Alberta Conservation Association

2018/19 Project Summary Report

Project Name: MULTISAR – South Saskatchewan

Wildlife Program Manager: Doug Manzer

Project Leader: Brad Downey

Primary ACA staff on project: Brad Downey, Jason Headley, 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

- Collaborated with ranchers and completed four Habitat Conservation Strategies (51,485 acres).
- Partnered with seven producers on eight enhancements including portable wind breaks to be used on uplands to prevent the need for cattle to access riparian habitat, hawk-pole installation, portable watering unit, upland winter waterer, and fencing for riparian protection.

- Eight properties (~66,140 acres) have been identified to collaborate with in 2019 and three additional producers have expressed interest already for 2020.

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. We work collaboratively with multiple partners to increase, maintain, 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. We develop these plans after first taking 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 solutions are adopted and integrated into the strategy, and 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 isn't working from their perspective, which helps us re-adjust the plan going forward. Another five-year stewardship agreement may be signed for continued implementation of the strategy.

Methods

We completed point count surveys on four ranches to measure the occupancy of birds (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 setup 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) (Alberta Sustainable Resource Development 2010). 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 (HCS). These plans map out objectives going forward along with potential habitat enhancements to guide future work.
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 2018, we completed detailed wildlife, range, and riparian surveys on four ranches (~51,485 acres) and developed the associated management plans (habitat conservation strategies). We identified 176 different species on these four ranches, including 47 that are considered *Endangered, Threatened, or Species of Special Concern*. In all, we had 6,022 observations of species. On these same four ranches we also conducted 248 detailed range transects, 296 range health assessments, 28 tame pasture assessments, three forest health assessments, and 21 riparian health assessments.

We completed eight new habitat enhancements as part of recommendations identified in Habitat Conservation Strategies. We protected cottonwoods along riparian areas on two properties that

are home to numerous species including bats, northern leopard frogs, and upland game birds. We provided portable wind breaks to alleviate pressure on a creek that supports loggerhead shrike, northern leopard frogs, and upland game birds. We installed a hawk pole to attract ferruginous hawks into the area to help control Richardson's ground squirrels and fence off another nesting site to prevent the tree from being damage from cattle rubbing on it. We developed a water line and wet wells for alternate water locations to reduce pressure off of a large wetland and purchased a portable watering unit to reduce pressure on dugout and wetlands on a second property. We developed a winter watering system to allow more flexibility for the producer to use a pasture there by reducing pressure on other pastures that contain large wetland complexes (Figure 1).

