

**Alberta Conservation Association**  
**2020/21 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, Julie Landry-DeBoer, Amanda McDonald, Adam Moltzahn, Allie Olson, Phil Rose, and Mike Verhage

**Partnerships**

Alberta Beef Producers

Alberta Environment and Parks

AltaLink

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 four Habitat Management Plans (29,035 acres).
- We partnered with 17 producers on 26 enhancements including three portable electric fencing units, two wildlife friendly fencing projects, three portable watering units, 11 upland water developments (spring developments, permanent water troughs, dugout, and two pasture pipeline projects designed to move water throughout the property), one

ferruginous hawk pole, two single tree protections, two groupings of riparian tree protections, construction of one bat condo, and weed control for one property.

- We have identified eight new properties (~23,120 acres) to collaborate with in 2021 and five producers will have their land reassessed (~51,657 acres).

## **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 2020, we collaborated with ranchers and completed four Habitat Conservation Strategies (HCS) and four Habitat Management Plans (HMP) on 29,035 acres of land. We partnered with 17 producers on 26 enhancements including three portable electric fencing units, two wildlife friendly fencing projects, three portable watering units, 11 upland water developments (spring developments, permanent water troughs, dugout and two pasture pipeline projects designed to move water throughout the property), one ferruginous hawk pole, two single tree protections, two groupings of riparian tree protections, construction of one bat condo, and weed control for one property.

We identified 214 different species on these eight properties, including four species that are federally considered *Endangered*, seven species that are *Threatened*, and seven that are *Species of Special Concern*. In all, we had 4,128 observations of species. On these same eight properties, we also conducted 281 detailed range transects, 443 range health assessments, 62 tame pasture assessments, 271 visual assessments, 62 HMP litter/Robel pole measurements, and 16 riparian health assessments. Long-term relationships built on mutual respect and trust between conservation groups and landowners have allowed us to collaborate with producers on 24 properties and implement enhancements on close to 200,000 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 benefiting 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 ACA and the landowner and clarifies that the landowner allows reasonable public access for recreation on their ranch. We then develop these plans after 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 mutually approved suggested enhancements and grazing strategies. Progress when possible is reassessed 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 readjust 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, Habitat Management Plans (HMP) were introduced 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.

## **Methods**

First, an initial Letter of Intent was signed that outlines the roles of both the ACA and the landowner and clarifies that the landowner allows reasonable public access for recreation (hunting and/or fishing) 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) as well as looking for raptor nests. 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 HCSs. 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 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 2020, we completed wildlife, range, and riparian surveys on eight ranches (~29,035 acres) and developed the associated management plans (HCSs and HMPs). We identified 214 different species on these eight properties, including four species federally considered *Endangered*, seven species that are *Threatened*, and seven that are *Species of Special Concern*. In all, we had 4,128 observations of species. On these same eight properties, we also conducted 281 detailed range transects, 443 range health assessments, 62 tame pasture assessments, 271 visual assessments, 62 HMP litter/Robel pole measurements, and 16 riparian health assessments. Long-term relationships built on mutual respect and trust between conservation groups and landowners have allowed us to collaborate with producers on 24 properties and implement enhancements on close to 200,000 acres since the project started in 2016.

We completed 26 new habitat enhancements as part of recommendations identified in HCSs and HMPs (Figure 1). We provided three landowners with portable electric fence units to assist with grazing management, including keeping cattle out of sensitive riparian areas and promoting grazing in areas that cattle tend to avoid. We assisted with two wildlife-friendly fencing projects for ungulate movement and provided three portable watering units to protect riparian areas to deter cattle loafing and at the same time provide fresh water for cattle. We also provided tire troughs and portable troughs that are filled with spring water to entice cattle away from natural springs. This prevents the spring from being damaged and still allows cool fresh water for cattle to drink and to flow into the riparian areas. We also assisted with a dugout and the development of two pasture pipelines to carry water into the uplands away from riparian areas to several locations. We installed a hawk pole on one property to encourage nesting of ferruginous hawks and protected other suitable nesting sites (lone trees) with corral panels to prevent cattle from rubbing on them, and we also protected groupings of trees with wire to reduce beaver tree harvest in two areas. To help bats roost away from a dwelling, one bat condo was built for a property that had bats coming into their home.

