

## Alberta Conservation Association 2007/08 Project Summary Report

**Project name:** Cavity Nesting Waterfowl Enhancement and Wetland Stewardship

**Project leader:** James R. Potter

**Primary ACA staff on this project:** James R. Potter

### Partnerships:

Ducks Unlimited Canada  
Windsor Plywood

### Key findings

- ACA now maintains 1,274 artificial cavity nest structures at sites with over 300 participating landowners. These structures are used by common goldeneye and bufflehead for nesting.
- Landowners previously involved in the project are reluctant to now sign a conservation agreement of any kind.
- New landowner contacts are interested in helping with the installation of new nest boxes.
- 38 new boxes were installed in 2007-2008, with 20 boxes placed with new landowners.
- Nest success was monitored and maintenance performed at 278 boxes.
- 1,259 adults and 1,093 youth have attended nest box seminars since 1989.

### Introduction

Certain areas within the Central Parkland have sufficient deep-water ponds for common goldeneye (*Bucephala clangula*) and bufflehead (*Bucephala albeola*) brood rearing but lack mature aspen needed for nest cavities (Corrigan 2007). In these areas, nest boxes secured to remaining trees can provide nesting habitat for these two species. From 1989 to 1992, 400 nest boxes were installed in the Buffalo Lake Moraine (BLM), an area selected by the *North American Waterfowl Management Plan* as the initial focus area for implementing various strategies to restore waterfowl populations to the levels of the 1970's. A baseline population survey was carried out in 1989 and biannually until 2003. Information gathered through these surveys provided a scientific approach to measuring the effectiveness of the Nest Box program.

The project now includes the Pine Lake and Lone-Pine/Big Valley moraines, with approximately 1,200 nest boxes installed and maintained and over 300 participating landowners. Alberta Conservation Association (ACA) and Ducks Unlimited Canada (DUC) have partnered in the expansion and ongoing maintenance activities associated with the nest box project. A significant component of the nest box program is public education and land stewardship. DUC is using program landowner contacts to pursue long term wetland habitat retention agreements.

The primary objectives are to:

- Secure new nesting locations and monitor existing boxes to increase the population of cavity nesting waterfowl;
- Increase the awareness of habitat requirements for cavity nesting species and encourage private landowners to retain the wooded margins of wetlands in central Alberta;
- Celebrate participating landowner contributions to the retention of wetlands and associated uplands (**Recognize, Reward, Reinforce**); and
- Create awareness of ACA and DUC habitat programs and encourage landowner participation.

## Methods

We attempt to annually monitor approximately one fifth of our total number of nest boxes. A GPS location is recorded for each box location, the site plotted on a 1:50,000 map, maintenance record and nest success data entered in a field booklet. Maintenance such as cleaning, fresh shavings, moving, or replacement is carried out at this time. During maintenance and monitoring, we locate prospective sites with good habitat and encourage property owners to participate in the program.

We collaboratively developed a program with DUC to “**Recognize, Reward, Reinforce**” (RRR) the contributions of partnering landowners in the retention of wetlands and associated uplands. We contacted participating landowners to **Recognize** their contribution to preserving the necessary habitat to support the particular species the box was placed for. We arranged to meet with them and **Reward** them with a set of DU drinking glasses and an air photo of their land with nest box locations marked. To **Reinforce** our commitment to habitat preservation, we offered to show them and guests a presentation highlighting the cavity nesting species benefiting from the program. Brochures, literature on larger cavity nesters and nest box plans and various Ducks Unlimited/ACA programs, including a 10 year voluntary Habitat Stewardship agreement are left with the landowner. During a follow up visit by the DUC representative this agreement was discussed, as well as other possible conservation commitments (e.g., Conservation Easements). We made presentations to landowners and interest groups discussing the program and provided instruction on how to build a nest box.

## Results

- We monitored 278 box locations, replaced 24 missing or damaged boxes, and updated the existing database with current information. We installed 38 nest boxes in new locations, with 20 placed with new landowners. We provided 44 nest boxes to individuals and youth groups.
- We made presentations to 56 participating landowners and guests (176 people).
- We contacted 149 participating landowners and as part of the “RRR” program, distributed 142 sets of DU drinking glasses and property air photos.
- We made presentations to seven groups; three of which also constructed nest boxes. We led two field trips for a total of 155 participants.

- DUC pursued voluntary habitat stewardship agreements with most of the landowners contacted and 15 agreements were signed. An additional eight landowners were referred to DUC for other programs (e.g., conservation easements).

## Conclusion

Landowner interest in voluntary habitat stewardship agreements was lower than anticipated. A detailed report authored by Lesley Peterson is available from DUC, Red Deer office. Providing landowners with an air photo of their property with the preferred habitat highlighted for the target species and nest box locations brings wetland conservation to a personal level and can inspire long-term wetland habitat retention. A glossy booklet on cavity nesters, with many pictures identifying the various species and nests is currently being produced by DUC and ACA. This booklet will be given to cooperating landowners in recognition of their contribution to wetland conservation.

## Communications

- *The Stettler Independent*, Feb. 6, 2008. Guests Speak of Duck Nest Boxes. The Buffalo Lake Naturalists President wrote a one page article describing our presentation to 18 attending naturalists.

## Literature cited

Peterson, L. 2008. Habitat Stewardship Pilot Program. Unpublished Report. Ducks Unlimited.

Corrigan, R.M. 2007. Effectiveness of nest boxes in influencing population trends for common goldeneye (*Bucephala clangula*) and bufflehead (*B. albeola*) in the Buffalo Lake moraine. M.Sc. Thesis, University of Alberta, Edmonton, Alberta. 120 pp.



Delburne Junior Forest Wardens helping to construct nest boxes. (Photo: James R. Potter)



Lesley Peterson, Ducks Unlimited Canada and Saw-whet Owl using nest box. (Photo: James R. Potter)



Nest box at Chapman Lake. (Photo: James R. Potter)