

Alberta Conservation Association 2013/14 Project Summary Report

Project Name: Restoring Natural Habitat for Wildlife

Wildlife Program Manager: Doug Manzer

Project Leader: Corey Rasmussen

Primary ACA staff on project:

Robert Anderson, Corey Rasmussen and Robb Stavne

Partnerships

Alberta Environment and Sustainable Resource Development

Key Findings

- We collected post-burn habitat data within the prescribed burn at Ram Mountain, an important mountain sheep area.
- A good portion of trees at the Ram Mountain prescribed burn were killed by the fire, opening the forest floor and allowing grasses and forbs (including wildflowers) to appear in spots that were too shady to grow before.
- Many tracks from bighorn sheep, elk and deer were seen in the newly burned Ram Mountain prescribed burn area, indicating its fresh appeal.

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 has had serious ecological implications on vegetation patterns and stand age, resulting in incremental habitat loss for a diverse group of species that range from alpine butterflies to elk and grizzly bears (Andison 2000; Smith 2000; Pengelly and Rogeau 2001; White et al. 2003). The primary focus of our 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 prescribed burn monitoring program, we worked with ESRD to establish and inventory fixed monitoring sites. We helped ESRD collect first year, post-burn habitat data within the Ram Mountain burn area. Our participation allowed us to provide partnership support on initiatives enhancing habitat in low disturbance areas, while sharing information between organizations on ways to monitor change associated with habitat treatments.

We also continued our efforts to increase the linkage between ACA's three program areas (Land Management, Wildlife and Fisheries), working together towards conducting baseline inventories on ACA-owned lands. Backed with knowledge gained from a couple of years of data collection, our program staff met to evaluate the monitoring protocols to ensure valid data collection. We also reviewed the functionality of the database created for these inventories.

Results

Our involvement with ESRD's burn program in 2013/14 focused on collaborative efforts to collect habitat data in the Ram Mountain prescribed burn area. Our data collection methods included transect pellet counts, browse assessment and vegetation clipping for biomass calculations. Spring 2013 weather conditions also allowed for prescribed burning. ESRD burned a portion of a capping unit in the Upper Clearwater in our Central Region and also performed prescribed burns in our Northwest Region, including in the Whitemud River, Whitemud Grazing and Cadotte River areas.

Conclusions

Through our collaboration and partnerships (existing and new) with ESRD, we continued our incremental approach to restoring the ecological role of natural disturbance in important habitats within several focal areas. Our efforts to establish and maintain collaborative partnerships will ultimately lead to greater habitat enhancement support and more efficient coordination of implementation and monitoring efforts on habitat enhancement projects. Conducting baseline inventories on additional ACA-managed lands was put on hold as we re-evaluated protocols and database utility. Modifications to methods and data collection were completed, and alongside ACA Land Management and Fisheries staff, we will resume inventories in 2014/15.

Communications

- Met with ESRD in our Northwest, Central and Southern regions, maintaining and expanding partnerships.
- Met with ESRD in Peace River to discuss the potential of using ESRD Forestry staff who need to recertify in chainsaw use to conduct small-scale clearing/alteration on ACA titled lands.
- Met with Agroforestry & Woodlot Extension Society in Peace River to discuss each organization's aspen management interests.
- Completed a draft update of the *Wapiti Subbasin Plan* as part of an effort to streamline ACA subbasin plans.

- Initiated discussion with ACA Land Management staff on habitat enhancements on ACA titled lands.

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.

Photo Captions



Measured transect line in a lightly burned portion of 2012 Ram Mountain prescribed burn.

Photo: Chiara Feder, ESRD

[filename: Photo1_RNHW_2013-14_Chiaara Feder ESRD.JPG]



Vegetation regrowth in a completely burned portion of the 2012 Ram Mountain prescribed burn.

Photo: Margriet Berkhout, ESRD

[filename: Photo2_RNHW_2013-14_Margriet Berkhout ESRD.JPG]



Team of habitat surveyors pick morel mushrooms, which typically grow in burn areas. Photo: Chiara Feder, ESRD
[filename: Photo3_RNHW_2013-14_Chara Feder ESRD.JPG]