Grant Number: AKW-10 Wildlife Restoration FY2016

Project Number: 25.0

Project Title: Alaska Wildlife Habitat Enhancement

Project Duration: 1 July 2015 – 30 June 2016

Principal Investigator: Tom Paragi

Work Location: Region III

This project has 4 objectives (evaluate potential, planning and design, implementation, and reporting) related to habitat management projects that are intended to enhance moose or small game harvest through land management and to create or enhance hunter access in recent burns or timber sales near the road system in Region III. Most activity in FY16 addressed the first objective. Evaluation of project success in meeting stated objectives would occur through a separate research project.

Project Activities and Accomplishments (only those activities active in FY16 are listed)

ACTIVITY 1: Provide technical review of timber harvest plans and other planning documents affecting wildlife values.

Accomplishments: Tom Paragi provided comments regarding wildlife habitat conservation to Division of Habitat staff on Forest Land Use Plans for several proposed timber sales on state lands, primarily in the Tanana Valley State Forest. He consulted with Julie Hagelin (Wildlife Diversity Program) when providing comments on non-game species. He continued work with Sue Rodman (Region II Program Coordinator, Landscape Ecology) to draft guidelines for planning, implementing, and evaluating habitat enhancement projects.

ACTIVITY 2: Gather digital imaging or geographical positioning data to document and analyze natural or anthropogenic disturbances or project accomplishments and to enhance public information capabilities.

Accomplishments: Paragi downloaded the 2015 update to the spatial database on fire history from the Alaska Fire Service website. He also obtained recent updates of timber sale and forest road locations from the Alaska Division of Forestry (DOF) and a spatial layer of ATV trails to enable Activity 3.
**Activity 3:** Create a GIS project with roads, known ATV trails, rivers, vegetation cover type, and land ownership to archive each year the location of new wildland fires and timber sales to identify those that intersect the highway or forest road system in Region III.

**Accomplishments:** Prior to leaving State service in March 2016, GIS Analyst Matt Warren used the 2015 fire data to update new segments and archived the GIS tool. The tool identified that in 2014 there was 13 mi² burned within 1 mile of existing roads compared with 73 mi² in 2015. The total area burned within the fire perimeters associated with these accessible segments was 88 mi² in 2014 and 474 mi² in 2015. During 2010-14 the 49 burns that extended within 1 mile of the road or trail system composed 1541 mi². Burn severity information exists from normalized difference in reflectance from satellite imagery for 25 of these burns (1340 mi²; http://www.mtbs.gov/) that may be useful in forecasting potential for browse response due to willow and broadleaf forest regeneration. This could be used to prioritize consideration for creating hunter access in some recent burns, subject to land manager discretion.

**Activity 4:** Maintain currency in published and gray (agency) literature of forestry and wildlife information to define methods of vegetation manipulation and wildlife response potentially suited for use in the boreal forest of interior Alaska.

**Accomplishments:** Paragi continued literature review primarily as part of a related research project (34.0, Forest management and wildlife-habitat relationships in Interior Alaska).

**Activity 5:** Participate in Alaska Board of Forestry, interagency, or public meetings; workshops; and seminars related to study objectives.

**Accomplishments:** Paragi attended periodic meetings (Sept-May) of the Citizen Advisory Committee of the Tanana Valley State Forest in Fairbanks to provide a wildlife habitat context during discussions of proposed timber sales. He also collaborated with a DOF forester in leading a field trip for members of the Alaska Board of Forestry in July 2015 at habitat enhancement sites in aspen stands implemented by ADF&G at Nenana Ridge during 1995-2003. As part of a related Federal Aid research project (34.0, Forest management and wildlife-habitat relationships in Interior Alaska), Paragi and Hagelin participated in the final meetings of a Science and Technical Committee (fall 2015) and Paragi served on an Implementation Group (spring 2016) convened by the Alaska Board of Forestry to review reforestation standards in the boreal region. Participation included providing recommendations on forest practices beneficial to creation or maintenance of wildlife habitat and identifying research needs for wildlife.

**Activity 6:** Develop constructive working relationships with people that may potentially affect DWC's ability to meet study objectives

**Accomplishments:** Paragi gave training presentations on how to assess browse production and removal by moose and visited field sites near Glennallen with DWC staff (Regions II and IV) and Ahtna Corporation staff. Ahtna Corporation invited the training for its staff to begin active management of private forest land near the highway system for economic benefits, hazardous fuel reduction (i.e., reduce risk of wildland fire near communities), and moose habitat enhancement. Paragi also trained DWC staff in Bethel (Region V) in the course of conducting a browse survey in Unit 18 for a growing moose population and discussed habitat enhancement options with staff in response to public inquiry in the Bethel area.
ACTIVITY 12: Write annual survey and inventory reports and produce maps; use newspaper, television, radio, and internet media for information exchange and public notice; and provide public involvement as necessary.

Accomplishments: Paragi drafted the Federal Aid performance report and reviewed program needs for FY17 budget preparation.

Submitted by: Doreen I. Parker-McNeill, Region III Management Coordinator

Date: July 19, 2016