

Alberta Conservation Association 2010/11 Project Summary Report

Project Name: *Waterfowl Nesting Habitat Enhancement*

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Partnerships

Alberta Fish and Game Association
Delta Waterfowl
Ducks Unlimited Canada
Syncrude Canada
Wildlife Habitat Canada
Windsor Plywood

Key Findings

- Hosted one field trip and three waterfowl habitat presentations in local communities.
- 49% of nest tunnels monitored were used by breeding waterfowl, probably mallards with a successful hatch rate of 100%.
- Installed 70 nest tunnels in northeast Alberta.
- Volunteers installed 48 nest boxes throughout Alberta.

Introduction

Enhancing waterfowl nesting habitat through the use of artificial nesting structures improves nesting success for mallards in the case of nest tunnels (Eskowich et al. 1998), and increases potential nesting sites for common goldeneye and bufflehead in the case of nest boxes (Corrigan 2007). We partnered with Delta Waterfowl and Wildlife Habitat Canada to install and maintain waterfowl nesting tunnels in areas where secure waterfowl nesting habitat limits ground nesting waterfowl production. Similarly, we partnered with Ducks Unlimited Canada (DUC) to install and maintain nest boxes on ponds in the central parkland area that lacks mature aspen needed for cavity nests. Syncrude Canada is a long-term partner that provides funding for this work.

Another important component of the project is the opportunity for involving landowners and volunteers in hands-on conservation. We engage landowners to allow installation of nest tunnels and boxes on their lands. We then work with volunteers to ensure these nesting structures are maintained and waterfowl use is recorded.

Primary objectives for this project are to secure new nesting structure locations and maintain existing nesting structures to increase nest success for mallards, bufflehead and common goldeneye. Secondary objectives are to increase awareness of habitat requirements for waterfowl species and encourage landowners to retain wetlands and associated riparian habitat, including the wooded margins of wetlands.

Methods

We installed nest tunnels in conjunction with Alberta Fish and Game Association clubs, volunteers, and interested landowners in small (0.2 – 2.0 ha), semi-permanent or permanent wetlands on the water edge of the emergent vegetation zone. We concentrated our tunnel installation efforts in 2010/11 in northeast Alberta to compliment the Alternative Land Use Services (ALUS) pilot project being delivered by Delta Waterfowl in the County of Vermilion River. Nest tunnel monitoring and maintenance is completed in late winter when we also determine how many nest tunnels are used and the proportion that had a successful hatch. Modest incentive payments are provided to volunteer groups and individuals for tunnel maintenance. We recognized co-operating landowners by providing them with *Nest Box Guides*, air photos of their property and other informative materials.

We opportunistically hosted field trips, nest box building workshops and presentations for interested groups, individuals and landowners to improve their understanding of waterfowl habitat requirements. Some field trips also provided the opportunity to view previously-installed nest structures and install new nest structures.

Results

We provided 70 nest tunnels to volunteers for installation, bringing our total number of installed tunnels to 245 since 2005. We engaged three conservation groups and five landowners to participate in maintenance and monitoring of approximately half of these tunnels. In 2010/11, 49% of the 52 tunnels monitored were used and 100% appeared to have successfully hatched. We maintained 16 nest boxes and received supplies from a sponsor (Windsor Plywood) to produce components for 100 nest boxes used in workshops and provided to volunteers. We provided 48 nest boxes to volunteers and provided Alberta Environment directions for construction and installation of nest boxes to enhance waterfowl nesting habitat at the Dixon Dam.

We delivered three waterfowl habitat presentations and field trips which attracted 18 adults and 37 youth. Presentations will be made to three more groups before the end of March. We featured nest boxes on ACA's website and generated seven requests for the *Nest Box Guide*. We also printed an additional 3,000 copies of this guide.

Conclusions

This project provides an ideal opportunity to connect with the public, increase awareness of the importance of waterfowl habitat, and to develop a committed volunteer base. Project activities allow people to do something tangible and immediate for conservation. Our partnership with Delta Waterfowl is providing an opportunity to participate in the evolution of Alberta's pilot

ALUS project and to cultivate partnerships with municipal and provincial government, industry, and other non-government organizations.

Communications

- Highlighted nest boxes on ACA website. The web page included videos of bufflehead chicks hatching and leaving the nest box.
- Provided annual summary reports to Delta Waterfowl, DUC and Syncrude Limited.
- The Rocky Ram Junior Forest Wardens (three adults and five youth) attended a field trip to install nest boxes that they had made at a previous workshop in the Rocky Mountain House area on May 15, 2010.
- The St. Paul “4 the Environment 4-H Club” attended a presentation and installation demonstration on nesting tunnels on June 4, 2010. Two adults and nine youth attended.
- The *St. Paul Journal* ran an article discussing ground nesting waterfowl habitat requirements and highlighting the St. Paul 4-H Club involvement with nesting tunnels on June 29, 2010.
- Provided a presentation to eight members of the St. Paul Fish and Game club on potential involvement with nest tunnels on December 6, 2010.
- Reprinted *The Nest Box Guide* publication for distribution to interested volunteers and landowners.

Literature Cited

- 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.
- Eskowich, K., D. McKinnon, G. Brewster, and K. Belcher. 1998. Preference and use of nest baskets and nest tunnels by mallards in the parkland of Saskatchewan. *Wildlife Society Bulletin* 26(4): 881-885.