Alaska Department of Fish and Game Division of Wildlife Conservation

> Federal Aid in Wildlife Restoration Annual Performance Report Survey-Inventory Activities 1 July 1995 - 30 June 1996

## Fire and Forest Management Planning for Wildlife Habitat

**Dale Haggstrom** 



Ken Whitten

Grant W-24-4 Study 20.0 September 1996

Alaska Department of Fish and Game Division of Wildlife Conservation September 1996

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#### **PERFORMANCE REPORT**

STATE: Alaska

**GRANT NO.:** W-24-4

Statewide/Region III

**STUDY NO.:** 20.0

**PROJECT TITLE:** Fire and Forest Management Planning for Wildlife Habitat

AUTHOR: Dale Haggstrom

**PERIOD:** 1 July 1995-30 June 1996

#### **PROJECT OBJECTIVES**

- 1 Work with state and federal agencies and the private sector to plan and coordinate wildland fire and forest management efforts to maintain or improve habitat for wildlife.
- 2 Encourage limited suppression efforts in remote areas to permit wildland fire to resume its natural role of perpetuating diverse, productive ecosystems.
- 3 Encourage prescribed burning and other appropriate forestry practices in developed areas to offset the negative ecological effects of increased suppression of natural fires.

#### ACCOMPLISHMENTS DURING THE PROJECT SEGMENT PERIOD

Statewide

ADF&G continued to participate in the Alaska Wildland Fire Coordinating Group (AWFCG) and the Multi-Agency Coordinating Group (MAC Group). The AWFCG is the interagency group that coordinates fire planning, education, prevention, training and research in Alaska. The MAC Group is the interagency group that coordinates regional or statewide changes in fire strategies during the fire season such as bans on open burning, conversion of Modified Action areas to Limited Action, and deviations from fire plan strategies due to unusual circumstances.

Following the disastrous Miller's Reach Fire in June 1996, we pressed for development and funding of a strategy to reduce forest fuels near populated areas. A strategy and news release were drafted and promoted through the AWFCG.

We believe a fuel reduction strategy holds great promise for those who use or otherwise value wildlife. Wildlife are scarce in continuous stands of fire-prone old spruce, especially when it is black spruce. A fuel reduction strategy would use prescribed fire, timber harvests, land clearing and other methods to interrupt expanses of fire-prone vegetation. This disturbance would allow a multitude of herbaceous plants, deciduous trees and shrubs to thrive during the several decades it takes for spruce to re-establish and regain dominance. These interim plant communities are less fire-prone and generally support a wider variety and abundance of wildlife.

#### **Region III**

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We continued to work with the Alaska Department of Natural Resources, Division of Forestry (DOF), and the Bureau of Land Management/Alaska Fire Service (BLM/AFS) to evaluate suppression decisions for individual fires adversely affecting ADF&G interests and to seek improved communication and cooperation between suppression staff and ADF&G area biologists. We also continued to work with ADF&G area biologists to facilitate fire-related projects and help resolve problems or concerns.

ADF&G continued to participate on the Interagency Planning Team and its working groups during the ongoing revision of the Tanana Valley State Forest Management Plan by DOF.

We initiated an effort to reduce wildland fire protection levels on the western Tanana Flats to more accurately reflect actual protection needs in this largely undeveloped area. Our intent was to increase opportunities for natural wildland fires to maintain habitat diversity and productivity, thereby reducing the need for expensive prescribed fires. ADNR supported the proposed changes, and DOF prepared new maps to aid discussions with other interested parties. Last minute concern by some people in Nenana resulted in the Toghotthele Corporation, the largest private landowner in the affected area, refusing to approve the changes. Thus, planned implementation of the changes for the 1996 fire season was postponed until public concerns could be further addressed. One unfortunate result of this delay was the unnecessary and expensive suppression of a lightning-caused fire on Toghotthele Corporation land near the planned prescribed burn site during late June 1996.

