

Alberta Conservation Association 2015/16 Project Summary Report

Project Name: MULTISAR

Wildlife Program Manager: Doug Manzer

Project Leader: Brad Downey

Primary ACA staff on project:

Brad Downey, Megan Jensen, Paul Jones, Kris Kendell, Julie Landry-DeBoer and Lee Moltzahn

Partnerships

Alberta Environment and Parks
Canadian Cattlemen's Association
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 18,000 ac.
- Analyzed our grassland bird data; our preliminary results showed that disturbance and structure drive the presence of Sprague's pipits in southern Alberta grasslands.
- Partnered with seven producers on 10 enhancements, such as installing pasture pipelines (water) to change cattle foraging patterns and installing wildlife-friendly fencing to facilitate pronghorn movement.
- Partnered with the Canadian Cattlemen's Association to expand MULTISAR into the South Saskatchewan River watershed.

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, which are then implemented through habitat enhancement activities that benefit both the farm or ranch operation and wildlife. We focus these efforts in the Milk River watershed (6,776 km²) and surrounding areas 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 two ranches to measure the occupancy of birds (Landry-DeBoer and Downey 2010). We also surveyed all riparian areas on these ranches by walking along the edge of the waterbodies and searching and listening 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 at sites that had 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 these ranches. 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 24 enhancements completed in previous years, and we evaluated the success of strategies applied to four ranches by measuring changes in habitat and in wildlife use and diversity at half the sites previously visited in 2009. These data will help determine if enhancements and ranch-specific actions (HCS) implemented since 2009 are having the desired effect on wildlife habitat (Jones and Landry-DeBoer 2012).

A large part of our effort goes into communication and outreach activities; in 2015/16, these included presentations and tours to funding agencies and partners, and participation in several conferences and workshops. We also partnered with Canadian Cattlemen's Association on the Environmental Booth at the Calgary Stampede for the third straight year (over 100,000 people went through our display) and on presentations at the Prairie Conservation and Endangered Species Conference.

Results

In 2015, we completed detailed wildlife, range and riparian surveys on two ranches (~8,500 ac) and developed their associated HCS. We identified 71 different species on the largest property (~7,640 ac), including seven species that are considered *Endangered/At Risk or Threatened/May Be At Risk*. We also conducted 75 detailed range transects, 95 range health assessments and 3 riparian assessments on the two ranches.

We completed 10 new habitat enhancements in 2015 and continued with another 8 enhancements initiated in previous years, including planting 2,000 needle-and-thread grass plugs and controlling Canada thistle on native grass restoration sites. We installed 800 m of new wildlife-friendly fencing, and two partnering ranches replaced the bottom barbed wire strand with smooth wire (minimum 18" high) along a further 15 km of existing fencing. We continued our test plots using Simplicity™ herbicide to control Japanese and downy brome grass at two sites. We installed a water pipeline and two solar fencers to change cattle forage patterns and move them away from sensitive riparian habitat. We also partnered on a portable watering unit to be used around dugouts and wetlands and set up windbreak shelters on the upland to draw cattle away from riparian habitat. One of our partnering ranchers fenced off an area with trees and shrubs to protect them from cattle damage. We also removed 6.4 km of fencing with page wire sections and installed 6.4 km of wildlife-friendly fencing (reflectors, perch deterrents and smooth

bottom wire) near a known active sage-grouse lek using funds received from Environment Canada targeted for sage-grouse conservation. This brings the total number of direct on-the-ground enhancements completed by MULTISAR participants since 2005 to 117 (Figure 1).

