

2022 Antelope Creek Conservation Area



Prepared by;

Neal Wilson

Manager

Antelope Creek Ranch

Antelope Creek Ranch

2022 Annual Report

What is the Antelope Creek Ranch?

The Antelope Creek Ranch (ACR) was established in 1986 through a multi-agency partnership. Alberta Fish and Wildlife Division, Wildlife Habitat Canada, Ducks Unlimited Canada and the Alberta Fish and Game Association were the purchasing partners of the Antelope Creek Ranch. ACR is in southern Alberta, west of Brooks. The land base is managed to provide productive plant cover for livestock and wildlife, and adequate nest cover for waterfowl on mixed grass prairie and wetland margins. Crested wheatgrass, irrigated pasture and native rangeland are incorporated into a complementary, deferred-rotation grazing system to achieve the management goals.

The Antelope Creek Ranch serves as a demonstration project for producers and resource managers in the mixed grass prairie region. ACR research focuses on sustainable rangeland management through specialized grazing systems to benefit both livestock and wildlife. ACR has also been a valuable research venue assisting several M.Sc. thesis research projects from the University of Alberta, University of Lethbridge and the University of Regina. In addition, ACR supports independent studies concerning wetlands, industrial reclamation, and tame grass production.

Research at ACR consists of a co-operative, multi-disciplinary monitoring program to document changes in range vegetation and range condition, forage production and utilization, litter reserves, cattle performance, soil chemical and physical characteristics, and changes in relative diversity of wildlife.

Vision

To improve the health of Alberta's prairie ecosystems while maintaining the benefits which society derives from its use of these landscapes.

Mission

Use the ACR as a demonstrative and educational tool to show land users and resource managers how to manage and integrate agricultural, recreational and industrial use of the prairie landscape while maintaining its health and the integrity of its ecosystems.

ACR Management

Antelope Creek Ranch is managed by two very different and distinct committees. They are the management committee and the technical committee. The committees consist of members from Alberta Fish and Game Association (AFGA), Ducks Unlimited Canada (DUC), Alberta Environment and Parks (AEP) and Wildlife Habitat Canada (WHC).

The management committee is responsible for managing the financial aspect of the ranch and setting policy of overall management. The Technical committee is responsible for the management of the habitat and anything that applies to the ground work of the ranch. This is all implemented with the grass roots contributions from the ranch manager.

The ranch manager works closely with the technical committee to manage the day to day operation of the ranch with consideration for cattle and range management, wildlife, oil and gas development, as well as monitoring recreational activities on the ranch.

The People and Partners of ACR

Management Committee

Craig Johnson – Chairperson, EAP
Kelly Carter - Vice Chairperson, AFGA
Duane Radford – AFGA representative
Wayne Lowry – ACR Finance Chair
Thorsten Hebben– Ducks Unlimited Canada representative
Pierre Vary– Wildlife Habitat Canada representative

Technical Committee

Joel Nicholson – Chairperson, EAP, Fish and Wildlife Division
Colin Kure – AFGA representative
Ross Adams – Public Lands Division representative
Carson McCormick- Ducks Unlimited Canada

Ranch Manager

Neal Wilson

Ranch Extension

2022 started out with Neal being elected to the position of Chair for the Prairie Conservation Forum (PCF) for his second year. The ranch involvement in the PCF allows us the opportunity to showcase what is happening at the ranch to a wider audience as well network with organizations and individuals in the broader conservation community. Being on the Board of



Directors this year required attending quite a few conference calls and virtual meetings to be a liaison between the PCF and the Prairie and Endangered Species Conference committee that was organizing the conference for February 2023. As well we attended the fall meeting and tour at the Waldon Ranch in September.

September brought the regular learning activities back to the ranch with the lessening of the covid situations, so the Lethbridge College was out with approximately 50 students for a half day of learning the basics of range management and how wildlife, agriculture, and industry are interconnected on a working ranch. The Grasslands Restoration Forum was out to hold their Range Health Training Day with about 23 people attending on a fairly nice day.



In November I gave a virtual presentation to the Transboundary Workshop in Medicine Hat on the targeted grazing we have been doing on the ranch over the past few years and what the affects are on the vegetation that we have been measuring.