ADF&G submitted written comments and worked with the Golden Valley Electrical Association, BLM, and ADNR to encourage location of the planned new electrical intertie from Healy to Fairbanks where it would have minimal effect on fire and habitat management efforts on the Tanana Flats. We opposed proposals that would cross the undeveloped central portions of the Tanana Flats and presented arguments for consolidating new developments such as the intertie near the Parks Highway, current power transmission line, and Alaska Railroad.

#### **PROGRESS MEETING PROJECT OBJECTIVES**

The State of Alaska in now under 1 consolidated wildland fire management plan that directs fire suppression effort to areas where human life and property are threatened and allows wildland fires to fulfill their natural role as the major revitalizing force on 60 percent of lands in Interior Alaska. Interagency efforts to incorporate changes in federal wildland fire policy and address problems discovered during field implementation of the plan have made the Alaska Fire Management Plan easier for field personnel to use, clarified policy and intent, and added needed flexibility to initial response guidelines.

Refinement of the plan will continue as agency and individual attitudes toward wildland fire continue to evolve. Increasingly, fire suppression decisions are becoming more responsive to the ecological needs of the forest and its wildlife without compromising human safety or protection of property or highly valued resources.

Integral to the success of the plan is the review and revision of protection levels afforded various lands under the plan. The protection level afforded each area must accurately reflect the actual values-at-risk for the plan to produce cost-effective and ecologically responsible fire suppression decisions. Much progress has been made statewide, but many areas continue to have inappropriately high protection levels either

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because land managers have not inventoried resources on these lands or are not financially accountable for the cost of fire protection and, therefore, lack incentive to revise protection levels.

. For the first time since inception of an interagency group to coordinate and guide wildland fire activities in Alaska, the ADF&G is now accepted as an equal voting partner in AWFCG and MAC Group decisions. This has been an ADF&G objective for nearly 2 decades because fire-related decisions by land managers and the suppression organizations affect wildlife resources we are responsible for managing, regardless of whose land they are on. ADF&G involvement was actively resisted during the early years of interagency coordination efforts because we are largely resource managers, not land managers; we were also openly critical of past fire suppression policies. The passage of time has shown our concerns were well founded, resulting in gradual changes in state and federal fire policies and increasing acceptance of our positions on fire management issues.

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In Region III, ADF&G area biologists continue to report instances where key fire suppression decisions were made without their knowledge or involvement. When these decisions compromise wildlife management objectives, wildlife managers become frustrated and critical of those involved in fire suppression efforts.

These incidents are fewer now than a decade ago, a clear sign of progress. Working relationships between ADF&G wildlife biologists and fire managers in DOF and AFS have improved and agency administrators now recognize ADF&G's role and encourage staff cooperation. When local ADF&G staff in Delta were not notified and involved during a large fire near the Delta River in summer 1996, the Regional Forester responded by reiterating to area forestry staff that DOF leadership expects ADF&G to be involved in the development of Escaped Fire Situation Analyses. A similar problem occurred near Tok but was never resolved to the satisfaction of the area biologist.

A compounding factor is that often AFS is providing suppression efforts on state land, or vice versa. This leads to confusion for the area biologist and the DOF and AFS personnel. During summer 1996, a fire occurring on state land near Rampart fell within the area where AFS is responsible for suppression efforts. In this case, neither DOF or AFS contacted ADF&G, even though the decision to contain the fire on state land was prompted by public concern for an alleged trapline and could have set a precedent adversely affecting ADF&G management interests.

This reporting period saw the first serious efforts to address the problems caused by continued fire exclusion near developed areas. The high risk to people and their property, plus the perceived need to protect forested areas with potential for commercial timber harvesting, has resulted in a concerted effort over the past 40-50 years to exclude wildland fires from areas near communities. Effective fire suppression efforts have significantly reduced the natural rate of disturbance by fire in these areas. The ecological consequences of these actions are reduced vegetative diversity and productivity and a related reduction in wildlife diversity and productivity. Ironically, these effects occur in the same areas where human demand for wildlife and access to wildlife is greatest.