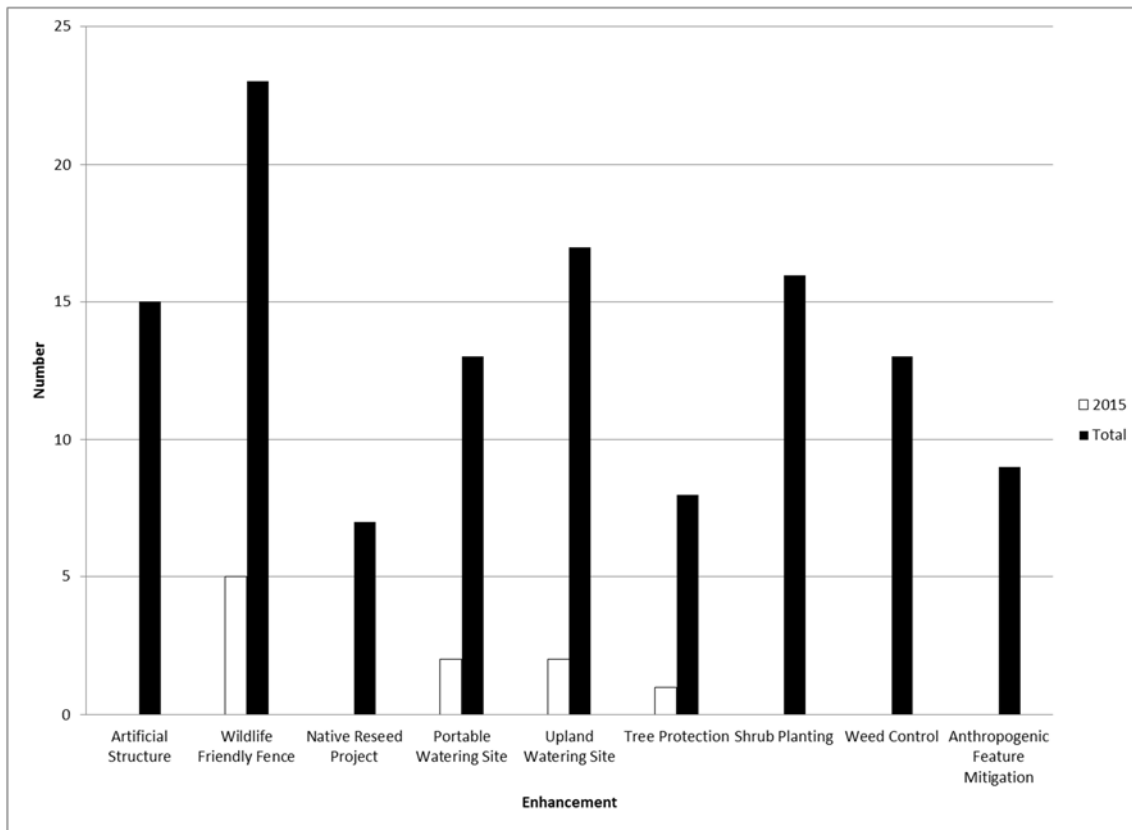


Figure 1. The number and type of habitat enhancements implemented by MULTISAR in 2015 and since 2005.

As part of our ongoing monitoring, we reassessed four ranches previously surveyed in 2009 totaling 10,187 ac. We completed 66 range health assessments, 21 tame pasture health assessments, 28 visual reconnaissance assessments, and 9 riparian assessments, and we provided 1,149 wildlife observations to the provincial government for entry into their Fisheries and Wildlife Management Information System database.

We monitored 24 enhancements in 2015, which showed that ferruginous hawks were using 6 of 10 nest platforms. We completed survivorship monitoring for silver sagebrush plugs on two properties, with survivorship ranging from 2% to 50%. We monitored six native grass reseed projects, which continue to evolve. On all sites, native grass species and wildlife species richness are increasing. One site was sprayed with Milestone® herbicide to help control Canada thistle. Patches of brome were noted again on one site, and a chemical application will be initiated in spring 2016 to control it. We also monitored three watering sites, one riparian enhancement site, and two sites where herbicide is being applied for control of downy and Japanese brome.

