison Range:

- Delta bison herd movements were monitored to determine when bison moved from summer range to the DJBR and from the DJBR to private agricultural lands in August.
- 140 acres of oats were planted, 460 acres of perennial grasses were fertilized, and 200 acres of brush were mowed to create and promote preferred bison forage.
- 23 trace mineral blocks were placed on the DJBR. Approximately 11,000 gallons of supplemental water were provided in 4 tanks on the DJBR during July–September.
- Forage quality monitoring was accomplished through visual assessment throughout the year.

The Status of Plains Bison and Factors Influencing Their Populations in Region IV

Region wide activities:

ACTIVITY 1: Prepare biennial bison management report.

The biennial bison management report was not due during this reporting period.

ACTIVITY 2: Monitor the harvest of bison from the permit hunts and analyze harvest data.

<u>2015-2016 Harvest</u>	<u>Permittees</u>	<u>Hunters</u>	<u>Males</u>	<u>Total harvest</u>
Unit 11 Chitina River	2	1	1	1 bison
Unit 11 and 13D Copper River	30	22	5 (50%)	10 bison

Activities by Unit:

Unit 11 Chitina River and Copper River Herds

ACTIVITY 1: Monitor the harvest of bison from the permit hunts and analyze harvest data.

See table above.

ACTIVITY 2: Conduct aerial sex and age population composition surveys to determine status trend productivity and mortality of bison.

Chitina River Herd - June 2015: 57 total bison (52 adults and 5 calves).

Copper River Herd - June 2015: 181 total bison (151 adults and 30 calves).

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