The department initiated discussion of a new fuel hazard reduction program for communities at risk from wildland fires. As the Miller's Reach fire of 1996 and the Tok fire of 1990 showed, fire exclusion has the dangerous and expensive effect of increasing the threat of catastrophic fire in developed areas. The fuel reduction strategy that ADF&G introduced through the AWFCG is designed to reduce this threat and, simultaneously, provide increased benefits to local wildlife resources.

Timber harvesting, although not functionally equivalent to burning, can offset the loss of natural fire to some extent. However, due to market constraints logging in Interior Alaska has been too limited to compensate for the exclusion of wildland fires. Furthermore, the silvicultural practices in use generally do not involve postlogging site treatment with prescribed burning and, thus, do not produce habitat changes as beneficial for wildlife as those produced naturally by wildland fire.

We have initiated a state funded Capital Improvement Project in Region III to help restore or enhance wildlife values in the developed portion of the region where wildland fire is largely excluded. This project includes large, landscape-scale prescribed burns in areas not managed for timber, experimental slash burning and willow planting in logged upland white spruce stands, felling blocks of mature aspen in local aspen stands to improve habitat for ruffed grouse, and mechanically crushing or shearing old and decadent willow stands to increase the abundance and quality of browse available to moose.

The planning process for revision of the Tanana Valley State Forest Management Plan proceeded very slowly during this report period. ADF&G withdrew from the series of working group meetings because so little progress was being made for the extensive time invested. The planning team, of which ADF&G is a part, did not meet during this period.

#### SEGMENT PERIOD PROJECT COSTS

	Personnel	Operating	<u>Total</u>
Planned	52.2	2.5	54.7
Actual	52.2	.3	52.5
Difference	0.0	2.2	2.2

*Explanation:* Mandatory salary/benefit cost increases were underestimated, and travel costs were less than expected.

#### Submitted by:

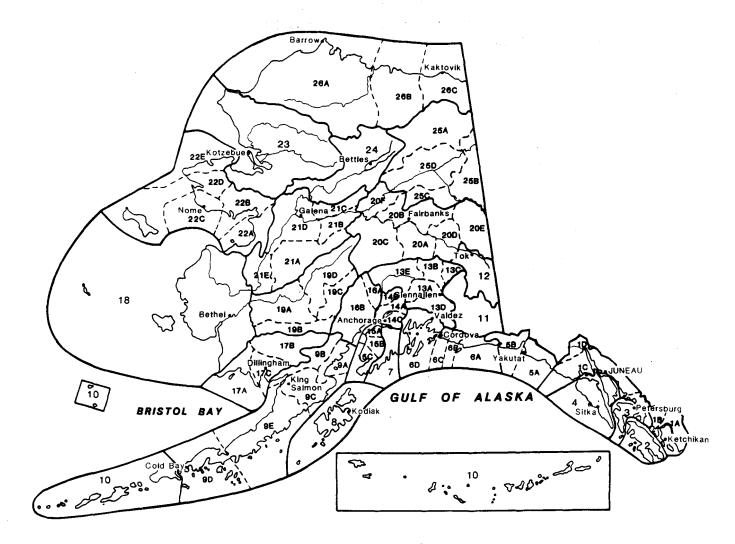
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#### Dale A. Haggstrom

Wildlife Biologist II

## Alaska's Game Management Units



The Federal Aid in Wildlife Restoration Program consists of funds from a 10% to 11% manufacturer's excise tax collected from the sales of handguns, sporting rifles, shotguns, ammunition, and archery equipment. The Federal Aid program allots funds back to states through a formula based on each state's geographic area and number of paid hunting license holders. Alaska receives a maximum 5% of revenues collected each year. The Alaska Department of Fish and Game uses federal aid funds to help restore, conserve, and manage wild birds and mammals to benefit the

public. These funds are also used to educate hunters to develop the skills, knowledge, and attitudes for responsible hunting. Seventy-five percent of the funds for this report are from Federal Aid.



Ken Whitten

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