Hunting and Recreational Users

Hunting on the ranch occurs all year round. Throughout the winter of 2022 there was a trapline on the ranch to snare coyotes for the 4th year in a row.

In the spring the snow goose hunt brought quite a few hunters out to hunt the geese that were staging on Lake San Francisco. The hunters had a few good hunts on the lake as well as many hunts out in the fields surrounding the ranch.



Once again, the ground squirrel hunting was plentiful but there were many badgers that seemed to grow and work on the ground squirrel population. When the fall waterfowl hunt started there were many hunters out again and the hunting was pretty good with the lake staying open until mid-November. Pheasant season was very busy with typically 7 vehicles out hunting everyday until the snow blew in around Remembrance Day which closed the west road of the ranch. A few of the pheasants made it up to the yard and were able to overwinter in the feed yard.

Oil and Gas

Oil and gas activity on the ranch were mainly maintenance this year with the leases. There was another company Prospera Energy that purchased an existing gas well from Torxen Energy and then drilled it to have an oil well.

There was no reclamation activity on the ranch this year. Although there were 3 reclamation certificates issued.

Grazing



Figure 1 Dry prairie at the end of May 2022.

2022's grazing year was an interesting year in the respect we were coming off a very dry year in 2021 with little snow over the winter and no spring rain before the lease cows came into the ranch. This left the ranch with adequate grass from 2021 although we were hoping for rain. By the end of May, we still had not received rain and were starting to plan how to deal with another year without moisture. The first week of June it started to rain, and we received adequate moisture to have a decent grass year by the end of July. We decided to decrease the stocking rate in 2022 to have an equivalent of 260 cow calf pairs from mid-May to Mid-October. We did this by bringing in 210 pair to graze in May and then bringing in another 70 pair at the end of July.

These photos are from the same area with figure 1 taken at the end of May and figure 2 taken on July 10th it is amazing how some rain can change the face of the prairie. The graph below shows that 2022 had 248mm or 9.74 inches of moisture which is 112% of the long-term growing season precipitation.



Figure 2 Same area as Fig 1 but in July after rains.

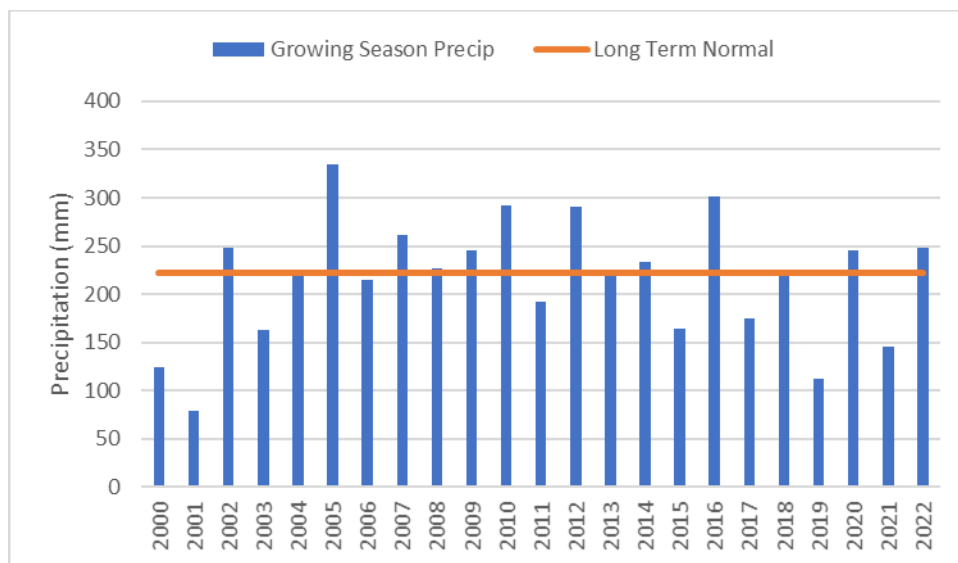


Table 1 Growing season precipitation in mm for Antelope Creek Ranch.

