

Alberta Waterfowl Crop Damage Prevention Program, 2011

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Alberta Waterfowl Crop Damage Prevention Program, 2011

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EXECUTIVE SUMMARY

The Waterfowl Crop Damage Prevention Program (WCDPP) provides assistance to Alberta grain producers in reducing or preventing damage to cereal crops caused by waterfowl during the fall migration period. Damage prevention is accomplished through, 1) the provision of waterfowl scare cannons available for producers to borrow free of charge, 2) waterfowl scaring advice available through print media, internet and WCDPP coordinators, and 3) the optional sharing of contact information with waterfowl hunters. Alberta Conservation Association (ACA), and Alberta Sustainable Resource Development collaboratively plan the WCDPP, while ACA delivers the program.

Scare cannons were available for producers to borrow at 42 locations throughout the white zone (agricultural region) of Alberta. Scare cannon distribution centres operated for an average of 83 days, with 181 cannons loaned to 74 producers, for use on at least 123 different quarter sections of land. We found 34% of producers who borrowed scare cannons allowed their contact information to be provided to waterfowl hunters. Scare cannon request information was available through weekly updates on the WCDPP web page. The WCDPP web page was viewed 290 times and had 203 unique visits from 1 August to 31 December 2011. We received requests from five waterfowl hunters looking for hunting opportunities as a result of the WCDPP web page.

Key words: Alberta, waterfowl, crop damage prevention, cereal grain, ducks, geese, cranes.

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1.0 INTRODUCTION

1.1 General introduction

Alberta is a major nesting and staging area for many species of waterfowl, including ducks, geese and cranes (Salt and Salt 1976; Poston et al. 1990; Federation of Alberta Naturalists 1992). Waterfowl are opportunistic feeders and their fall migration period tends to coincide with the harvest season for cereal grains in Alberta (Federation of Alberta Naturalists 1992); thereby, creating the potential for waterfowl damage to unharvested grain crops. Most grain producers tolerate a certain amount of waterfowl damage to crops; however, when damage becomes severe or recurrent, producers may become intolerant of waterfowl and the damage they cause (Renewable Resources Consulting Services 1969). Consequently, producers may become less receptive to programs aimed at enhancing or protecting waterfowl and their habitat. To address potential concerns over damage from waterfowl, compensation and prevention programs have been functioning in the province of Alberta since 1961.

1.2 Waterfowl crop damage compensation

In 1961, the Government of Alberta established the Wildlife Damage Fund, funded by hunting license fees, to provide compensation for crop damage caused by waterfowl to Alberta grain producers, without the payment of crop insurance premiums. Initially, the compensation payable was the lesser of \$15/acre or 50% of the value of the lost crop. In 1973, the rate was increased to the lesser of \$25/acre or 75% of the value of the lost crop. The rate was adjusted again in 1978, to the lesser of \$50/acre or 75% of the value of the lost crop. From 1983 – 1990, the per acre rate was adjusted annually, while the maximum payment remained at 75% of the value of the lost crop. The signing of the North American Waterfowl Management Plan in the late 1980s increased the need for an improved compensation program. Discussions between various governments, producers, and crop insurance agencies culminated in the development of a compensation program that paid a flat rate of 80% of the value of the crops lost to waterfowl damage from 1991 – 1999. In 2000, waterfowl damage compensation was changed to the present rate of 100% of the commercial value of the damaged crop (Ken Lungle, Alberta Sustainable Resource Development (ASRD), pers. comm.).

1.3 Waterfowl crop damage prevention

In 1970, an experimental waterfowl damage prevention program was initiated by the Government of Alberta in the Grande Prairie area (Burgess 1973). The purpose of this program was to determine if a waterfowl scaring program, in combination with the provision of feeding sites would prevent or minimize crop damage. Ultimately, the goal was to determine whether the prevention program would be economically efficient, by preventing crop damage instead of providing compensation payments after the damage occurred. With the success of the experimental program, a waterfowl damage prevention program was expanded into areas of the province where crop losses had been both severe and recurrent.

Currently, the Waterfowl Crop Damage Prevention Program (WCDPP) delivers damage prevention assistance throughout the white zone (agricultural region) of the province. Mallards (*Anas platyrhynchos*), northern pintails (*Anas acuta*), Canada geese (*Branta canadensis*), white-fronted geese (*Anser albifrons*), snow geese (*Chen caerulescens*), and sandhill cranes (*Grus canadensis*) are the primary waterfowl species targeted by the WCDPP.

