Alberta Conservation Association

2021/22 Project Summary Report

Project Name: Species Habitat Assessments and Ranching Partnership

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Partnerships

Alberta Community Bat Program
Alberta Environment and Parks
Alberta Fish & Game Association – Minister's Special Licence Program
ALUS Canada
Canadian Agricultural Partnership
Canadian Cattlemen's Association
Environment and Climate Change Canada – Habitat Stewardship Program
Landholders

Key Findings

- We continued to collaborate with two ranches from last year and three new ranches: totaling 18,903 acres.
- We focused most of our enhancements efforts around improving range and riparian health on ~367 acres of upland and 20 acres of riparian habitat.
- We partnered with three producers to complete eight habitat enhancements including planting wildflowers to increase abundance of pollinators, installing snow fencing to increase snow collection and improve subsequent runoff into a dugout, installing a

portable watering unit, and constructing two new fenced off dugouts to help with cattle distribution on the property and encourage grazing away from sensitive riparian areas.

Abstract

Maintaining wildlife habitat and sustainable grazing practices go hand in hand. A sustainable grazing system can provide multiple benefits to livestock and wildlife on rangelands and result in positive outcomes for ecosystem structure and function. Landowners have always played a vital role in the management of wildlife and the habitat they require.

Species Habitat Assessments and Ranching Partnership (SHARP) is a voluntary collaborative project designed to work with producers to maintain and develop feasible grazing practices that benefit both wildlife and their ranching operations 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 as well as wildlife inventories. We evaluate these results with the needs of target species and the long-term objectives of the landholder. This results in mutually agreed-on 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 16,096 acres) within the North Saskatchewan Watershed and enrolled three new ranches (total 2,807 acres) located in the North Saskatchewan Watershed, Red Deer Watershed, or Peace River Watershed. We identified 104 different wildlife species on these three new properties, including 16 species that are considered *Sensitive* provincially or higher under Alberta's General Status evaluation process. On these three properties, we also completed four grassland health assessments, six tame pasture health assessments, ten forest health assessments, 54 visual plot assessments, and 19 riparian health assessments.

We partnered with three producers to implement eight habitat enhancements as part of recommendations identified in Habitat Conservation Strategy reports. In collaboration with one producer, we planted wildflowers along the edges of a newly created eco-buffer shelterbelt to attract a greater diversity and abundance of pollinators such as bees, butterflies, moths, and

beetles. In partnership with a second producer, we trialed snow fencing around a dugout to increase snow collection and improve subsequent runoff into this dugout. We partnered with a third producer to implement a watering system, construction of new dugouts, and wildlife-friendly fencing around these two dugouts and one existing dugout, all designed to help with cattle distribution on the property to avoid overgrazing and encourage grazing away from sensitive riparian areas. 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

Maintaining wildlife habitat and sustainable grazing practices go hand in hand. A sustainable grazing system can provide multiple benefits to livestock and wildlife on rangelands and result in positive outcomes for ecosystem structure and function. Landowners have always played a vital role in the management of wildlife and the habitat they require.

The Species Habitat Assessments and Ranching Partnership (SHARP) project is a voluntary collaborative project designed to work with producers to maintain and develop feasible grazing management practices that benefit both wildlife and their ranching operations in central and northwestern Alberta. Alberta Conservation Association's (ACA) 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* (CRSB 2020). 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, the 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. Then, we develop a HCS after first completing in-depth range and riparian health assessments as well as wildlife inventories. We evaluate these results with the needs of target species like sharp-tailed grouse, ruffed grouse, or species groups like amphibians, waterfowl, and pollinators, 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 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 adjust the plan going forward. Another five-year stewardship agreement may be signed for continued implementation of the HCS.

Methods

In 2021/22, we completed formal surveys at select properties, while other surveys and species observations were opportunistic. In late April, we conducted ruffed and sharp-tailed grouse surveys to search for drumming logs (i.e., staging areas) and active leks at two new properties. In the spring, we completed audio and visual surveys for amphibians by walking along the edges of waterbodies at two new properties. We implemented a three-round survey at waterbodies at one new property to ensure most breeding waterfowl were observed. We completed point count surveys to measure the occupancy of birds and other wildlife at three new properties. To further supplement our observations, we set up an audio moth, an acoustic device, in a key area on one new property to record birds and amphibians that may have been missed during point counts. In collaboration with Alberta Community Bat Program, we monitored use, temperature, and humidity conditions of a bat condo installed last year. Wildlife inventories followed standard

methods for select species (GoA 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 three new properties. Vegetation assessments followed the standard protocol developed by Alberta Public Lands (Adams et al. 2016), and riparian health assessments followed the protocols outlined by the Alberta Riparian Habitat Management Society (Fitch et al. 2009, Ambrose et al. 2009). 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 and habitat enhancement recommendations. Providing this information to the landholder, and having open discussions on what is working, enables them to make informed decisions on mutually agreed-upon solutions that benefit both the ranching operation and wildlife habitat. This sets the stage for development of long-term relationships, and as enhancements are made, we develop a monitoring plan to assess their progress and effectiveness.

Results

In 2021/22, we completed wildlife inventories, range, forest, and riparian health assessments on three properties (2,807 acres) and developed the associated HCS reports. We identified 104 different wildlife species on these three new properties, including one species that is provincially considered *At Risk*, one species that is *May be at Risk*, and 14 species that are *Sensitive* under Alberta's General Status evaluation process. On these three properties, we also completed four grassland health assessments, six tame pasture health assessments, ten forest health assessments, 54 visual plot assessments, and 19 riparian health assessments. We confirmed the presence of bats occupying a condo that was installed at one property last year. Preliminary findings suggest the condo provides a wide thermal gradient that bats can select among.

We focused most of our enhancement efforts around improving range and riparian health on ~367 acres of upland and 20 acres of riparian habitat. We partnered with two existing and one new producer to complete eight habitat enhancements as part of recommendations identified in HCSs. In collaboration with one producer, we planted wildflowers along the edges of a newly created eco-buffer shelterbelt to attract a greater diversity and abundance of pollinators such as

bees, butterflies, moths, and beetles. In partnership with a second producer, we trialed snow fencing around a dugout to increase snow collection and improve subsequent runoff into this dugout. We partnered with a third producer to implement a watering unit, and assisted with the construction of two new dugouts and wildlife-friendly fencing around these two new dugouts and one existing dugout, all designed to help with cattle distribution on the property to avoid overgrazing and encourage grazing away from sensitive riparian areas.

Conclusions

Riparian areas were identified as areas that could benefit from habitat enhancements and/or grazing management recommendations at 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, 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 three 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 2022. 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

- The SHARP project was featured in an article in *Alberta Farmer Express*: "Using a conservation assessment as a springboard."
- The SHARP project was featured in *Let's Go Outdoors*: "Is wildlife and cattle ranching compatible?"

Literature Cited

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Photos

Photo 1. ACA staff member, Mike Ranger, conducting a waterfowl survey. Photo: Amanda Rezansoff

Photo 2. Wood frog eggs. Photo: Kris Kendell

Photo 3. ACA staff members—Joanne Melzer, Benjamin Misener, and Sue Peters—planting wildflowers at eco-buffer shelterbelt for pollinators. Photo: Corey Rasmussen