# Alberta Conservation Association 2020/21 Project Summary Report

Project Name: Species Habitat Assessments and Ranching Partnership

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## Partnerships

Alberta Community Bat Program Alberta Environment and Parks ALUS Canada Canadian Agricultural Partnership Canadian Cattlemen's Association Ducks Unlimited Canada Huvan Construction Landholders Wildlife Preservation Canada

## **Key Findings**

- We continued to collaborate with two ranches from last year and one new ranch, totalling 25,420 acres (24,940 acres of private land and 480 acres of leased land).
- We focused most of our enhancements efforts around improving range and riparian health on these properties as roughly 1,050 acres of uplands and 253 acres of riparian were in an unhealthy state.

• We partnered with two existing producers to complete nine habitat enhancements as part of recommendations identified in Habitat Conservation Strategies. In collaboration with one producer, we installed a large bat house to provide an alternative roosting site for bats displaced from surrounding residential buildings. In partnership with a second producer, we purchased a portable watering unit, cattle oiler, and assisted with the construction of two new dugouts, all designed to help with cattle distribution on the property to avoid overgrazing and encourage grazing away from sensitive riparian areas. We also installed wildlife-friendly fencing around one of these two new dugouts to reduce pressure on riparian habitat, and trialed snow fencing around the dugouts to increase snow collection and improve subsequent runoff into these dugouts. We wrapped stucco wire around individual mature trees to protect them from beavers and encourage unwanted beavers to relocate by decreasing their food supply. We also purchased fence deflectors to be used on properties that have fences adjacent to wetlands to prevent waterfowl and other birds from colliding with the fence.

#### Abstract

The Species Habitat Assessments and Ranching Partnership (SHARP) project is a voluntary collaborative project designed to improve the quality and quantity of wildlife habitat available on the landscape in central and northwestern Alberta. Our objective is to make wildlife conservation straightforward and cost-effective for producers through education and cost-sharing agreements for habitat enhancements. We develop habitat strategies after first completing in-depth range and riparian health assessments. Through these assessments, we evaluate range and riparian health, and look for areas that could be improved. We balance these with the needs of target species and the long-term objectives of the landholder and come up with mutually agreed-upon solutions that benefit both wildlife and the producer's operations. As enhancements are made, we develop a monitoring plan to assess their progress and effectiveness. We continued to work on two ranches (total 15,700 acres) within the North Saskatchewan Watershed, and enrolled a new ranch (total 10,000 acres) located partly in both the North Saskatchewan Watershed and Red Deer Watershed. We completed nine enhancements focusing on areas of properties that are in an unhealthy state. We look forward to developing partnerships with more producers in these areas as well as expanding the footprint to include Peace River Watershed in 2021. Long-term

relationships built on mutual respect and trust between conservation groups and landowners are the key to effective on-the-ground conservation efforts being undertaken through initiatives like the SHARP project.

#### Introduction

The Species Habitat Assessments and Ranching Partnership (SHARP) project is a voluntary collaborative project designed to aid in improving the quality and quantity of wildlife habitat available on the landscape. Alberta Conservation Association's (ACA's) objective is to make conservation straightforward and cost-effective for producers through education and cost-sharing agreements for habitat enhancements. The project can also provide producers with a plan and resources that will assist them in meeting the goals identified for the natural resource components of the Canadian Roundtable for Sustainable Beef Production Standards. We use an adaptive approach whereby data collected on each participating property will be used to evaluate the success of any habitat enhancements that are implemented, as well as guide future management recommendations. SHARP consist of three primary components: 1) Habitat Conservation (e.g., species and habitat inventories, habitat conservation strategies, habitat enhancements); 2) Education, Outreach, and Awareness (e.g., development and distribution of Beneficial Management Practices, brochures and guides); and 3) Monitoring (e.g., effectiveness of enhancements and changes in grazing practices in achieving our goals).

A Habitat Conservation Strategy (HCS) is a five-year, extendable detailed voluntary plan that identifies beneficial management practices and habitat improvement recommendations to encourage sustainable ranching operations. First, a 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 an HCS after first completing in-depth range and riparian health assessments, followed by wildlife surveys the subsequent year in areas where habitat enhancement opportunities may occur. We evaluate these results with the needs of target species like sharp-tailed grouse, ruffed grouse, or species groups like amphibians and waterfowl, and balance the plan with the needs and objectives of the ranching operation. Mutually agreed-upon solutions are adopted and integrated into the HCS, along with a wildlife- and range-monitoring plan to assess progress and effectiveness of recommendations. After reviewing the

HCS and signing a five-year stewardship agreement, we assist the producer with implementing the enhancements and grazing strategies by providing advice and/or resources. Progress is reassessed every five years, with adjustments incorporated into the existing HCS for the operation. A landowner questionnaire is also completed to identify what is or is not working from their perspective, which helps us adjust the plan going forward. Another five-year stewardship agreement may be signed for continued implementation of the HCS.

