Alberta Conservation Association 2022/23 Project Summary Report

Project Name: MULTISAR – Milk River

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Partnerships

Alberta Beef Producers

Alberta Environment and Protected Areas

Canadian Cattle Association

Canadian Roundtable for Sustainable Beef

Cows and Fish – Alberta Riparian Habitat Management Society

Environment and Climate Change Canada

Landholders

Milk River Watershed Council Canada

Prairie Conservation Forum

Key Findings

- We collaborated with ranchers to maintain current relationships, completed a Habitat
 Conservation Strategy on a newly acquired Alberta Conservation Association property
 (158 acres) and another on 1,890 acres of lease land for an existing MULTISAR
 participant's ranch.
- We partnered with three landholders to improve water availability by cost sharing four portable watering units, deepening 23 dugouts, and purchasing two solar pumps to improve the functionality of existing wells and alleviate cattle pressure on natural

wetlands. We collaborated with another landowner to assist with the upgrade of one mile of existing fenceline to wildlife-friendly fence, as well as installing half a mile of new fenceline with Clipex® posts to wildlife-friendly specifications to allow grazing on a site previously reseeded with native grasses.

• We worked with a contractor to collect 150 pounds of silver sagebrush seed in late November and will use this to reseed future sites.

Abstract

We focus on multi-species conservation at the landscape level that promotes stewardship through voluntary participation of landholders on both Crown and private lands. In 2022, we worked collaboratively with multiple partners to maintain, increase, and improve habitat for species at risk within the greater sage-grouse range of Alberta. This partnership involves habitat assessments, development of voluntary habitat conservation plans, and subsequent implementation and monitoring of on-the-ground enhancements. We completed a Habitat Conservation Strategy (HCS) for 1,890 acres of lease land on an existing MULTISAR participant's ranch and one newly acquired Alberta Conservation Association (ACA) property of 158 acres along the Milk River Natural Area. The HCS included 30 detailed range transects, eight range health assessments, three visual plots, five riparian assessments, and recorded 461 wildlife observations. We also conducted wildlife surveys and made an additional 328 wildlife observations on one new landowner's property, which is scheduled to have range surveys and an HCS completed in 2023/24. Twenty-nine different species at risk were recorded, including five listed as Endangered/At Risk, seven listed as Threatened/May Be At Risk, and 17 listed as Special Concern/Sensitive. We also collaborated with three landowners to install four portable watering units and two solar pumps for existing wells and refurbished 23 dugouts. These water developments are designed to improve grazing distribution and habitat management by alleviating cattle pressure in sensitive riparian areas. On a separate property, we replaced one mile of fenceline with wildlife-friendly fence and installed half a mile of new wildlife-friendly fence with Clipex® posts so a site previously reseeded with native grasses can now be grazed separate from an adjoining hay field. We will monitor this Clipex fenceline to assess if these small diameter posts eliminate raptors from perching in the area, decreasing risk to sage-grouse. We worked with a contractor to collect 150 pounds of silver sagebrush seed in late November

and will use this to reseed future sites. Our interaction with the ranching community in this drainage continues to grow and, moving forward, we anticipate taking on additional operators as well as seeking additional enhancements on the dozens of existing ranches that we are currently engaged with.

Introduction

We focus on multi-species conservation at the landscape level that promotes stewardship through voluntary participation of landholders on both Crown and private lands. In 2022, our focus continued to be on the southeast corner of Alberta, concentrating on critical greater sage-grouse habitat and adjacent lands. We work collaboratively with multiple partners to maintain, increase, and improve habitat for species at risk (SAR) within the greater sage-grouse range of Alberta. This partnership involves habitat assessments, development of voluntary Habitat Conservation Strategies (HCS), and subsequent implementation and monitoring of on-the-ground enhancements. Our primary goal is to collaboratively develop plans to benefit greater sage-grouse as well as other grassland-associated species that fall within the greater sage-grouse range in Alberta. These plans are then implemented through habitat enhancement activities that benefit both the ranching operation and wildlife.

An HCS is a five-year extendable, voluntary plan that identifies beneficial management practices and habitat improvement recommendations to encourage sustainable ranching operations. First, an initial Letter of Intent is signed that outlines the roles of both Alberta Conservation Association (ACA) and the landowner and clarifies that the landowner allows reasonable public access for recreation on their ranch. Then, we develop a plan after first completing in-depth wildlife, fish, and habitat 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. 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, and to document landowner views across years. This questionnaire helps us readjust the plan going forward and can show change over time with

landowner beliefs on SAR. Another five-year stewardship agreement may be signed for continued implementation of the strategy.

