

**Alberta Conservation Association
2021/22 Project Summary Report**

Project Name: Waterfowl Crop Damage Prevention Program

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Partnerships

Alberta Environment and Parks

Athabasca County

Big Lakes County

Camrose County

Clearhills County

County of Grande Prairie

County of Minburn

County of Northern Lights

County of Paintearth

County of St. Paul

County of Stettler

County of Two Hills

County of Vermilion River

Flagstaff County

Lac La Biche County

Lacombe County

Mackenzie County

Municipal District of Bonnyville

Municipal District of Fairview

Municipal District of Greenview

Municipal District of Peace

Municipal District of Provost

Municipal District of Smoky River

Municipal District of Spirit River

Northern Sunrise County

Ponoka County

Saddle Hills County

Smoky Lake County

Key Findings

- We offered additional scare cannons to participating counties and municipal districts (MDs) for use in their equipment lending programs; however, no counties accepted cannons.
- We communicated program delivery methods to district Fish and Wildlife offices, Ducks Unlimited Canada offices, and Alberta Agriculture offices and provided them with a list of participating counties and MDs.

Abstract

The intention of the Waterfowl Crop Damage Prevention Program is to assist agricultural producers in reducing damage to crops caused by waterfowl during fall migration. Eight years ago, we began offering scare cannons free of charge to counties and municipal districts, enabling them to incorporate this equipment into their existing equipment rental programs. This has greatly improved efficiency by placing cannons much closer to end users. In 2021/22, we continued to work with producers as well as counties and municipal districts to ensure that scare cannons were available where needed for waterfowl crop damage prevention. We provided locations where scare cannons were available for loan as well as laying out strategies for avoiding crop damage on our website.

Introduction

Alberta is a major nesting and staging area for several species of waterfowl, including ducks, geese, and cranes (Salt and Salt 1976). Waterfowl are opportunistic feeders, and their fall migration tends to coincide with the harvest season for cereal grains in Alberta, creating the potential for waterfowl damage to unharvested grain crops. We have historically assisted producers in reducing damage to crops by waterfowl during fall migration through our Waterfowl Crop Damage Prevention Program (WCDPP).

In reviewing data from past years, we have seen a decrease in producers using our service and indeed, only a small number of grain producers experience waterfowl damage on a regular basis. Weather can slow harvest chronology, which in turn may affect the degree of waterfowl crop damage in a given year. Poor harvest conditions (i.e., wet, cool periods) may increase the

potential for crops to remain in the swath and therefore be more vulnerable to waterfowl depredation (Arsenault 1996). However, harvest techniques and equipment have improved over time, reducing the exposure time of swathes in the field. There has also been a substantial shift towards straight-cut harvest, which eliminates swathing altogether. Most producers now have very few or no problems with waterfowl damage.

In past years, we have made scare cannons available for producers to borrow free through a network of distribution centres during September and October. This approach required a significant effort (staff time and budget) every year regardless of cannon use. To increase efficiency, we approached county and municipal district (MD) Agriculture Field Services offices in areas where we have operated scare cannon distribution centres in the past and offered scare cannons free of charge for them to incorporate into their existing equipment lending programs. Most of the counties and MDs we approached were receptive and have taken on cannons. The scare cannons are now more readily available to producers to borrow year-round from nearby counties and MDs.

Methods

We provide county/MDs with reliable scaring equipment when required. Producers are also provided with waterfowl crop damage prevention information through direct contact (i.e., in person, phone, email) or through our website. We communicated program delivery methods to district Fish and Wildlife offices, Ducks Unlimited Canada offices, and Alberta Agriculture offices and provided them with a list of participating counties/MDs. Producers experiencing waterfowl damage issues are now asked to contact their local Agricultural Service Board (ASB) or visit Alberta Conservation Association's (ACA) website for information.

Results

Twenty-six counties and MDs are providing scare cannons to producers through their equipment lending programs. No counties/MDs requested cannons from ACA in 2021/22. Different from previous years, we were not approached by any landowners looking to purchase cannons from ACA in 2021/22.

Conclusions

Producers in Alberta had limited issues harvesting crops in 2021 because of the prolonged summer/fall drought. We did not receive any direct requests for scare cannons during the 2021/22 fiscal year as a result.

Providing producers with easy access to scare cannons through local lending outlets and direct purchase enables them to prevent waterfowl damage more effectively. We will continue to sell our older model cannons to interested producers until we have exhausted our inventory. Meeting the needs of those producers who only require scaring equipment occasionally through their local ASB equipment lending program makes economic and logistical sense. Most ASBs have well-established equipment lending programs and were very receptive to including scare cannons in their inventory. Producers are in communication with their local government including the ASB several times throughout the year, making promotion of scare cannon availability efficient and easy.

Scare cannons are available for year-round use through the ASBs. This allows producers to include scare cannons in strategies to prevent other wildlife damage, including ungulates, and spring goose damage to emerging crops, which is becoming more prevalent in many parts of the province.

Communications

- Waterfowl crop damage prevention strategies and location of counties and MDs that have scare cannons available to borrow were provided on the ACA website: <https://www.ab-conservation.com/programs/landowner-compensation-and-damage-prevention/#1>
- District Fish and Wildlife offices, Ducks Unlimited Canada, and Alberta Agriculture offices were informed of our program change and were provided with a list of participating counties/MDs.

Literature Cited

- Arsenault, A.A. 1996. *Biological and Economic Evaluation of Waterfowl Crop Damage Prevention Efforts in the Little Quill /Foam Lakes Area*. Wildlife Technical Report 96-1. Saskatchewan Environment and Resource Management Wildlife Branch. Saskatoon, Saskatchewan, Canada. 44 pp.
- Salt, W.R. and J.R. Salt. 1976. *The Birds of Alberta*. Hurtig Publishers. Edmonton, Alberta, Canada. 498 pp.

Photos



Photo 1. Canada geese flying over and landing in a stubble field. Photo: Velma Hudson



Photo 2. Propane scare cannon deployed in a stubble field. Photo: Ken Wright