#### Methods

In 2020/21, we completed select wildlife surveys on one property on which we initiated work last year. In late April, we surveyed sharp-tailed grouse in key areas to see if we could find any additional grouse and/or a lek as three observations were made last year. In the spring, we completed point count surveys to measure the occupancy of birds and other wildlife in areas where habitat enhancements may occur, including areas targeted for potential aspen thinning. We also completed pollinator foraging habitat surveys in these potential aspen thinning areas. These surveys provide a baseline for monitoring the effect of aspen thinning as a silvicultural treatment to increase wildlife habitat for species such as songbirds and pollinators. In collaboration with our partners, we set up bat meters in key areas to help determine which species of bats were present on the property. Wildlife inventories followed standard methods for select species (Government of Alberta 2013), and all wildlife observations were entered into the Alberta Fisheries and Wildlife Management Information System.

We also completed range, forest, and riparian assessments on two properties that were added last year and on one new property. Vegetation assessments followed the standard protocol developed by Alberta Public Lands (Adams et al. 2005), and riparian health assessments followed the protocols outlined by the Riparian Health Authority (Cows and Fish 2018a, 2018b). Vegetation data for crown land were entered into the Ecological Site Information System database. Results from these assessments along with those from the wildlife inventories were incorporated into a landholder specific HCS report that includes management recommendations and suggestions from implementing habitat enhancements that mutually benefit the ranching operation and wildlife habitat.

#### Results

In 2020/21, we completed inventories on two properties that were added last year, and one new property, totalling 25,420 acres (24,940 acres of private land and 480 acres of leased land). We also finalized the associated HCSs for two properties and completed Year 1 of the HCS for the third property.

We did not detect any sharp-tailed grouse on the one property we surveyed. However, we cannot assume grouse are not present without more extensive survey efforts. On this same property, we identified 58 different wildlife species, including noteworthy species like least flycatcher, broad-winged hawk, migrating whooping crane, hoary bat, eastern red bat, silver-haired bat, and little brown myotis. We also recorded between 22 and 28 flowering forbs and shrubs within each of the six pollinator study plots, and each plot contained between seven and nine early spring-flowering species. On these three properties, we also completed 16 grassland health assessments, 44 tame pasture health assessments, 58 forest health assessments, 222 visual plot assessments, and 126 riparian health assessments.

We focused most of our enhancement efforts around improving range and riparian health on properties, as roughly 1,050 acres of uplands and 253 acres of riparian were in an unhealthy state. We partnered with two existing producers to complete nine habitat enhancements as part of recommendations identified in HCSs. In collaboration with one producer, we installed a large bat house to provide an alternative roosting site for bats displaced from surrounding residential buildings. In partnership with a second producer, we purchased a portable watering unit, cattle oiler, and assisted with the construction of two new dugouts, all designed to help with cattle distribution on the property to avoid overgrazing and encourage grazing away from sensitive riparian areas that were classified as unhealthy or healthy but with problems. We also installed wildlife-friendly fencing around one of these two new dugouts to reduce pressure on riparian habitat, and trialed snow fencing around the dugouts to increase snow collection and improve subsequent runoff into these dugouts. We wrapped stucco wire around individual mature trees to protect them from beavers and encourage unwanted beavers to relocate by decreasing their food supply. We provide double-stranded smooth wire to replace barbed wire on the top and bottom of 3 miles of fence to help facilitate ungulate movement and reduce chance of entanglement. We

also purchased fence reflectors to be used on properties that have fences adjacent to wetlands to prevent waterfowl and other birds from colliding with the fence.

#### Conclusions

Riparian areas were identified as areas that could benefit from habitat enhancements and/or grazing management recommendations at both properties this year. These are high value areas for wildlife as they provide a place for wildlife to inhabit and travel more safely. They are also areas that cattle often frequent because of the availability of water, and in some situations, shade. This increased time livestock spend in riparian area can lead to overgrazing. Therefore, we recommended implementation of habitat enhancements and/or grazing management strategies such as portable watering units, cattle oilers, wildlife-friendly fencing, and deferred, rotational grazing to improve riparian health on these properties over time.

Long-term relationships built on mutual respect and trust between conservation groups and landowners are key to effective on-the-ground conservation efforts. Using a collaborative, voluntary approach allows all members of a team to provide ideas and discuss options. This allows for greater interactions and potential uptake by producers who can see win-win situations where both their operations and wildlife habitat can benefit. Using what we have learned during the first two years, we hope to continue building new partnerships in central and northern Alberta through the SHARP project and have already signed up two new producers for 2021. It is through these partnerships that we strive to foster mutually beneficial relationships with the agriculture community and improve wildlife habitat on this land base.

#### Communications

 Presented to the British Columbia Institute of Agrologists on our range and riparian health assessments methods and how we work with producers to implement enhancements in the MULTISAR and SHARP Programs. Brad Downey and Natasha Mackintosh, November 2020.

#### **Literature Cited**

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## Photos



ACA staff member, Natasha Mackintosh, identifying grass. Photo: Amanda Rezansoff



ACA staff member, Kris Kendell, conducting an early morning bird survey. Photo: Amanda Rezansoff



A large bat house provides an alternative roosting site for bats displaced from surrounding residential buildings. Photo: Corey Rasmussen