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 2015.
- Presented at the University of Lethbridge on native grass restoration and species at risk, Brad Downey, April 2015.
- Presented at the Rancher Range Management Course in Manyberries, Alberta, Brad Downey, June 2015.
- Presented at the Prairie Conservation and Endangered Species Conference in Saskatoon, Saskatchewan, on Sprague's pipits, Julie Landry-DeBoer, February 2016.
- Published article "Ranch like a Ross" by Karen Crowdis in ACA's *Conservation Magazine*, Fall/Winter 2015.
- Presented at the ACA Board Meeting in Lethbridge on the MULTISAR project, Brad Downey, June 2015.
- Presented at a Lethbridge College laboratory and demonstrated bat monitoring techniques, Julie Landry-DeBoer, November 2015.
- Participated in Youth Range Days in Kimball, Alberta, to work with youth on range health assessments and plant identification, Lee Moltzahn, July 2015.
- Presented at Youth Range Days in Kimball, Alberta, on bats, Julie Landry-DeBoer, July 2015.
- Participated in Green Days at Blackie School; gave presentation on ferruginous hawks and bats, set up MULTISAR booth, and built hawk nest platform. Brad Downey, Julie Landry-DeBoer, Megan Jensen and Lee Moltzahn, June 2015.
- Presented to the Foothills Fescue Forum on MULTISAR and ACA, Julie Landry-DeBoer, November 18, 2015.
- Prepared internal MULTISAR evaluation report, Julie Landry-DeBoer and Paul Jones, March 2016.
- MULTISAR collaborated with the Alberta Beef Producers and Canadian Cattlemen's Association, as well as other environmental groups, on an environment booth at the Calgary Stampede, Brad Downey, Megan Jensen, Lee Moltzahn and Julie Landry-DeBoer, July 2015.
- Set up MULTISAR display at the Milk River Watershed Council Canada Annual Meeting, Julie Landry-DeBoer, Brad Downey and Lee Moltzahn, April 2015.

- MULTISAR mentioned in an article “The Prairie Calls” by Debbie Furber in the *Canadian Cattlemen* magazine, December 2015.
- Hosted bat walk around Henderson Lake, Julie Landry-DeBoer, August 2015.
- Presented to the Lethbridge Naturalist Society, Julie Landry-DeBoer, November 2015.
- Presented at the Jennie Emery Elementary School’s summer program, Julie Landry-DeBoer, August 2015.
- Presented information on bats to two Hutterite colonies near Lomond and Enchant, Julie Landry-DeBoer, March 2016.
- Contributed (K. Kendell, ACA) to publication: Randall, L., K. Kendell, P. Govindarajulu, B. Houston. P. Govindarajulu, and A. Moehrensclager. 2015. Re-introduction of the northern leopard frog in British Columbia and Alberta, Canada. *In*: P.S. Soorae (editor) (2015). Global re-introduction perspectives 2016: case studies from around the globe. Gland, Switzerland: IUCN/SSC Reintroduction Specialist Group and Abu Dhabi, UAE: Environment Agency-Abu Dhabi. xv + 276 pp.

Partners

- Published *MULTISAR: A Multi-Species Conservation Strategy for Species at Risk in the Grassland Natural Region of Alberta 2015/16*, MULTISAR, March 2016.
- Published *Grassland Gazette* newsletter, Winter 2015/16 issue.
- Maintained and updated MULTISAR Facebook page and Twitter account, Kristen Rumbolt.

