

Alberta Conservation Association
2019/20 Project Summary Report

Project Name: MULTISAR – South Saskatchewan

Wildlife Program Manager: Doug Manzer

Project Leader: Brad Downey

Primary ACA staff on project: Kelsey Cartwright, Brad Downey, Ryan James, Daniel Knop, Julie Landry-DeBoer, Amanda McDonald, Adam Moltzahn, Allie Olson, Phil Rose, and Mike Verhage

Partnerships

Alberta Beef Producers

Alberta Environment and Parks

Canadian Cattlemen's Association

Canadian Roundtable for Sustainable Beef

Cows and Fish – Alberta Riparian Habitat Management Society

Government of Canada

Landholders

Prairie Conservation Forum

Key Findings

- We collaborated with ranchers and completed four Habitat Conservation Strategies and two Habitat Management Plans (49,514 acres).
- We partnered with six producers on nine enhancements including three movable electric fencing units, bio-control insects for leafy spurge, one wildlife friendly fencing project, two portable watering units, and two tire troughs for a spring development.
- We have identified six properties (~13,730 acres) to collaborate with in 2020 and eight additional producers have expressed interest already for 2021.

Abstract

Numerous species at risk occur in the southern part of Alberta, often overlapping with agricultural landscapes. Existing management practices on these lands is what has allowed these species to persist, but there are also many opportunities on these lands and adjoining lands to further enhance habitat quality for these species while also benefitting agricultural operations. We work collaboratively with multiple partners to maintain, increase, and improve habitat for species at risk within the Grassland Natural Region of Alberta. In 2019, we collaborated with ranchers and completed four Habitat Conservation Strategies and two Habitat Management Plans (HMP) on 49,514 acres of land. We partnered with six producers on nine enhancements including three movable electric fencing units, bio-control insects for leafy spurge, one wildlife-friendly fencing project, two portable watering units, and two tire troughs at a natural spring, getting cattle out of the flowing water. We identified 173 different species on these six properties, including one species that is federally considered *Endangered*, nine species that are *Threatened*, and eight that are *Species of Special Concern*. In all, we had 4,664 observations of species. On these same six properties, we also conducted 246 detailed range transects, 308 range health assessments, 10 tame pasture assessments, 65 visual assessments, 21 HMP litter/Robel pole measurements, and nine riparian health assessments. Long-term relationships built on mutual respect and trust between conservation groups and landowners have allowed us to collaborate with more than 90 producers and implement enhancements on close to 167,910 acres since the project started in 2016.

Introduction

Numerous species at risk occur in the southern part of Alberta, often overlapping with agricultural landscapes. Existing management practices on these lands is what has allowed these species to persist, but there are also many opportunities on these lands and adjoining lands to further enhance habitat quality for these species while also benefitting agricultural operations. We work collaboratively with multiple partners to maintain, increase, and improve habitat for species at risk within the Grassland Natural Region of Alberta. This partnership involves habitat assessments, development of voluntary habitat conservation plans, and subsequent implementation and monitoring of on-the-ground enhancements.

A Habitat Conservation Strategy (HCS) is a five-year extendable voluntary plan that identifies beneficial management practices and habitat improvement recommendations to encourage sustainable ranching operations. First, an initial Letter of Intent is signed that outlines the roles of both the ACA and the landowner, and clarifies that the landowner allows reasonable public access for recreation on their ranch. We then develop these plans after first completing in-depth habitat, wildlife, and fish surveys, along with vegetation inventories, and range and riparian health assessments. We evaluate these results with the needs of species at risk and balance the plan with the needs and objectives of the ranching operation. Mutually agreed-upon solutions are adopted and integrated into the strategy, with priorities listed along with a monitoring plan to assess progress. After signing a five-year stewardship agreement, we assist the producer with implementing the agreed to enhancements and grazing strategies. Progress is re-assessed every five years with adjustments incorporated into a living management plan for the operation. A landowner questionnaire is also completed to identify what is or is not working from their perspective, and to document landowner perspectives across years. This questionnaire helps us re-adjust the plan going forward and can show change over time with landowner beliefs on species at risk. Another five-year stewardship agreement may be signed for continued implementation of the strategy.

