

Alberta Conservation Association 2016/17 Project Summary Report

Project Name: MULTISAR – Milk River

Wildlife Program Manager: Doug Manzer

Project Leader: Brad Downey

Primary ACA staff on project:

Brad Downey, Paul Jones, Julie Landry-DeBoer, Lee Moltzahn, Brook Skagen and Colin Starkevich

Partnerships

Alberta Environment and Parks
Canadian Natural Resources Limited
Government of Canada
Landholders
Prairie Conservation Forum

Key Findings

- Collaborated with ranchers and completed Habitat Conservation Strategies and reassessments on roughly 70,000 acres.
- Partnered with 8 producers on 13 enhancements ranging from water wells, to native grass reseeding, to installation of wildlife-friendly fence lines.
- Extended our funding partnership with Environment Canada to March 2019.

Introduction

MULTISAR focuses on multi-species conservation at the landscape level that promotes stewardship through voluntary participation of landholders on both Crown and private lands. The program is a collaborative effort among landholders, Alberta Conservation Association, Alberta Environment and Parks, and Prairie Conservation Forum. Our primary goal is to collaboratively develop plans to benefit multiple species; these plans are then implemented through habitat enhancement activities that benefit both the farm or ranch operation and wildlife. We chose the Milk River Watershed (6,776 km²) and surrounding areas as the MULTISAR program area because it supports the highest number of species at risk of any definable landscape in Alberta.

Methods

We completed multi-species point count surveys on one ranch to measure the occupancy of birds (Landry-DeBoer and Downey 2010). We also surveyed all riparian areas on the ranch by walking along the edge of the waterbodies listening and observing for amphibians (Kendell

2002). In early August, we surveyed short-horned lizards at sites that were predicted to be highly suitable habitat based on habitat models and historical occurrences (James 2002). In early October, we surveyed coulee slopes to identify new snake hibernacula (dens) (Alberta Sustainable Resource Development 2010). We also completed detailed range health assessments (Adams et al. 2005) on the ranch. We incorporated the results of the wildlife inventories and range assessments into landholder-specific strategies (Habitat Conservation Strategies: HCS) and identified potential habitat enhancements for future work.

We monitored 58 enhancements completed in previous years, and we evaluated the success of strategies applied to four ranches by measuring changes in habitat and wildlife use and diversity at half the sites previously visited in 2010. These data will help determine if enhancements and ranch-specific actions (HCS) implemented since 2010 are having the desired effect on wildlife habitat (Jones and Landry-DeBoer 2012).

A large part of our effort goes into communication activities. These activities included presentations and tours to funding agencies and partners, and participation in several conferences and workshops, including presentations at the International Rangeland Congress and at Medicine Hat College, and a tour of a MULTIAR participant's land with staff from Environment Canada, a major funding partner.

Results

In 2016, we completed detailed wildlife, range and riparian surveys on one new ranch (480 acres) and developed the associated HCS. We identified 29 different species, including three that are considered *Endangered/At Risk* or *Threatened/May Be at Risk*. We also conducted 9 detailed range transects, 13 range health assessments and 2 riparian assessments on the ranch.

We completed 13 new habitat enhancements in 2016 and continued work on another two enhancements initiated in previous years, including the continued restoration of 1,300 acres back to native grass through spraying for brome, Canada thistle and other weeds to help ensure the seed bed is clean. We seeded 90 acres back to native grass, and we seeded 250 acres to lentils to help control weeds and prepare this land for seeding in the spring of 2017 if conditions are favourable. We partnered with a producer on a 70-acre seeding project that contained western wheatgrass (native) to reduce the spread of non-native species that were being considered for planting along a riparian area. Another producer is removing 34 acres of crested wheatgrass and planting a simple four-species native mix. We installed 5 km of new wildlife-friendly fencing, and one other landowner installed smooth wire along the bottom of 1 km of fence line to make it wildlife-friendly. We continued our test plots using Simplicity™ herbicide to control Japanese and downy brome grass at two sites. We developed three upland watering sites and purchased two portable watering units to be used around dugouts and wetlands. These activities bring the total number of direct on the ground enhancements completed by MULTISAR participants since 2005 to 140 (Figure 1).

