## Waterfowl Management In a Box

## By Glen Parsons

Each year a small army of outdoor enthusiasts including cottage owners, members of conservation and naturalist groups, hunters, trappers, bird watchers and scouts travel along stream side paths to "check-out" their waterfowl/duck nest boxes. The number of nest boxes erected in the province is unknown—but we estimate hundreds of boxes are maintained each year, by everyday Nova Scotians.

Cavity nesting ducks including wood duck, hooded merganser and common goldeneye (mostly in Cape Breton) typically select nest sites in abandoned woodpecker holes or tree cavities created by fire, disease, lightening or wind damage. However, natural nesting sites are not always common around wetlands or along streams. Birds are then forced to

"move on" or select nest sites that are less than optimal for their needs— this is why we sometimes hear of cottage owners finding ducks in stovepipes or chimneys. Through the proper construction, placement and maintenance of nest boxes, people can increase the availability of secure nesting sites and increase duck nesting success.

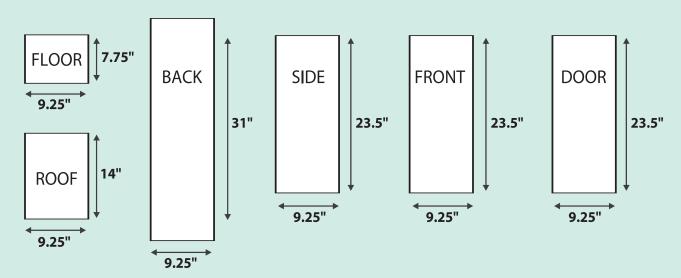
The Nova Scotia Department of Natural Resources has maintained and monitored duck nest boxes for many years at several locations including the Tobeatic Wildlife Management Area, Belleisle Marsh, Whycocomagh and Baddeck. DNR staff are frequently asked to provide advice on nest box construction, placement, maintenance and monitoring. Almost anybody can construct nest boxes, however, there are several things to be aware of:



Waterfowl nest box in the Tobeatic Wildlife Management Area.

Construction: Boxes can be constructed with one inch (2.5 cm) lumber (see illustrations). DNR uses rough sawn, untreated hemlock which is inexpensive and relatively resistant to weather and insects. The size of the entrance hole is critical to reduce the risk of predation. For wood ducks and hooded mergansers, make a 7.5 cm x 10 cm oval. For common goldeneye, make a 10 cm x 13 cm oval. Boxes should be strongly built and securely fastened to a stable tree or pole—ducks do not prefer a

## **Material Measurements**



For more information, consider obtaining a copy of the Nest Box Guide for Waterfowl published by Ducks Unlimited Canada. This 40-page waterproof guide is full of great pictures and valuable information suitable for all ages. You can reach Ducks Unlimited Canada in Amherst, Nova Scotia at (902)-667-8726 or visit their website: www.ducks.ca

moving nest. Don't be concerned about a few holes in the box. Holes increase ventilation and help with drainage. Painting or staining the boxes is not necessary. Use wood chips or shavings—not sawdust—as nesting material to insulate the bottom of the box. Sawdust can cause respiratory problems in ducklings that could eventually lead to suffocation.

Placement: Protect boxes from predators such as cats, squirrels, and raccoons. Always place boxes away from overhanging tree branches or structures that predators could use for access. Do not place a perch on the box—ducks do not require it and it often invites predators. Ideal placements are in flooded wooded areas along streams, rivers and marshes. The boxes should be erected at a height of 2-3 meters near, or directly over, water. Ducklings

usually leave the nest within two days of hatching. Since they cannot fly, the ducklings tumble from the box to the ground, in search of water. Where possible, try to place the entrance over water and facing away from the prevailing winds.

Maintenance: Clean nest boxes before birds return and discard used nesting material to eliminate parasites. These parasites can bite people, sometimes causing severe reactions. Always wear protective clothing if cleaning nest boxes in the spring when the parasites are active.

**Other Wildlife:** Sometimes other wildlife such as squirrels, owls and small birds, use duck nest boxes. DNR nest box data from Belleisle Marsh has shown that approximately 25 per cent of the nest boxes are used by nesting common grackles and starlings. These



Northern flying squirrel found in a nest box in the Tobeatic.

birds usually nest later than the ducks and usually do not occupy the boxes until after the ducks have left.

Record Keeping: Checking the box during the nesting season adds to the enjoyment of being a nest box guardian. It is best not to disturb the box when the adults are attending eggs as hens may abandon the nest. For maximum enjoyment, keep good records—arrival dates of hen, species use, success of brood etc., and share them with Project Nest Watch (www.bsc-eoc.org/national/nestwatch.html) coordinated by Bird Studies Canada.

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## **Detailed View Exploded View** 4.0" (Not to scale) 3.25" **ROOF** 3.0" **ENTRY HOLE CLEANOUT** SIDE **DOOR BACK SCREEN LADDER BOARD** (INSIDE FACE) **FRONT** FLOOR **CLEANOUT DOOR PIN**