

**Alberta Conservation Association
2019/20 Project Summary Report**

Project Name: MULTISAR – West

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Partnerships

Alberta Beef Producers

Alberta Environment and Parks

Altalink

Calgary Stampede OH Ranch

Canadian Cattlemen's Association

Canadian Roundtable for Sustainable Beef

Cows and Fish – Alberta Riparian Habitat Management Society

Government of Canada

Landholders in Southwest Alberta

Prairie Conservation Forum

Shell Canada

Key Findings

- We completed three Habitat Conservation Strategies in partnership with ranchers (14,511 acres).

- We partnered with one cattle producer to 1) removed an old horse corral where, for over 100 years, livestock had direct access to a creek, 2) helped relocate a new corral upslope, 3) rehabilitated the riparian area by planting roughly 2,000 shrubs, and 4) developed two upland watering sites to reduce pressure on the riparian zone.
- We partnered with a second cattle producer to implement a portable watering unit to reduce pressure on wetland habitat.

Abstract

While it is true that the majority of Species at Risk (SAR) are found in the Grasslands Natural Region of southern Alberta, the Foothills, Parkland and Rocky Mountain Natural Regions of southwest Alberta boast some of the province's most ecologically diverse landscapes and provide habitat for many SAR including the little brown bat, bull trout, grizzly bear, limber pine, western wood pewee, and westslope cutthroat trout. Best management practices and habitat enhancements occurring on farmlands within this area have enabled many of these species to persist, but there are also many opportunities to further enhance habitat quality for these species while also benefiting agricultural operations.

In 2019, we collaborated with private landowners and leaseholders to complete three Habitat Conservation Strategies on ranches, totalling approximately 14,511 acres. We identified 140 different wildlife species on these three ranches, including 27 that are considered *Endangered*, *Threatened*, or *Species of Special Concern*. In total, we had 2,227 observations of wildlife species and conducted 250 habitat assessments. We partnered with two cattle producers to implement five habitat enhancements including the removal of an old horse corral where, for over 100 years, livestock had direct access to a creek (a tributary to the Oldman River supporting bull trout and westslope cutthroat trout).

Building off long-term landowner relationships that ACA has established on previous projects has enabled us to collaborate with producers and implement enhancements in 2019. Our goal is to continue building on this mutual trust and respect so we can collaborate on future projects that mutually benefit habitat for wildlife, SAR and ranching operations in southwest Alberta.

Introduction

Many species at risk occur in southwest Alberta, an area characterized by fescue grasslands, rolling topography, deciduous and coniferous forest that often overlap with agricultural landscapes. Existing management practices on these lands is what has allowed these species to persist. Alberta Conservation Association (ACA) works collaboratively with multiple partners to further increase, maintain and improve habitat for SAR in southwest Alberta, while mutually benefiting the producer's operations. This partnership involves wildlife surveys, habitat assessments, development of voluntary habitat conservation strategies 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 SAR 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, which helps us re-adjust the plan going forward. Another five-year stewardship agreement may be signed for continued implementation of the strategy.

Methods

In mid-April, we conducted sharp-tailed grouse surveys at known historic lek (dancing ground) sites located on these properties following established protocols (GOA 2013). In the spring, we completed multi-species point count surveys to measure the occupancy of birds and document

the presence and abundance of all wildlife species observed on the ranches (Landry-DeBoer and Downey 2010). We also surveyed riparian areas in the spring and summer months making observations of wildlife and fish associated with these areas. To further supplement our visual observations, we set up bat meters, song meters, and trail cameras in key/remote areas.

We also completed range health assessments (Adams et al. 2005) and riparian health assessments following protocols outlined by Cows and Fish (Fitch et al. 2009; Ambrose et al. 2009). Results from these assessments were incorporated into landholder-specific HCS reports that include management recommendations and suggestions for implementing habitat enhancements that mutually benefit the ranching operation and habitat for SAR.

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 inventories, range and riparian health assessments, and made subsequent management recommendations for habitat enhancements on three ranches (14,511 acres) in southwest Alberta. In collaboration with producers, we completed three HCS reports and associated management plans where we identified 140 different wildlife species, including 27 that are considered *Endangered*, *Threatened*, or *Species of Special Concern* (Figure 1). Noteworthy observations that occurred during wildlife surveys included identifying a previously undocumented sharp-tailed grouse lek, a breeding pond for western tiger salamanders, and the occurrence of several bear rub trees on the participating ranches. In total, we had 2,227 observations of wildlife species. On these same three ranches, we also conducted 62 detailed range transects, 60 range health assessments, 40 tame pasture assessments, 51 forest health assessments, and 37 riparian health assessments.

In 2019, we implemented five new habitat enhancements to reduce pressure on riparian habitat.

