

Alberta Conservation Association (ACA)

Date: 2014-2015

Project Name: Restoring Natural Habitat for Wildlife

Wildlife Program Manager: Doug Manzer

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Primary ACA staff on project:

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Partnerships

- Alberta Environment and Sustainable Resource Development
- Alberta Fish & Game Association
- Wild Sheep Foundation of Alberta

Key Findings

- ACA provided valued support to help drive prescribed burning of 70 hectares in the Forty Mile meadow in the eastern slopes west of Rocky Mountain House and 640 hectares near Peace River (Hutton Creek and Deadwood burns).

Introduction

Over time, anthropogenic activities and land management decisions have slowly altered the natural state of many wildlife habitats across Alberta. For example, in some areas of Alberta, wildfire control activities have had serious ecological implications on vegetation patterns and stand age resulting in incremental habitat loss for a diverse group of species ranging from alpine butterflies to elk and grizzly bears (White et al. 2003; Pengelly and Rogeau 2001; Andison 2000; Smith 2000). The primary focus of the Restoring Natural Habitat for Wildlife project is to restore natural ecosystem patterns and wildlife habitat values within landscape units (e.g., watershed subbasins) and focal areas (e.g., Alberta Conservation Association [ACA] Conservation Sites) that have aged beyond the natural range of variability.

Methods

Using an ecosystem-management approach, we continue to work with Alberta Environment and Sustainable Resource Development (ESRD) to incorporate species, ecosystem and landscape values into prescribed burn and landscape treatment plans.

As part of ACA's continued habitat treatment and monitoring program, we worked with ESRD to identify new burning opportunities for sheep and other ungulate habitat enhancements through

mapping and ground reconnaissance exercises. By continuing to provide partnership support, including participation in burn plan development and implementation and monitoring of treatments, we are helping to enhance habitat within low disturbance areas while sharing information between organizations on ways to monitor changes associated with these habitat treatments.

In 2014/15, we also continued our efforts to increase linkages between ACA's three program areas (Land Management, Wildlife and Fisheries) to work together to prepare for habitat treatments on ACA-owned lands.

Results

Achieving prescription (ideal conditions) and being able to carry out prescribed burning can be challenging. Often, wildfires are occurring naturally at the same time as we are planning for treatments, and resources (human resources and equipment) need to be reallocated to firefighting. Spring 2014 weather conditions allowed for one prescribed burn in our Central Region. Approximately 70 hectares of the 200 hectare Forty Mile meadow was burned by ESRD to fight shrub encroachment and improve foraging habitat for species including deer and elk. In our Northwest Region, prescribed burns occurred in the Hutton Creek (380 hectares) and Deadwood (260 hectares) areas to improve habitat for elk and deer. In addition, our continued communication with ACA Land Management staff has outlined a path for data collection that should support sound habitat manipulations on ACA lands in the near future.

Conclusions

Prescribed burning is a habitat management disturbance that can effectively reintroduce natural variability and diversity into landscapes where natural, uncontrolled burns have been suppressed for decades. We continued our incremental approach to restoring the ecological role of natural disturbance in important habitats in several focal areas through collaboration and partnerships (existing and new) with ESRD. We had originally planned to conduct a post-burn assessment at a previous burn site in the Upper North Saskatchewan River drainage; however, this work was delayed for one year due to other priorities.

Communications

- Joined University of Lethbridge professor Dr. Andrew Iwaniuk in the field for a review of ruffed grouse drumming survey methods.
- Met with ESRD Fish and Wildlife and Forestry divisions located in our Northwest and Central regions to maintain and enhance this partnership. In our Northwest Region, we took part in a spring burning operational debriefing as a member of ESRD's Prescribed Burn Standing Group. In our Northwest and Central regions, we discussed additional prescribed burn opportunities with ESRD in Peace River and Rocky Mountain House, which included a reconnaissance flight in the Rocky Mountain House area.
- Coordinated and facilitated a discussion with Alberta Fish & Game Association, Wild Sheep Foundation of Alberta and ESRD about sheep habitat concerns and how each organization could contribute to habitat enhancements.

- Pursued and initiated further discussions with ACA Land Management staff to coordinate efforts to plan habitat enhancements on ACA titled lands.
- Initiated discussions with ESRD staff in our Northeast region who are interested in providing assistance to ACA in pursuit of habitat treatments on ACA lands.
- Continued discussions with industry representatives from West Fraser Mills and Daishowa-Marubeni International Ltd. to identify potential for collaboration on habitat enhancement initiatives.

Literature Cited

- Andison, D.W. 2000. Landscape-level fire activity on foothills and mountain landscape of Alberta. Alberta Foothills Disturbance Ecology Research Series, Report No. 2, Foothills Model Forest, Hinton, Alberta, Canada.
- Pengelly, I., and M.-P. Rogeau. 2001. Banff field unit fire management plan. Banff National Park, Banff, Alberta, Canada. 132 pp.
- Smith, J.K., ed. 2000. Wildland fire in ecosystems: effects of fire on fauna. General Technical Report RMRS-GTR-42-vol. 1, U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, Ogden, Utah, USA. 83 pp.
- White, C.A, I.R. Pengelly, and D. Zell. 2003. Landscape fire regimes and vegetation restoration in Banff National Park, Alberta. Occasional Paper BNP-2003-01, Parks Canada, Banff, Alberta, Canada.

Photos



Aerial image of Forty Mile meadow prescribed burn along the upper Clearwater River. Photo: Corey Rasmussen



Shed elk antler found on a bluff along the Peace River in a prescribed burn area. Photo: Corey Rasmussen