Alberta Conservation Association (ACA) and ASRD collaboratively plan the WCDPP. Since 1997, ACA has delivered the WCDPP. In 2011, the WCDPP provided, 1) waterfowl scare cannons available for producers to borrow free of charge, 2) waterfowl scaring advice available through print media, internet and WCDPP coordinators, and 3) the optional sharing of contact information with waterfowl hunters.

2.0 STUDY AREA

The WCDPP is delivered throughout the white zone (agricultural region) of Alberta (Figure 1).

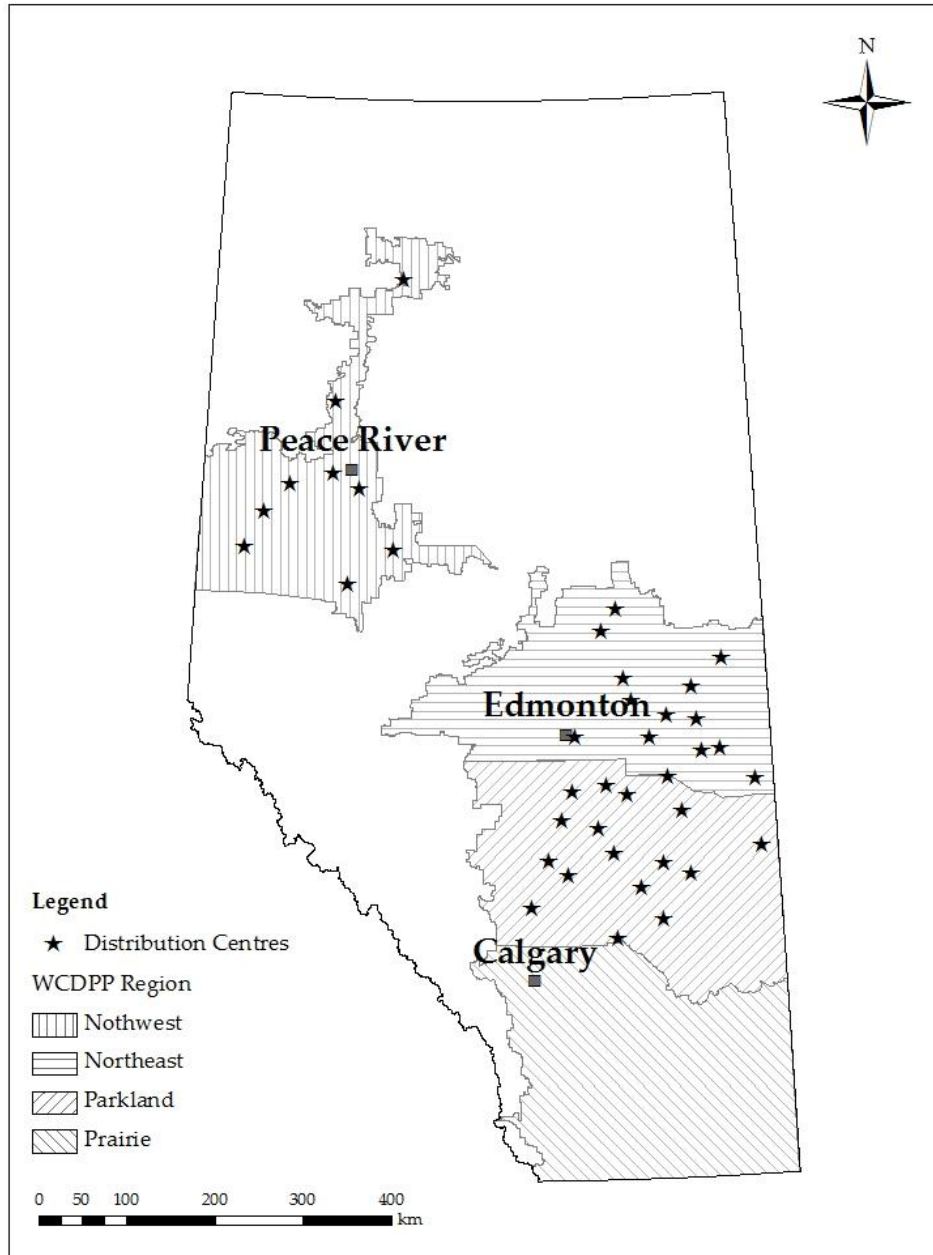


Figure 1. Map of WCDPP 2011 operational areas showing regions and distribution centre locations across Alberta.

3.0 MATERIALS AND METHODS

3.1 Regional organization

Four regional coordinators, one for each of the Northwest, Northeast, Parkland, and Prairie regions (Figure 1), deliver the WCDPP under the direction of a provincial coordinator.

