

Alberta Conservation Association
2022/23 Project Summary Report

Project Name: Species Habitat Assessments and Ranching Partnership

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Partnerships

Alberta Community Bat Program

Alberta Environment and Protected Areas

Alberta Fish & Game Association – Minister’s Special Licence Program

ALUS Canada

Canadian Cattle Association

Canadian Roundtable for Sustainable Beef

Environment and Climate Change Canada – Habitat Stewardship Program

Landholders

Key Findings

- We continued to collaborate with three ranches from last year and three new ranches, totalling 18,335 acres.
- We partnered with four producers to 1) plant additional wildflowers to increase abundance of pollinators, 2) replace existing fencing with wildlife friendly fencing, 3) install fence reflectors on fences to prevent waterfowl and other birds from colliding with the fence, 4) install two watering units and fence riparian areas to help with cattle distribution, improve water quality, and encourage grazing away from sensitive riparian areas, 5) install two cattle crossings to reduce cattle pressure on sensitive areas, and 6)

plant saskatoon seedlings along the perimeter of a dugout to contribute to riparian function.

Abstract

Species Habitat Assessments and Ranching Partnership (SHARP) is a voluntary, collaborative project designed to work with producers to maintain the unique grazing and ecosystem values on their property in central and northwestern Alberta. We develop habitat strategies after first completing 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 cost-shared enhancements are made, we develop a monitoring plan to assess their progress and effectiveness.

We continued to work on three ranches (total 16,575 acres) and enrolled three new ranches (total 1,760 acres). We identified 144 different wildlife species on these three new properties, including 30 species that are considered provincially *Sensitive* or higher under Alberta's General Status evaluation process. On these three properties, we also completed 19 range health assessments, 82 range visual plot assessments, 15 riparian health assessments, and two riparian visual plot assessments.

We partnered with four producers to implement eight habitat enhancements. In collaboration with one producer, we planted additional wildflowers along an eco-buffer shelterbelt to attract a greater diversity and abundance of pollinators. We also replaced barbed wire on the top and bottom wires with double-stranded smooth wire to help facilitate ungulate movement and reduce the chance of entanglement. In partnership with a second producer, we replaced existing fences with wildlife friendly fencing and installed fence reflectors on fences adjacent to wetlands to prevent waterfowl and other birds from colliding with the fence. We partnered with a third producer to implement two watering systems, and install wildlife friendly fencing around riparian areas, designed to help with cattle distribution on the property to avoid overgrazing, improve water quality, and encourage grazing away from sensitive riparian areas. We also partnered with a fourth producer to install a livestock crossing at two locations to reduce cattle pressure on sensitive riparian areas, and planted saskatoon seedlings along the perimeter of a

dugout to contribute to riparian function. 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 consists 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 an 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 approximately 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 2022/23, we completed formal surveys at three 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. In the spring, we completed daytime and nighttime audio and visual surveys for amphibians by listening and visually searching along the edges of waterbodies. We implemented a two-round survey at waterbodies to ensure most breeding waterfowl were observed. We completed point count surveys to measure the occupancy of birds and other wildlife. We set up two Autonomous Recording Units (ARU) in suitable habitat to detect the presence of bat species at each of the three properties. To further supplement our observations, we set up two ARUs in suitable habitat on one new property to detect owls. 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 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 (Ambrose et al. 2009, Fitch 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 2022/23, we completed wildlife inventories, range, forest, and riparian health assessments on three new properties (1,760 acres) and developed the associated HCS reports. We identified 144 different wildlife species on these three new properties, including 30 species that are provincially *Sensitive* or higher under Alberta's General Status evaluation process. On these three properties, we also completed two grassland health assessments, 13 tame pasture health assessments, four forest health assessments, 82 range visual plot assessments, 15 riparian health assessments, and two riparian visual plot assessments.

We focused most of our enhancement efforts around improving range and riparian health. We partnered with four producers to complete eight habitat enhancements. In collaboration with one producer, some wildflowers planted 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 suffered mortality last year because of drought and ungulate trampling. As a result, we supplemented the planting area with additional wildflowers this year. We also replaced barbed wire on the top and bottom wires with double-stranded smooth wire to help facilitate ungulate movement and reduce the chance of entanglement. In partnership with a second producer, we replaced existing fences in need of repair with wildlife friendly fencing and installed fence reflectors on fences adjacent to wetlands to prevent waterfowl and other birds from colliding with the fence. We partnered with a third producer to implement two watering units, and install wildlife friendly fencing around riparian areas, designed to help with cattle distribution on the property to avoid overgrazing, improve water quality, and encourage grazing away from sensitive riparian areas. We also partnered with a fourth producer to install a livestock crossing at

two locations to reduce cattle pressure on sensitive riparian areas, and plant saskatoon seedlings along the perimeter of a dugout to contribute to riparian function.

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 areas 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. To date, SHARP has partnered with eight producers, and we hope to continue building new partnerships in central and northwestern Alberta. 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

Articles

- *Conservation Magazine* Spring/Summer 2022: “Look SHARP. Stewardship in Action.”
- *International Mountain Section Society for Range Management* Fall 2022 Newsletter: “Let’s talk SHARP! Connecting & Collaborating with Producers.”

Oral presentations

- St. Albert Fish & Game Association, January 10, 2023.

Poster presentations

- Prairie Conservation Endangered Species Conference, Ranching Viability and Habitat Stewardship on Alberta’s Northern Grasslands and Forested Rangelands: Introducing SHARP, February 21-23, 2023.

Literature Cited

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Photos



Photo 1. ACA staff member, Kris Kendell, conducting an early morning songbird point count survey. Photo: Amanda Rezansoff



Photo 2. Set up of an Autonomous Recording Unit to detect the presence of bat species. Photo: Kris Kendell



Photo 3. Riparian areas are vital as they serve many functions such as protecting water quality, reducing erosion, flood control, and providing wildlife with shelter, refuge from predators, and protected movement corridors. Photo: Amanda Rezanoff