Methods

We completed point-count surveys on 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 looking for amphibians (Kendell 2002). We also set up bat meters and song meters in key areas to identify bats and record birds and amphibians, respectively, that may have been missed during point counts. Properties with badlands habitat were surveyed in late summer/fall for short-horned lizards and snake hibernacula. Sand dune habitat was also surveyed for signs of kangaroo rat or other dune specialist species, including rare plants like prairie spiderwort. Trail cameras were set up in sand dunes to record the small mammal community.

We completed range and riparian health assessments (Adams et al. 2005) and incorporated these results along with those from the wildlife inventories into an HCS specific to each landowner. We also monitored native grass restoration projects completed in previous years. These data will help determine if restoration projects are having the desired effect on wildlife habitat and are progressing toward what is expected in a true native grassland (Jones and Landry-DeBoer 2012).

Results

We focused our efforts on completing HCS's for 1,890 acres of lease land on an existing MULTISAR participant's ranch (private land was assessed in 2022) and one newly acquired ACA property of 158 acres along the Milk River Natural Area. We completed 30 detailed range transects, eight range health assessments, three visual plots, five riparian assessments, and recorded 461 wildlife observations. Wildlife surveys, which included an additional 328 wildlife observations, were also conducted on 4,512 acres of one new landowner's property but range surveys were not completed to the full extent by the contractor and preparation of the HCS has now been pushed back to 2023. Twenty-nine different SAR were recorded, including five *Endangered/At Risk* species, seven *Threatened/May Be At Risk* species, and 17 *Special Concern/Sensitive* species.

We purchased four portable watering units, two solar pumps to improve the functionality of existing wells, and deepened 24 dugouts. The enhancement of these 30 water sources will improve grazing and habitat management, allow better retention of water for longer periods, and help alleviate cattle pressure on sensitive riparian areas. We replaced one mile of old fenceline with wildlife-friendly fence and installed half a mile of new wildlife-friendly fence with Clipex® posts so a site previously reseeded with native grasses can now be grazed separate from the hayland. We will monitor the Clipex® fenceline in upcoming years to see if the smaller surface area of these posts reduces raptor perch sites in sage-grouse critical habitat in comparison to conventional fence posts. These posts also facilitate the movement of pronghorn and other wildlife as the top and bottom wires can be raised or lowered as needed when the pasture is not in use by simply unclipping and clipping the wires to different levels. Fence reflectors will be added to the top wire this spring. A contractor was hired to collect silver sagebrush (Artemisia cana) seed and, with the assistance of ACA staff, approximately 150 pounds of seed was gathered during one day of seed collection in late November. This silver sagebrush seed will be used to enhance greater sage-grouse habitat on existing native grass reseed projects, as well as new reseed projects completed by ACA in upcoming years.

With COVID-19 restrictions finally lifted, we were able to meet with landowners and stakeholders in person throughout the year to strengthen and maintain these important relationships. We also continued to manage and monitor native grassland restoration projects previously implemented in the greater sage-grouse range.

Conclusions

Long-term relationships built on mutual respect and trust between conservation groups and landowners have allowed us to collaborate with producers on habitat enhancements. We are also pleased to see positive results from our long-term efforts with converting cropland back to grassland and the additional habitat created for grassland birds and other species. These improvements not only benefit habitat for SAR like greater sage-grouse and other grassland birds, but also provide essential resources and habitat for upland game birds and ungulates that are highly valued by recreational users who access these properties.

Communications

Brad Downey: Silver Sage Conservation Site Native Grass Restoration. Presentation at Grassland Restoration Forum. November 17, 2022

Literature Cited

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- Jones, P. and J. Landry-DeBoer. 2012. MULTISAR's Monitoring, Enhancement, and Evaluation Program. Alberta Conservation Association Internal Report, Lethbridge, Alberta, Canada.
- Kendell, K. 2002. *Survey Protocol for the Northern Leopard Frog.* Alberta Sustainable Resource Development, Fish & Wildlife Division, Resource Status and Assessment Branch. Alberta Species at Risk Report No. 43, Edmonton, AB. 30 pp.
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Photos



Photo 1. Portable watering unit purchased in 2021 and now installed and functioning on one of the properties assessed in 2022. Photo: Phil Rose



Photo 2. Newly acquired ACA property along the Milk River Natural Area. Photo: Phil Rose



Photo 3. Clipex fence. Photo: Tyler Johns



Photo 4. ACA staff collecting silver sagebrush seed. Photo: Brad Downey