In 2018/19, MULTISAR created another extension program to further influence rangeland management and benefit prairie wildlife habitats. Habitat Management Plans (HMP) were introduced in 2018 as an extension of the MULTISAR Habitat Conservation Strategy (HCS) to focus solely on proposed habitat improvements at a given ranch and to continue collecting some wildlife and habitat data. HMPs are a more condensed version of the HCS applied at the ranch level but involve detailed wildlife surveys and simplified wildlife habitat assessments to document species at risk and habitat indicators, respectively.

Methods

First, an initial Letter of Intent is signed that outlines the roles of both the ACA and the landowner, and clarifies that the landowner allows reasonable public access for recreation on their ranch. We then completed point count surveys on properties to measure the occupancy of

birds and other wildlife (Landry-DeBoer and Downey 2010). We surveyed riparian areas on these ranches by walking along the edge of the waterbodies listening and observing for amphibians (Kendell 2002). We also set up bat meters and song meters in key areas to identify bats and record birds and amphibians that may have been missed during point counts.

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) (Government of Alberta 2013). We also completed range health assessments (Adams et al. 2005) and incorporated these results along with those from the wildlife inventories into landholder-specific Habitat Conservation Strategies. These plans map out objectives going forward, along with potential habitat enhancements to guide future work.

For our HMPs, detailed wildlife inventories, including multi-species point count surveys, were completed. At each multi-species point count survey location, a Robel pole measurement and litter weight estimate were also taken following protocols by Robel et al. (1970) and Willoughby (2007), respectively, to gain some insight on wildlife habitat for a particular land base.

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.

Results

In 2019, we completed detailed wildlife, range, and riparian surveys on six ranches (~49,514 acres) and developed the associated management plans (HCSs and HMPs). We identified 173 different species on these six properties, including one species federally considered *Endangered*, nine species that are *Threatened*, and eight that are *Species of Special Concern*. In all, we had 4,664 observations of species. On these same six properties, we also conducted 246 detailed range transects, 308 range health assessments, 10 tame pasture assessments, 65 visual assessments, 21 HMP litter/Robel pole measurements, and nine riparian health assessments.

We completed ten new habitat enhancements as part of recommendations identified in Habitat Conservation Strategies (Figure 1). We provided three landowners with portable electric fence units to assist with grazing management, including keeping cattle out of sensitive areas and promoting grazing in areas that cattle tend to avoid. For another property, we provided bio-control for leafy spurge, a perennial noxious weed. This weed is problematic as it can lower carrying capacity of pastures since cattle refuse to graze areas that are infested. We assisted with two wildlife-friendly fencing projects and provided two portable watering units to provide fresh water for cattle and to deter cattle loafing. We also provided two tire troughs to entice cattle out away from a natural spring by offering easy access to cleaner water. Offering cleaner water can improve weight gain and offset foot rot occurrences.

