## WOODWORKING FOR NATURE



## WOOD DUCK BOX Installation and Management Instructions

#### Introduction

The population of the Wood Duck (*Aix aponsa*) was in serious decline in the late 19th century as a consequence of severe habitat loss and market hunting. In response, the Migratory Bird Treaty was established in 1916 and the enactment of the United States of America Migratory Bird Treaty Act of 1918, allowed populations to recover gradually. To assist with population growth the artificial nest box was developed in the 1930's. Various conservation groups and landowners have erected these nest boxes and preserved habitat allowing for a healthy population to exist today [3]. As their name implies, Wood Ducks inhabit wooded areas using trees for both perching and nesting cavities within trees [2]. In addition to Wood Ducks, several other duck species will nest in tree cavities and therefore use artificial nest boxes, such as Bufflehead, Hooded merganser, and Common Goldeneye [2].

### Wood Duck Box Construction

**Design:** Boxes are designed to allow water to flow out the bottom to prevent flooding and allow the box to dry more quickly. The boxes are also designed to be easily accessed by researchers. In addition ventilation holes are drilled to allow for air circulation. The nest box needs to be equipped with either a wire mesh or wooden ladder, allowing the ducklings to climb up the inside front of the box to the exit hole.

#### Mounting a Wood Duck Box

- Nest boxes should be mounted between 6 feet (1.8m) to 12 feet (3.6m) off the ground. Taking these estimations into consideration, nest boxes should be placed high enough to prevent flooding during high waters.
- Nest boxes can be mounted on tree trunks or a steel pole above or beside the water. Ensure a predator guard is attached to the steel pole. Various designs exist such as cylindrical metal stove-pipe-shaped baffles, PVC pipe guards, and sheet metal guards all of which are to be attached to the pole.
- Place boxes vertical or tilted slightly forward. This assists ducklings in climbing up and out of the nest box when they are ready to fledge.

#### Wood Duck Box Location and Placement

The location of a nest box is one of the most important considerations in not only attracting birds, but also in optimizing their chances for successful nesting.

**Habitat Preferences:** Wood Ducks prefer wooded areas with an adequate wetland habitat nearby for the hen and her ducklings [1]. Numerous articles recommend various distances to a body of water varying from 25 yards (22.9m) to ½ mile (0.8km). Slow moving or standing shallow waters such as ponds, small lakes, old river channels, rivers, creeks, marshes, and swamps near standing trees offer good wood duck nesting and brood rearing habitat [2]. Waters with much woody debris (logs, stumps, standing trees, or fallen trees into the water, such as beaver ponds) are sought by wood ducks [2].

**Placement of Nest Boxes:** Having the nest boxes facing toward water will increase the likelihood of occupancy. Ensure the flight path to the nest box is unobstructed.

#### Monitoring and Maintenance

**Monitoring:** Check your nest box at two-week intervals is optimum, preferably during the morning hours. You may find Screech Owls also using the structures.

**NOTE**: Cavity nesting ducks do not carry nesting materials. It's important to help them out by placing four to six inches of wood shavings in the bottom of the nest box.

**Maintenance:** Nest boxes should be cleaned out after each brood of young leave the nest. This includes removing old eggs, nests, and any other contents a distance away as to not attract predators. Fewer nests, eggs, and ducklings are produced in nest boxes that are not checked and maintained regularly [4]. Boxes can also be a host for other species such as Owls and Bees, be sure to clean bee nests in the off season if bees inhabit the box.

# Keep us informed on the success of the structure and share with us on our facebook page!

#### **References & Further Information**

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- 2. Guidelines For Managing Wood Duck Nest Boxes In Washington State. (2000). Fielder, Paul C. Washington Department of Fish and Wildlife. 600 Capitol Way North Olympia, W.A. 98501-1091
- 3. United States Department of Agriculture. Wood Duck (Aix sponsa) Fish and Wildlife Habitat Management Leaflet. Retrieved on May 30, 2016 from <<u>http://www.nrcs.usda.gov/Internet/FSE\_DOCUMENTS/stelprdb1045457.pdf</u>>.

 Utsey and Hepp (1997). Frequency of nest box maintenance: effects on Wood Duck nesting in South Carolina. Journal of Wildlife Management 61:801– 807.