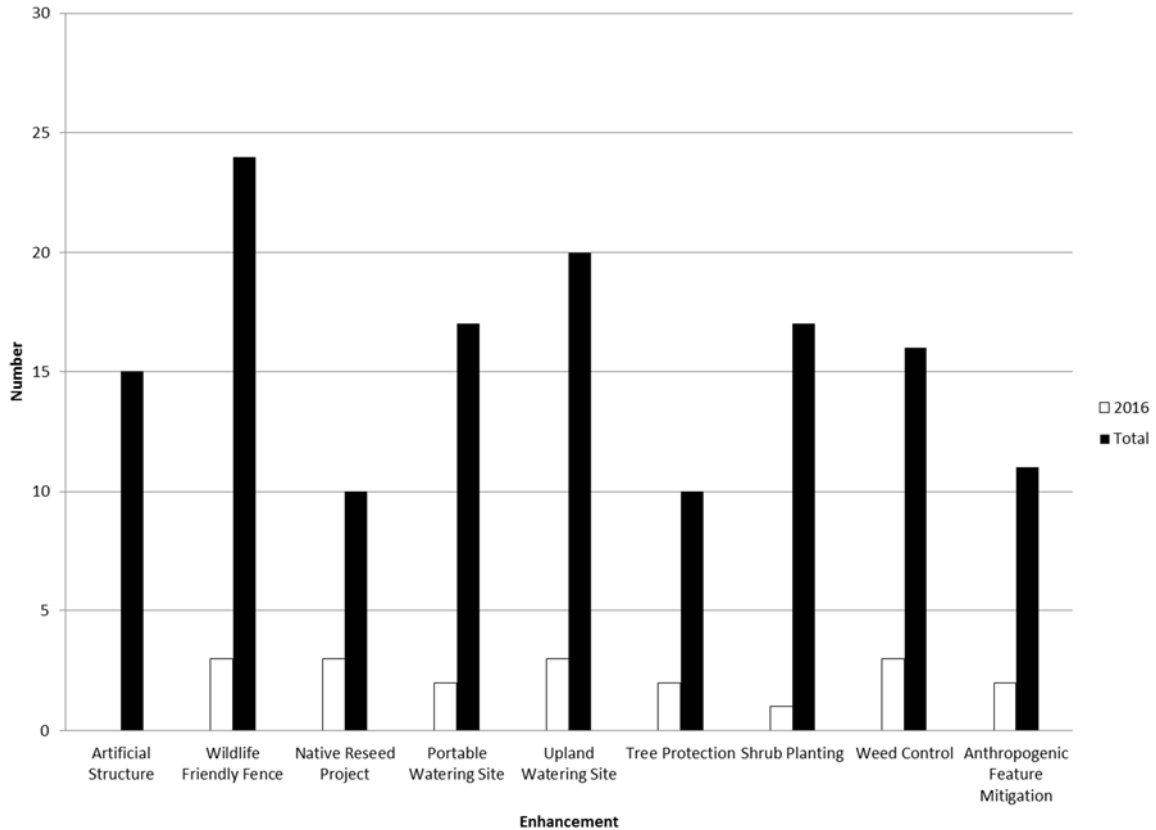


Figure 1. The number and type of habitat enhancements implemented by MULTISAR in 2016 and since 2005.

As part of our ongoing monitoring, we reassessed four ranches previously surveyed in 2010 totaling 69,000 acres. We completed 170 range health assessments, 7 tame pasture health assessments and 8 riparian assessments. In total, 3,029 wildlife observations were entered into the provincial government’s Fisheries and Wildlife Management Information System database.