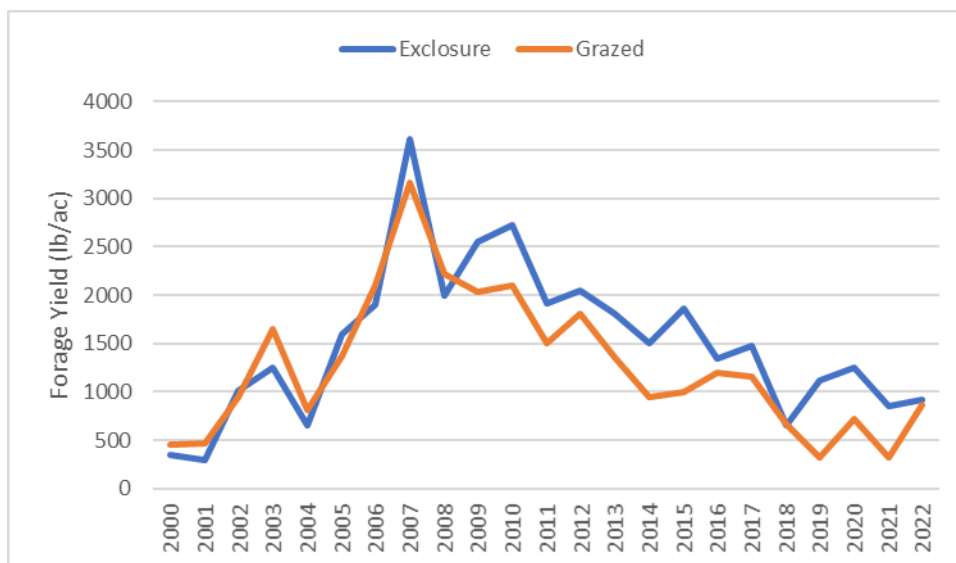


Table 2 Field 2 Forage production in lbs/ac for both enclosure and grazed areas.

The grazing plan on the ranch through the years has changed from the initial rest-rotation where one of the native fields was given a full year's rest before being grazed, to a deferred rest rotation where grazing of the native fields was held off until after seed set and the season of use was changed each year. Now we use a modified rest rotation where we still try to hold off going into the native fields until later in the summer, but now we go into those fields early as well with the idea to use the crested

wheatgrass (cwg) on the pipelines before the native grasses green up and can be set back by grazing pressure. The reasoning behind this is to hopefully weaken the cwg and halt its expansion into the native fields.

Each of the large native fields are approximately 1200 acres in size and all contain a grazing enclosure that prohibits grazing in that area permanently, as well as five roving grass cages to allow measurement of the production in the areas which were grazed the previous year. In 2022 the forage yield in field 2 was 921 and 862 lbs/ac for the enclosure and the grazed areas respectively while the litter levels were 317 and 48 lbs/ac respectively. Field 4 forage production for the enclosure and the grazed areas was 1173 and 1695 lbs/ac, and the litter levels were 1321 and 44 lbs/ac respectively. These values with the historical clipping data can be found in the tables 2 through 4.

The low litter values in both native fields can be attributed to the low forage production from the 2021 growing season and it will be interesting to see what the litter levels are after the 2023 grazing season as the litter levels are dependant on the previous years forage production.

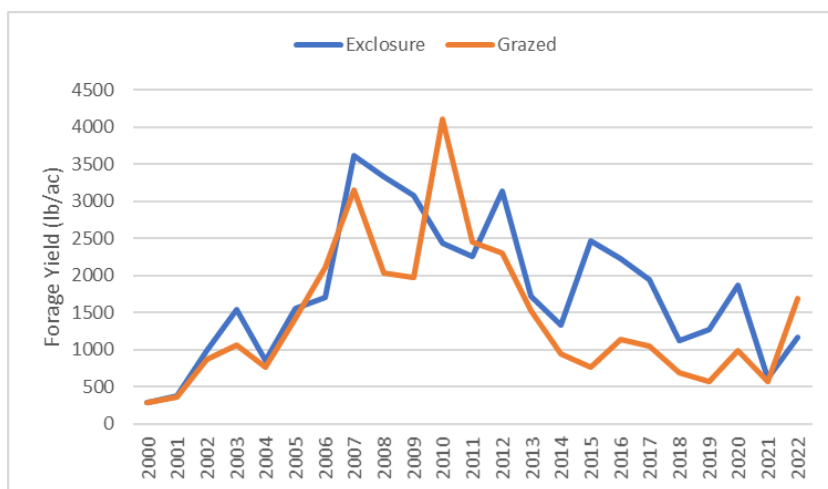


Table 3 Field 4 Forage production in lbs/ac for both enclosure and grazed areas.