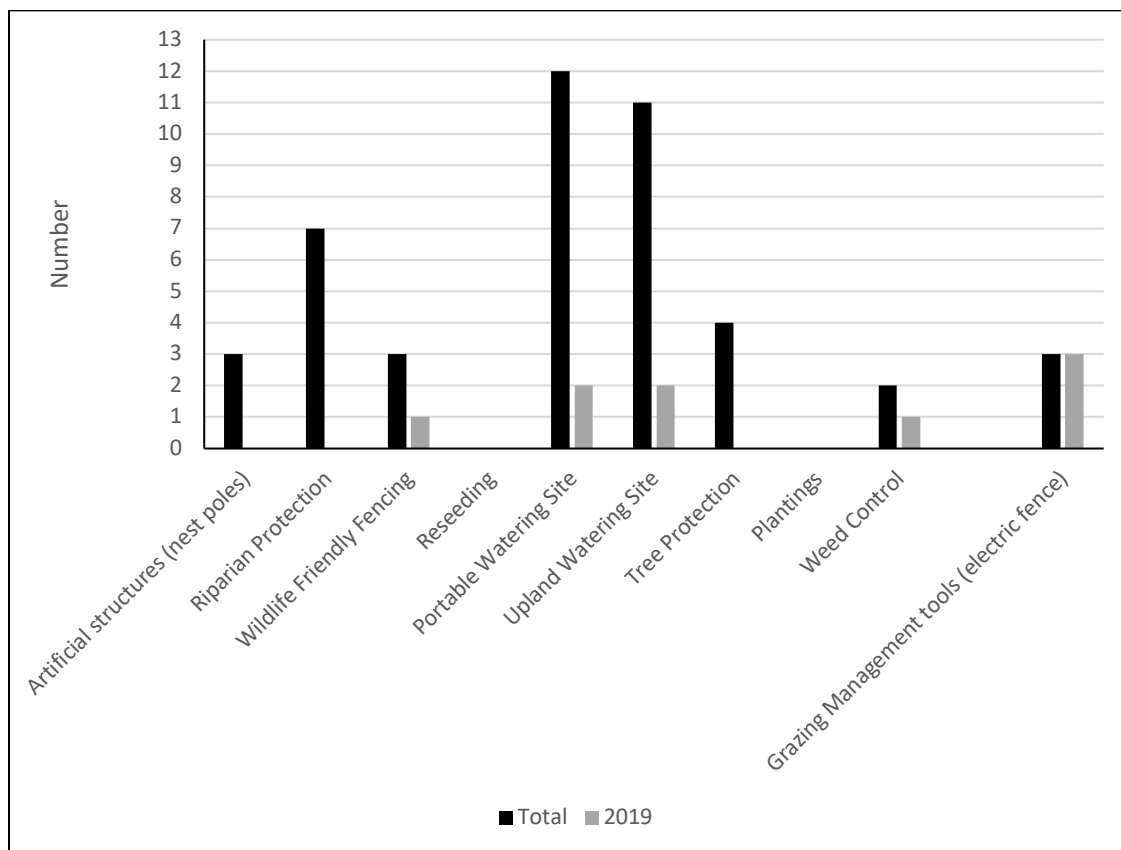


Figure 1. The number and type of habitat enhancements implemented through the MULTISAR – South Saskatchewan project since 2016.

Since 2017, we have compiled 11 landowner questionnaires from species at risk partnerships on agricultural lands (SARPAL) participants. Ninety-one percent (10/11) of the respondents believed that their land was important for providing habitat for species at risk. When asked what the landowner hoped to achieve by working with the MULTISAR program, 63% (7/11) said they were looking forward to having assistance with land management decisions. Other responses included looking forward to finding out more about range management (5/11), as well as finding balance between species at risk management and landowner interests (5/11).

Conclusions

Long-term relationships built on mutual respect and trust between conservation groups and landowners have allowed us to collaborate with more than 90 producers and implement enhancements on close to 167,910 acres. Landholders view this collaboration as non-threatening, and new relationships are being formed because of this awareness and through promotion of the program in the local community. MULTISAR – South Saskatchewan was initiated as a result of the positive feedback and desire of landholders for us to expand beyond the Milk River basin. The South Saskatchewan expansion has led to funding partnerships (~\$380,000/year) and the support of the Canadian Cattlemen’s Association and Canadian Roundtable for Sustainable Beef. It is through these partnerships that we strive to foster mutually beneficial relationships with the agriculture community and improve wildlife habitat for all species on this land base.

Communications

ACA:

- Presented at the Grassland Market Symposium: How MULTISAR collaborates with producers. Brad Downey, November 2019.
- Presented for NCC Nature Talks: Why Grasslands Matter. Talked to public about MULTISAR and what the project entails. Adam Moltzahn, May 2019.
- Presented to the Society of Range Management. Talked about MULTISAR and what the project entails. Brad Downey, November 2019.
- Presented to the Lethbridge College Student Chapter of the Wildlife Society on Ferruginous hawks and the MULTISAR project. Adam Moltzahn, November 2019.