We monitored 58 enhancements in 2016, including ferruginous hawk poles, native grass restoration projects, upland watering systems, portable watering systems, shrub/forb plantings, and weed control plots. Native grass restoration sites that have not been grazed seemed to have plateaued around the “healthy with problems” range health score and will require some grazing to help open up the soils and allow forbs to establish. Health of fall reseeded ranged from 58% to 62%, whereas health of spring reseeded ranged from 63% to 75%. Needle-and-thread plugs were very successful, with most of the plugs producing seed this year. Future restoration work will include needle-and-thread plugs planted in patches throughout the reseeded, which will significantly reduce the cost of including needle-and-thread seed in the grass mix. Potential partnerships with Medicine Hat College may lead to detailed monitoring of insects on these reseeded in the future and a determination of how they relate to the bird populations at the sites.

Conclusions

MULTISAR is a collaborative effort among landowners, conservation organizations, government and industry. The program is succeeding through co-operative teamwork, with all partners working toward a common goal of habitat and species conservation on farms and ranches. Success has occurred not only through direct improvements that benefit wildlife habitat and farm or ranch operations, but also through awareness of species at risk in landholders' day-to-day activities on their land. Landholders view the MULTISAR program as non-threatening, and new relationships are being formed because of this awareness and through promotion of the program in the local community.

Communications

ACA

- Assisted at the Women's Grazing School, Julie Landry-DeBoer and Megan Jensen, July 2016.
- Presented at the Medicine Hat College on native grass restoration and species at risk, Brad Downey, November 16, 2016.
- Presented (two presentations) at the International Rangeland Congress in Saskatoon, Brad Downey, July 2016.
- Toured eight Environment Canada biologists around a MULTISAR participant's land with a producer, Brad Downey and Doug Manzer, June 27, 2016.
- Participated in a MULTISAR film, June 2016 and August 2016.
- Participated in Youth Range Day in Elkwater; worked with youth on range health assessments and plant identification, Lee Moltzahn, July 2016.
- Participated in Youth Range Days in Elkwater: bat presentation, Julie Landry-DeBoer, July 2016.
- Set up MULTISAR display at the Milk River Watershed Council Canada Annual Meeting, Julie Landry-DeBoer, Brad Downey and Lee Moltzahn, May 2016.
- Hosted bat lecture and walk around Henderson Lake for Lethbridge College, Julie Landry-DeBoer, September 2016.
- Presented at Jenny Emery Elementary School's summer program, Julie Landry-DeBoer, August 2016.
- Hosted MULTISAR booth at the Calgary Stampede in partnership with Canadian Cattlemen's Association, Brad Downey, Julie Landry-Deboer, Brook Skagen and Colin Starkevich, July 2016.

Partners

- Published *MULTISAR: A Multi-Species Conservation Strategy for Species at Risk in the Grassland Natural Region of Alberta 2016/17*, MULTISAR, March 2017.
- Published *Grassland Gazette* newsletter, Winter 2016/17 issue.
- Maintained and updated MULTISAR Facebook page and Twitter account, Kristen Rumbolt.

Literature Cited

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- Landry-DeBoer, J.P., and B.A. Downey. 2010. Habitat Conservation Strategies. Pages 12 – 23. *In*: F. Blouin, B.L. Downey, B.A. Downey, S.L. Frank, D.J. Jarina, P.F. Jones, J.P. Landry-DeBoer, and K.S. Rumbolt. MULTISAR: A Multi-Species Conservation Strategy for Species at Risk 2009 – 2010 Report. Alberta Sustainable Resource Development, Fish and Wildlife Division, Alberta Species at Risk Report No. 135, Edmonton, Alberta, Canada. 71 pp.

Photos



Attracting cattle away from riparian areas onto the uplands with a portable watering system, Photo: Julie Landry-DeBoer



Alberta Conservation Association staff members Brad Downey and Kristen Rumbolt installing fence reflectors to reduce accidental fence collisions near a sharp-tailed grouse lek. Photo: Rachel Whitehouse