

FEDERAL AID INTERIM PERFORMANCE REPORT

ALASKA DEPARTMENT OF FISH AND GAME
DIVISION OF WILDLIFE CONSERVATION
PO Box 115526
Juneau, AK 99811-5526

Alaska Department of Fish and Game Wildlife Restoration Grant

GRANT NUMBER: AKW-20

PROJECT NUMBER: 9.0

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

PROJECT LOCATION: STATEWIDE

PROJECT DURATION: July 1, 2016 – June 30, 2017

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

REPORT DUE DATE: Approved extension – December 8, 2017

PRINCIPAL INVESTIGATOR: Doreen Parker McNeill, Bob Schmidt, Josh Peirce

COOPERATORS: Various fire control agencies.

WORK LOCATION: Region 3 (units 19C, 19D, and 20D)

Briefly describe how Federal Aid funds were spent on each active job, listing the results achieved during this segment period. If a job was not accomplished as planned, explain briefly why.

I. PROGRESS ON PROJECT OBJECTIVES DURING LAST SEGMENT

OBJECTIVE 1: Prepare information for 5-year bison management reports and operational plans.

Accomplishments:

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

OBJECTIVE 2: Monitor harvest from permit hunts and analyze harvest data to determine harvest rate and effect on population.

Accomplishments:

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

OBJECTIVE 3: Provide bison management information to state and federal regulatory processes.

Accomplishments:

Communicated and coordinated with and attended meetings of 3 local Fish and Game Advisory Committees, the Alaska Board of Game, the Delta-Salcha Soil and Water Conservation District, Delta Farm Bureau, members of the Delta Bison Working Group, private landowners, 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.

OBJECTIVE 4: Capture bison to deploy radio collars and/or collect productivity data.

Accomplishments:

Units 19 and 20D: Ten Delta herd and 9 Farewell herd bison were captured and fitted with radio collars and were monitored to determine distribution and movements of these herds.

OBJECTIVE 5: Assess range conditions and work with fire control agencies to improve habitat. (Accomplishments reported here include 20D objective 5 in current FY17 project statement – Brenda Bowers review).

Accomplishments:

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.

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

Accomplishments:

Aerial surveys were conducted monthly from April to the start of the hunting season to estimate the fall pre-hunt size of the Delta and Farewell herds. A sex and age composition survey was 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.

Delta bison herd movements were monitored to determine bison movement from summer range to the Delta Junction Bison Range (DJBR) July and August to determine when individual bison began moving from the DJBR to private agricultural lands.

Aerial bison presence and crop field assessment surveys were conducted throughout the growing season on privately-owned agricultural land located within the Delta bison herd range.

OBJECTIVE 6: Collect biological samples from hunter-killed bison to conduct genetics analysis and disease screening. (Accomplishments reported here include 20D objectives 6 in current FY17 project statement – Brenda Bowers review).

Accomplishments:

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.

OBJECTIVE 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. (Accomplishments reported here include 20D objectives 6-9 in current FY17 project statement – Brenda Bowers review).

Accomplishments:

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.
- 255 acres of oats were planted, 409 acres of perennial grasses were fertilized, and 150 acres of brush were mowed to create and promote preferred bison forage on the DJBR. In

addition, 70 acres of turnips and 45 acres of new bluegrass were planted for additional forage.

- 30 trace mineral blocks were placed on the DJBR. Approximately 10,000 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.

II. SUMMARY OF WORK COMPLETED ON JOBS IDENTIFIED IN ANNUAL PLAN THIS PERIOD – see above information under objectives.

III. SIGNIFICANT DEVIATIONS AND/OR ADDITIONAL FEDERAL AID-FUNDED WORK NOT DESCRIBED ABOVE THAT WAS ACCOMPLISHED ON THIS PROJECT DURING THIS SEGMENT PERIOD **None.**

IV. PUBLICATIONS (*List project-related publications prepared or published during this reporting period.*) None.

V. RECOMMENDATIONS FOR THIS PROJECT (optional) This will be addressed in our 5-year management plan when it is written. In the meantime, we have no new recommendations.

Prepared by: Doreen Parker McNeill and Brenda Bowers

Date: December 8, 2017

**FEDERAL AID
ANNUAL PERFORMANCE REPORT**

ALASKA DEPARTMENT OF FISH AND GAME
DIVISION OF WILDLIFE CONSERVATION
PO Box 115526
Juneau, AK 99811-5526

**PLAINS BISON
ANNUAL SURVEY AND INVENTORY**

STATE: Alaska

GRANT AND SEGMENT NO. AKW-20 Wildlife Restoration FY2017

PROJECT NO. 9.0

PERIOD: 1 July 2016 – 30 June 2017

PROJECT LOCATION: Region IV (Units 11 & 13)

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

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

**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.

2016-2017 Harvest	Permittees	Hunters	Males	Total harvest
Unit 11 Chitina River	2	2	2	2 <i>bison</i>
Unit 11 and 13D Copper River	24	16	5 (50%)	10 <i>bison</i>

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 via PA-18 to determine status trend productivity and mortality of bison.

Chitina River Herd - May 2017: 54 total bison (52 adults and 2 calves).

AKW-20 9.0 Plains Bison S&I Combined FY2017
Annual Performance Report

Copper River Herd - June 2016: 196 total bison (164 adults and 32 calves). The June 2017 count was postponed due to the herd being scattered in the trees; conducted in July 2017, the count resulted in 225 total bison (188 adults and 37 calves).

Submitted by: Todd A. Rinaldi, Region IV Management Coordinator

Date: 1 September 2017