- Presented to Walk on the Wildside: Talked about Ferruginous Hawks and Osprey Poles. Amanda MacDonald, November 2019.
- Presented for the Prairie Conservation Action Plan Webinar Series: “Developing Predictive Models of Occurrence For Grassland Birds in Alberta.” Julie Landry-DeBoer, April 2019.
- Presented at the Ladies Livestock Lessons Workshop: “Species At Risk.” Phil Rose, January 18, 2020.

Partners:

- Published MULTISAR: A Multi-Species Conservation Strategy for Species at Risk in the Grassland Natural Region of Alberta 2019/20: MULTISAR, March 2020.
- Published *Grassland Gazette* newsletter: Winter 2019/20 issue.
- Maintained and updated MULTISAR Facebook page and Twitter account: Kristen Rumbolt.
- Updated and reprinted information pamphlets on Loggerhead Shrike, Reptiles, Burrowing animals, and Wetland Species.

Literature Cited

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Photos

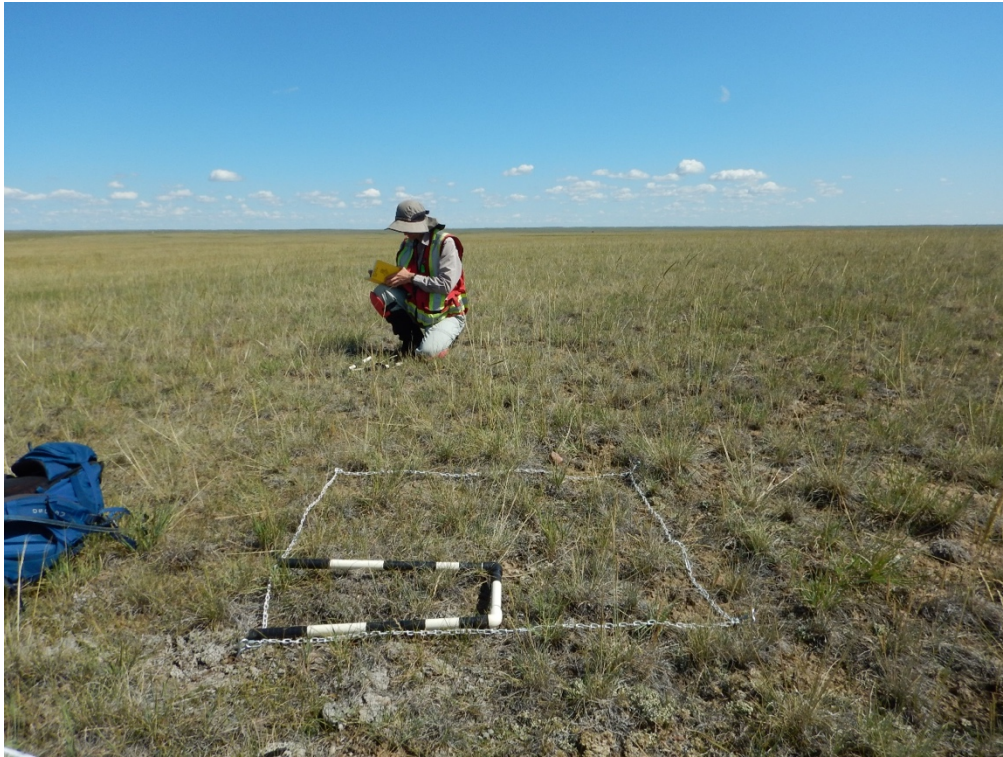


ACA staff member, Adam Moltzahn, and partners conducting a short-horned lizard survey.

Photo: Julie Landry-DeBoer.



ACA staff members, Adam Moltzahn, Lee Moltzahn, and Julie Landry-DeBoer, having fun with Youth Range Day attendees on the last day of the school. Photo: Kandra Forbes.



Seasonal ACA staff member, Ryan James, completing a range health assessment.
Photo: Allie Olson.