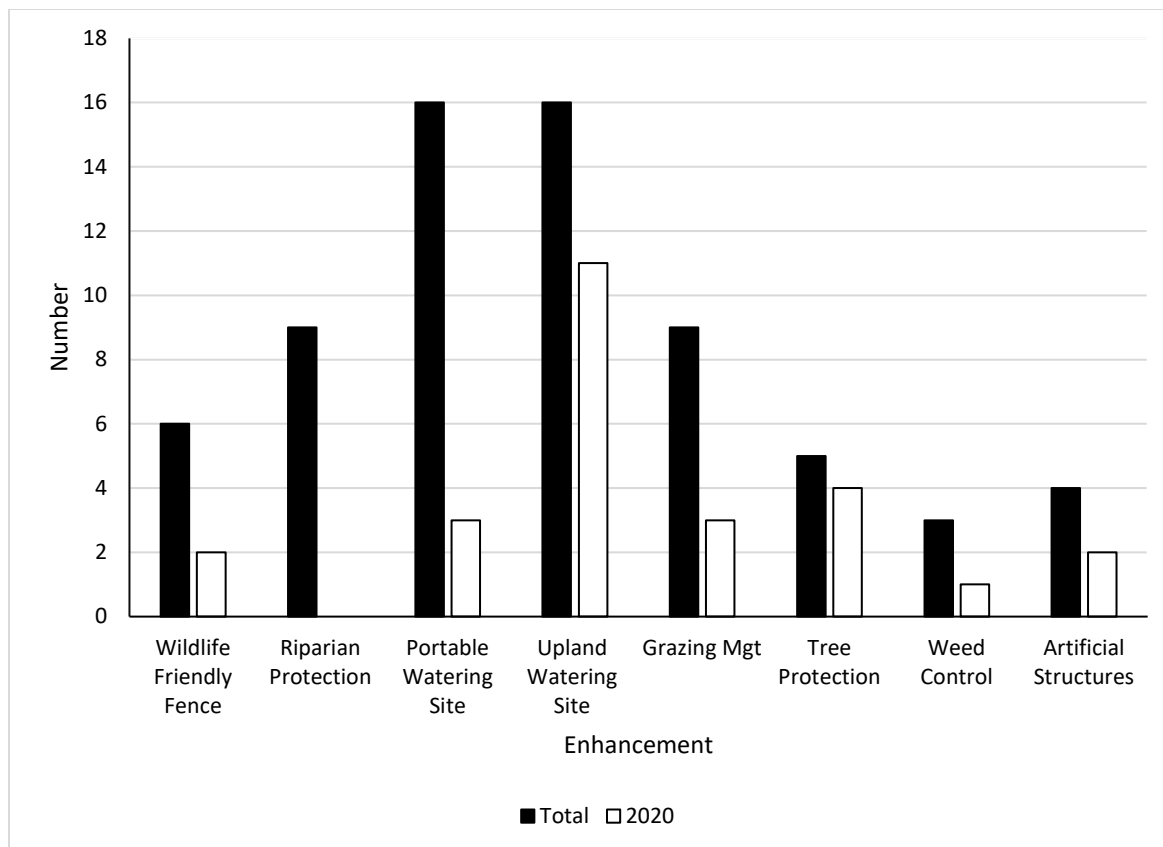


Figure 1. The number and type of habitat enhancements implemented through the MULTISAR – South Saskatchewan project since 2016.

## Conclusions

Long-term relationships built on mutual respect and trust between conservation groups and landowners have allowed us to collaborate with producers and implement enhancements on close to 200,000 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. The South Saskatchewan Watershed expansion has led to renewed funding partnerships until March 2023 (~\$345,000/year) from Environment and Climate Change Canada Priority Places Funding. Our advisory team, consisting of Alberta Beef Producers, Canada Cattlemen’s Association, and Canadian Roundtable for Sustainable Beef, along with the landholders we collaborate with, continue to provide vital support and promotion of the program within the ranching community. 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 to Partners in Flight on the native grassland restoration and insect study at Silver Sage Conservation Site. Brad Downey and Phil Rose, November 2020.
- Presented to British Columbia Institute of Agrologist on MULTISAR/SHARP Project. Brad Downey and Natasha Mackintosh, November 2020.
- Presented to Environmental Farm Plan Ag Techs on MULTISAR, species at risk habitat enhancements, and landowner communications. Brad Downey, November 2020.
- Presented to the Lethbridge College Fourth Year Class about species at risk management and landowner communications. Julie Landry-DeBoer and Adam Moltzahn, November 2020.
- Paige, C. 2020. *Alberta Landholder's Guide to Wildlife Friendly Fencing*. Alberta Conservation Association, Sherwood Park, Alberta. 68 pp.

### **Partners:**

- Published MULTISAR: A Multi-Species Conservation Strategy for Species at Risk in the Grassland Natural Region of Alberta 2020/21: MULTISAR, April 2021.
- Published *Grassland Gazette* newsletter: Winter 2020/21 issue.
- Maintained and updated MULTISAR Facebook page and Twitter account: Kristen Rumbolt; Prairie Conservation Forum.

## **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.

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- Willoughby, M.G. 2007. Range Survey Manual for Alberta Rangelands Version One. Rangeland Management Branch, Alberta Sustainable Resource Development. Edmonton, Alberta. Pub. No.: I/176. ISBN: 978-0-7785-6507-9 (Print edition), ISBN: 978-0-7785-6508-6 (Online edition).



## Photos



ACA staff member, Allie Olson, conducting a range assessment. Photo: Julie Landry-DeBoer





ACA staff member, Adam Moltzahn, conducting snake hibernacula surveys. Photo: Brad Downey





ACA staff member, Amanda MacDonald, conducting an early morning bird survey. Photo: Brad Downey