

**Alberta Conservation Association  
2019/20 Project Summary Report**

**Project Name:** Waterfowl Crop Damage Prevention Program

**Wildlife Program Manager:** Doug Manzer

**Project Leader:** Ken Wright

**Primary ACA staff on project:**

Ken Wright

**Partnerships**

Alberta Environment and Parks

County of Athabasca

County of Camrose

County of Clearhills

County of Flagstaff

County of Grande Prairie

County of Lac La Biche

County of Lacombe

County of McKenzie

County of Minburn

County of Northern Lights

County of Northern Sunrise

County of Paintearth

County of Ponoka

County of Smoky Lake

County of St. Paul

County of Stettler

County of Two Hills

County of Vermillion River

MD of Big Lakes

MD of Bonnyville

MD of Fairview

MD of Greenview

MD of Peace

MD of Provost

MD of Smoky River

MD of Spirit River

**Key Findings**

- We sold 18 scare cannons to farmers to help them prevent crop damage on their farms.
- We offered additional scare cannons to participating counties and municipal districts for use in their equipment lending programs. Three counties accepted 10 cannons.
- We communicated program delivery methods to District Fish and Wildlife offices, Ducks Unlimited Canada offices, and Alberta Agriculture offices and provided a list of participating Counties/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. Seven years ago, we began offering scare cannons free of charge to Counties and Municipal Districts, enabling them to incorporate this equipment into their equipment rental programs. This has greatly improved efficiency, placing cannons much closer to end users. In 2019/20, 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 updated the ACA website to identify where scare cannons are available for loan and suggested prevention strategies to reduce crop damage.

## **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. Alberta Conservation Association (ACA) has 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've 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 (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 toward 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 hours 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 equally or more available to producers since they are available to borrow year-round from the 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 (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 a list of participating Counties/MDs. Producers experiencing waterfowl damage issues are now asked to contact their local Agriculture Service Board or visit the ACA website for information.

## **Results**

Twenty-six counties and MDs are providing scare cannons to producers through their equipment lending programs. Three participating counties requested additional cannons in 2019/20 and picked up their cannons from Peace River and St. Paul. Eighteen cannons were sold to producers through our Peace River, Red Deer, and St. Paul offices. All producers who contacted us were satisfied with the solutions (borrowing scare cannons from their local municipal government or purchasing used cannons) offered to them.

## **Conclusions**

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 Agricultural Service Board (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 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 which have scare cannons available to borrow were provided on the ACA website at <http://www.ab-conservation.com/go/default/index.cfm/programs/wildlife/wildlife-projects/crop-damage-control/overview/>.

- District Fish and Wildlife offices, Ducks Unlimited Canada offices, and Alberta Agriculture offices were informed of our program change and 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.

### **Photo**



Propane cannon in field. Photo: Ken Wright