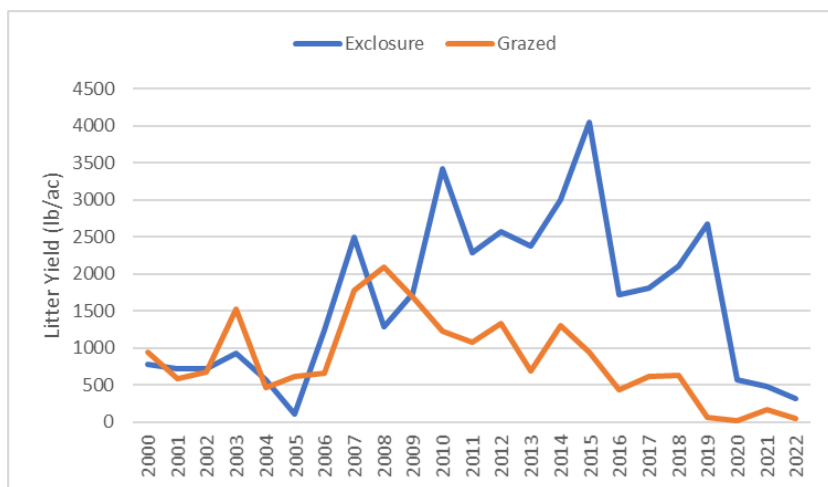


Table 4 Field 2 litter yield in lbs/ac

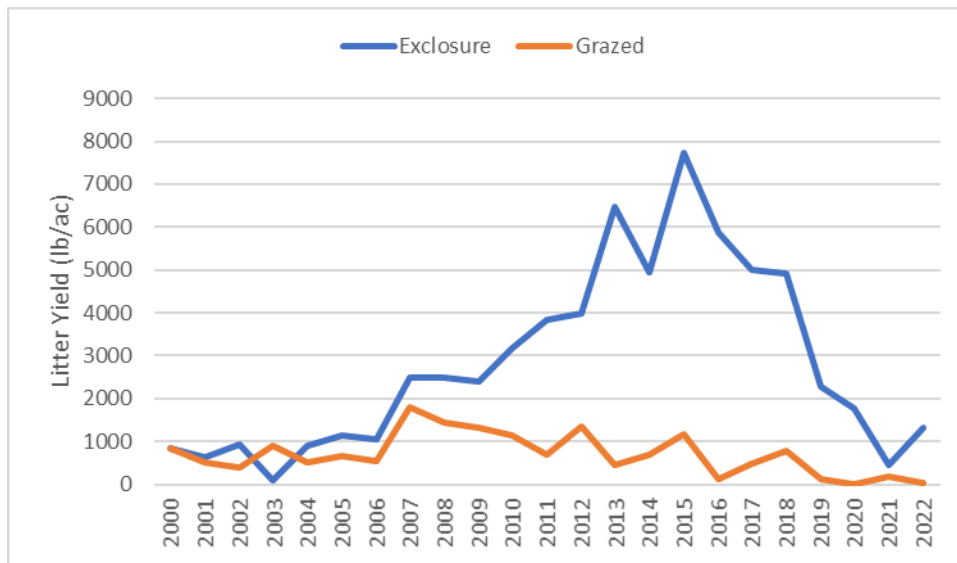


Table 5 Field 4 litter yield in lbs/ac.

Contact Information

Neal Wilson

P.O. Box 2011 Brooks, AB

T1R 1C7

Phone: 1 403 793 2544, cell (403) 427-4018

Email: antelopecreekbranch@eidnet.org