3.2 Scare cannon distribution centres

Scare cannon distribution centres are located in local businesses, as well as ACA and ASRD offices. Cannons may be borrowed, free of charge, by producers with waterfowl damage problems. The distribution centre operator collects a damage deposit which is returned to the borrower when the cannon is returned in good condition. Producers are asked the location of waterfowl damaged land, the crop type, the waterfowl species causing the damage, and whether or not they will permit their contact information to be provided to interested waterfowl hunters. Regional coordinators collect this information weekly from distribution centres. In 2011, distribution centres were paid \$350 for storing cannons for the season, plus \$10 for each cannon distributed. ASRD offices that served as distribution centres provided this service to ACA free of charge.

3.3 WCDPP web page

The WCDPP uses a website to assist waterfowl hunters in locating potential areas of waterfowl concentrations and to assist producers with waterfowl crop damage prevention. To prevent crop damage, producers could allow hunting in their fields, as hunting typically frightens waterfowl. Feedback from producers suggests they often do not know how to contact waterfowl hunters, while at the same time hunters are looking for access to land with waterfowl concentrations.

The web page contains information on the WCDPP, a downloadable fact sheet on waterfowl crop damage prevention strategies, and a link to a provincial map which visually displays the number of requests for assistance received weekly from scare cannon distribution centres. The number of requests for assistance can indicate areas of waterfowl concentration. The viewer is able to click on a region of interest and view more detailed information on the number of requests for scare cannons received in the

past week, plus the total number of requests based on individual reporting areas. Contact information for regional coordinators is listed, and viewers are encouraged to contact the appropriate coordinator for the contact information of producers willing to discuss hunting. Information on the web page was updated weekly from 2 September to 28 October 2011.

4.0 RESULTS

4.1 Scare cannon distribution centres

Scare cannons were available at 29 contracted businesses, ten ASRD district offices, and three ACA offices, for a total of 42 locations in 39 communities (Figure 1). Six local businesses in Bentley, Bonnyville, Girouxville, Hythe, Holden, and Vilna that were contracted to be a distribution centre in the past were unwilling to continue to provide this service in 2011. Alternate businesses were contacted when possible; however, only the Bonnyville ASRD district office agreed to distribute scare cannons. We did not receive any feedback from producers or other stakeholder groups because of this change. Detailed information on distribution centre use is contained in Appendix 1.

The distribution centres operated for an average of 83 days, beginning in late August and finishing in late October through late November, depending on the area. We lent 181 scare cannons to 74 producers, for use on at least 123 different quarter sections of land. Thirty-four percent of the producers indicated they would allow their contact information to be provided to waterfowl hunters.

4.2 WCDPP web page

Our waterfowl web page was viewed 290 times and had 203 unique visits from 1 August to 31 December 2011. Five waterfowl hunters contacted WCDPP coordinators directly through the web page and were provided with additional information, including the contact information of producers willing to be contacted regarding hunting.

4.3 Program expenditures

The program expenditures represent the total amount of funds spent on the WCDPP between 1 April 2011 and 31 March 2012. The total WCDPP program expenditure amounted to \$26,701, excluding staff salaries (Table 1).

Table 1. Alberta WCDPP expenditures for the 2011/12 budget year.

| Expenses | Proposed budget | Actual expenditure |
|--|--------------------|-----------------------|
| Contracted services and landowner agreements | \$18,500 | \$14,143 |
| Equipment repair and maintenance | 1,500 | 63 |
| Freight and postage | 1,000 | 27 |
| Telephone | 848 | 405 |
| Vehicle operation | 11,700 | 11,760 |
| Travel expenses | 970 | 303 |
| Total | \$34,518 | \$26,701 |

5.0 LITERATURE CITED

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6.0 APPENDICES

Appendix 1. A summary of the waterfowl scare cannon service provided during the 2011 WCDPP in Alberta. Distributing agents: C = contracted business, ACA = ACA office, ASRD = ASRD office.