In collaboration with a producer situated on the west side of the Porcupine Hills, we removed an old horse corral where livestock previously have had direct access to a creek for over 100 years. We then provided materials and supplies for a new corral upslope, and rehabilitated the riparian area by planting over 2,000 riparian shrubs along this tributary to the Oldman River that supports westslope cutthroat trout and bull trout. In collaboration with two landowners, we also developed two natural springs as alternative watering sites for cattle and supplied a portable watering unit to reduce pressure on riparian habitat.

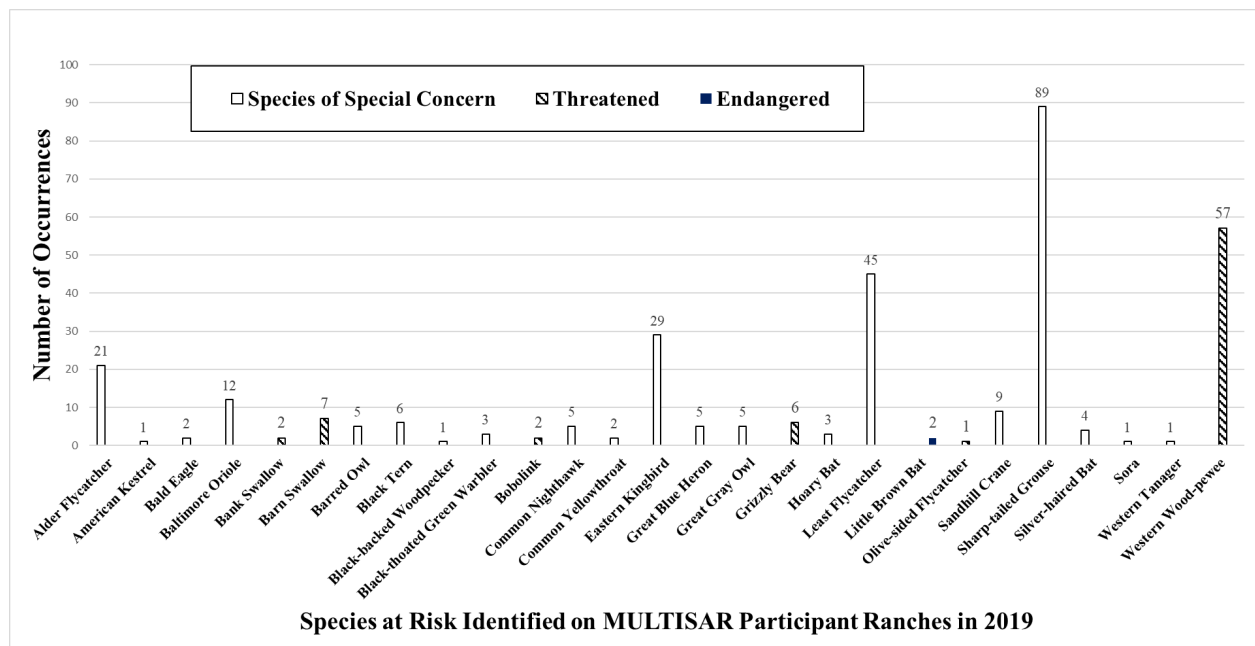


Figure 1. Occurrences of Species at Risk identified on MULTISAR participant ranches in 2019.

Conclusions

Long-term relationships built on mutual respect and trust between conservation groups and landowners have allowed ACA to collaborate with producers and implement enhancements on 14,511 acres in southwest Alberta in 2019. To date, this project has benefitted five producers, with another 5,600 acres expressing interest for 2020. Participating 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 – West was initiated as a result of the positive feedback and desire of landholders for us to expand

MULTISAR beyond the Milk River basin. The western expansion has led to funding partnerships (~\$97,500 in 2019) and the support of Altalink, Calgary Stampede OH Ranch, the Canadian Cattlemen's Association, Canadian Roundtable for Sustainable Beef, Government of Canada, and Shell Canada. 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 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 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: SAR Partnerships on Agricultural Lands (SARPAL)." Brad Downey, February 2019.
- Presented at the Prairie Conservation Action Plan's "Multiple Species Management Workshop." Consul, Saskatchewan. Brad Downey, March 2019.

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Photos



Secured to a fence post, this bat meter allows ACA to detect various bat species after analyzing recorded echolocation pulses. Photo: Amanda MacDonald



ACA staff encountered this mule deer fawn while completing multi-species point count surveys on a ranch in southwest, Alberta. Photo: Jalen Hulit



ACA staff member, Mike Jokinen, and a producer standing next to a solar-powered, portable watering unit that will reduce impacts to riparian habitat. Photo: Mike Verhage