Literature Cited

- Adams, B.W., G. Ehlert, C. Stone, M. Alexander, D. Lawrence, M. Willoughby, D. Moisey, C. Hinz, A. Burkinshaw, and J. Carlson. 2005. Rangeland health assessment for grassland, forest, and tame pasture. Public Lands Division, Alberta Sustainable Resource Development. Pub. No. T/044, Edmonton, Alberta, Canada. 128 pp.
- Alberta Sustainable Resource Development. 2010. Sensitive species inventory guidelines. Alberta Sustainable Resource Development, Fish and Wildlife Division, Edmonton, Alberta, Canada. 69 pp. Available online at <http://esrd.alberta.ca/fish-wildlife/wildlife-management/documents/SensitiveSpeciesInventoryGuidelines-Apr18-2013.pdf>.
- James, J.D. 2002. A survey of short-horned lizard (*Phrynosoma hernandesi hernandesi*) populations in Alberta. Alberta Sustainable Resource Development, Fish and Wildlife Division, Alberta Species at Risk Report No. 29, Edmonton, Alberta, Canada. 25 pp.
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- Kendell, K. 2002. Survey protocol for the northern leopard frog. Alberta Sustainable Resource Development, Fish and Wildlife Division, Alberta Species at Risk Report No. 43, Edmonton, Alberta, Canada. 30 pp.

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.

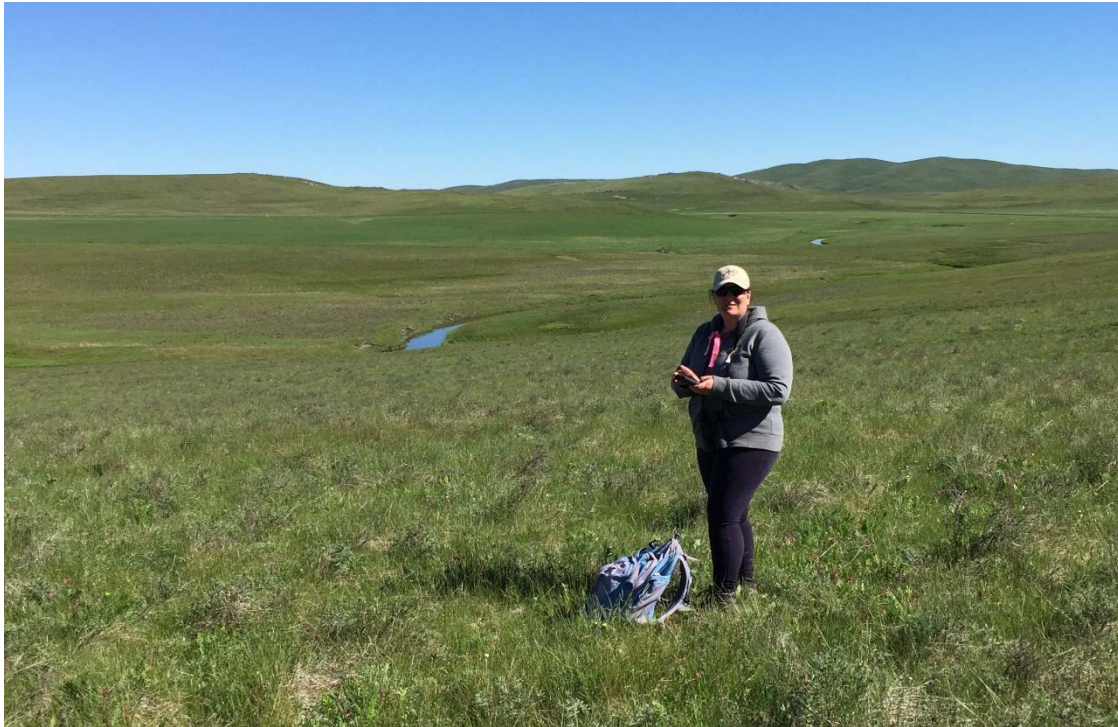
Photos



Brad Downey (Alberta Conservation Association) constructing a nest platform for ferruginous hawks with students from Blackie School. Photo: Julie Landry-DeBoer



Megan Jensen (Alberta Conservation Association) using Anabat device to detect bats at Escape Coulee. Photo: Julie Landry-DeBoer



Julie Landry-DeBoer (Alberta Conservation Association) completing grassland bird point count surveys. Photo: Megan Jensen