| Location of distribution centre | Distributing agent | Start date | End date | Duration of centre (days) | Number of cannons borrowed | Number of targeted quarters | Number of borrowing producers | Number of producers sharing contact information with hunters |
|---------------------------------|--------------------|------------|----------|---------------------------|----------------------------|-----------------------------|-------------------------------|--|
| Andrew | C | 1-Sep | 22-Nov | 83 | 0 | 0 | 0 | 0 |
| Atmore | C | 16-Aug | 22-Nov | 99 | 1 | 2 | 1 | 0 |
| Bashaw | C | 10-Aug | 31-Oct | 82 | 5 | 4 | 3 | 1 |
| Bawlf | C | 5-Aug | 19-Oct | 75 | 2 | 4 | 1 | 1 |
| Bonnyville | ASRD | 27-Sep | 29-Nov | 64 | 0 | 0 | 0 | 0 |
| Boyle | C | 16-Aug | 22-Nov | 99 | 2 | 2 | 1 | 0 |
| Byemore | C | 4-Aug | 13-Oct | 70 | 9 | 5 | 3 | 1 |
| Camrose | C | 5-Aug | 19-Oct | 75 | 4 | 3 | 3 | 2 |
| Camrose | ASRD | 1-Aug | 31-Oct | 90 | 0 | 0 | 0 | 0 |
| Castor | C | 4-Aug | 13-Oct | 70 | 2 | 1 | 1 | 1 |
| Cornation | ASRD | 1-Aug | 31-Oct | 90 | 0 | 0 | 0 | 0 |
| Drumheller | ASRD | 1-Aug | 31-Oct | 90 | 0 | 0 | 0 | 0 |
| Fairview | C | 12-Aug | 21-Nov | 102 | 10 | 6 | 5 | 3 |
| Grimshaw | C | 12-Aug | 21-Nov | 102 | 16 | 8 | 5 | 4 |
| Hanna | ASRD | 1-Aug | 31-Oct | 90 | 0 | 0 | 0 | 0 |
| High Prairie | C | 22-Aug | 1-Nov | 72 | 17 | 6 | 5 | 0 |
| La Crete | C | 19-Aug | 3-Nov | 76 | 6 | 5 | 2 | 0 |
| La Glace | C | 12-Aug | 22-Nov | 79 | 3 | 3 | 3 | 2 |
| Lougheed | C | 10-Aug | 19-Oct | 70 | 0 | 0 | 0 | 0 |
| Manning | C | 16-Sep | 3-Nov | 49 | 7 | 5 | 2 | 1 |

Appendix 1. Continued

| Location of distribution centre | Distributing agent | Start date | End date | Duration of centre (days) | Number of cannons borrowed | Number of targeted quarters | Number of borrowing producers | Number of producers sharing contact information with hunters |
|---------------------------------|--------------------|------------|----------|---------------------------|----------------------------|-----------------------------|-------------------------------|--|
| Mannville | C | 19-Aug | 24-Nov | 98 | 0 | 0 | 0 | 0 |
| Myrnam | C | 19-Aug | 24-Nov | 98 | 18 | 8 | 8 | 0 |
| Nampa | C | 15-Aug | 25-Nov | 103 | 20 | 14 | 3 | 2 |
| Olds | ASRD | 1-Aug | 31-Oct | 90 | 0 | 0 | 0 | 0 |
| Paradise Valley | C | 19-Aug | 9-Nov | 83 | 5 | 5 | 3 | 2 |
| Pine Lake | C | 9-Aug | 20-Oct | 72 | 0 | 0 | 0 | 0 |
| Ponoka | ASRD | 1-Aug | 31-Oct | 90 | 0 | 0 | 0 | 0 |
| Provost | C | 4-Aug | 30-Sep | 57 | 6 | 7 | 2 | 2 |
| Provost | ASRD | 1-Aug | 31-Oct | 90 | 0 | 0 | 0 | 0 |
| Red Deer | ACA | 1-Aug | 31-Oct | 90 | 2 | 1 | 1 | 0 |
| Sherwood Park | ACA | 1-Aug | 31-Oct | 90 | 0 | 0 | 0 | 0 |
| Smoky Lake | C | 1-Sep | 24-Nov | 85 | 3 | 3 | 3 | 0 |
| Spirit River | C | 12-Aug | 25-Nov | 105 | 3 | 1 | 1 | 0 |
| St. Paul | ACA | year-round | | | 28 | 21 | 11 | 0 |
| Stettler | C | 12-Aug | 20-Oct | 69 | 2 | 1 | 1 | 1 |
| Stettler | ASRD | 1-Aug | 31-Oct | 90 | 0 | 0 | 0 | 0 |
| Two Hills | C | 9-Sep | 29-Nov | 81 | 0 | 0 | 0 | 0 |
| Valleyview | C | 15-Aug | 2-Nov | 49 | 5 | 2 | 2 | 1 |
| Vegreville | C | 19-Aug | 15-Nov | 89 | 4 | 4 | 3 | 0 |
| Vermilion | C | 19-Aug | 9-Nov | 83 | 1 | 2 | 1 | 1 |
| Viking | C | 19-Aug | 9-Nov | 83 | 0 | 0 | 0 | 0 |
| Wetaskiwin | ASRD | 1-Aug | 31-Oct | 90 | 0 | 0 | 0 | 0 |
| Total | | | | | 181 | 123 | 74 | 25 |

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