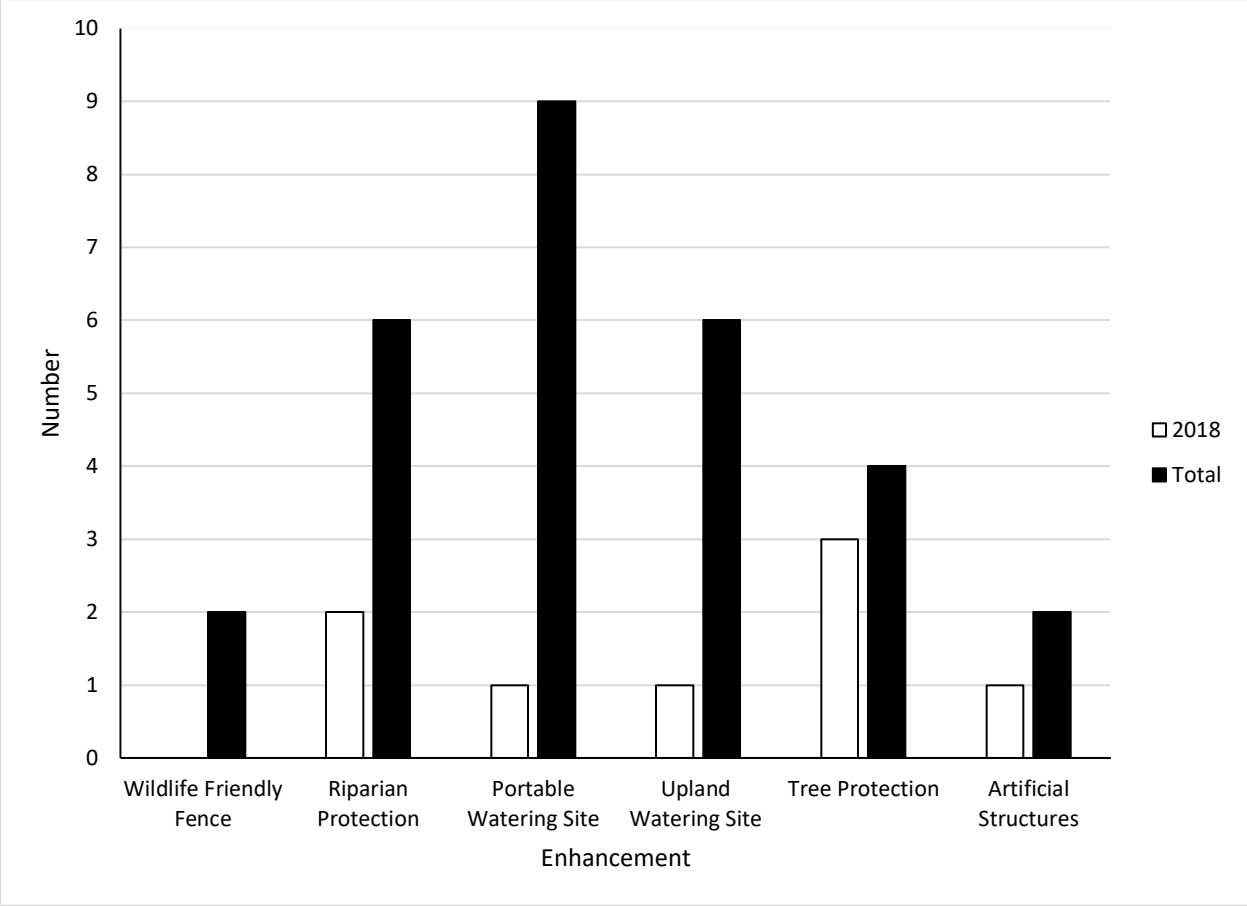

Figure 1. The number and type of habitat enhancements implemented through the MULTISAR – South Saskatchewan project from 2016 to March 2019.

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 123,876 acres benefiting roughly 80 producers thus far with another 66,140 acres expressing interest for 2019. 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 to the Bow Island Grazing Association on MULTISAR. Brad Downey, August 2018.
- Presented during the Canadian Roundtable for Sustainable Beef and International Beef Alliance tour at Spruce Ranch. Brad Downey and Mike Verhage. September 2018.
- Presented to the Lethbridge Naturalist about MULTISAR. Amanda MacDonald. January 2019.
- Presented to the MD of Ranchlands Ag Service Board on MULTISAR. Chain Lakes, Alberta. Mike Verhage, January 2019.
- Presented to the Endangered Species Conservation Committee on MULTISAR. Calgary, Alberta. Brad Downey, February 2019.
- Presented to the Waterton Biosphere on northern leopard frogs and riparian enhancements. Magrath, Alberta. Mike Verhage, August 2018.
- Presented at the Prairie Conservation and Endangered Species Conference in Winnipeg, Manitoba "MULTISAR – Enhancing habitat conservation strategies with GIS Solutions.

Applying ArcGIS Model Builder & GVI to expedite wildlife surveys for SAR & management plans for producers in southern Alberta." Mike Verhage, February 2019.

- Presented at the Prairie Conservation and Endangered Species Conference in Winnipeg, Manitoba "MULTISAR: Species at Risk Partnerships on Agricultural Lands (SARPAL)." Brad Downey, February 2019.
- Presented at the Prairie Conservation and Endangered Species Conference in Winnipeg, Manitoba "Developing predictive models for the occurrence of four grassland bird species in Alberta." Julie Landry-DeBoer, February 2019.
- Presented a poster at the Prairie Conservation and Endangered Species Conference in Winnipeg, Manitoba "Restoring Grassland Habitat in Alberta's Sagebrush Ecosystem: The Silver Sage Success Story." Phil Rose, February 2019.
- Presented a poster at the Prairie Conservation and Endangered Species Conference in Winnipeg, Manitoba. "Raptor Nest Cameras – Engaging and Educating the Public about Species at Risk in Alberta." Adam Moltzahn, February 2019.
- Presented at the Prairie Conservation Action Plan's "Multiple Species Management Workshop." Consul, Saskatchewan. Brad Downey, March 2019.

Partners

- Published MULTISAR: A Multi-Species Conservation Strategy for Species at Risk in the Grassland Natural Region of Alberta 2018/19, MULTISAR, March 2019.
- Published *Grassland Gazette* newsletter, Winter 2018/19 issue.
- Maintained and updated MULTISAR Facebook page and Twitter account, Kristen Rumbolt.
- Presented at the Transboundary Workshop on MULTISAR. Katheryn Taylor and Kristen Rumbolt Miller. Lethbridge, Alberta, December 2018

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: http://srd.alberta.ca/FishWildlife/WildlifeManagement/documents/SensitiveSpeciesInventoryGuidelines-Aug2010.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.

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

ACA staff member, Phil Rose, working at the Calgary Stampede booth. Photo: Julie Landry-DeBoer

ACA staff member, Adam Moltzahn, educating kids on wildlife habitat. Photo: Kandra Forbes

ACA staff, Mike Verhage, completing amphibian habitat assessment. Photo: Amanda MacDonald