Wood Duck
(Aix sponsa)

The wood duck, as its name implies, is most often found in wooded swamps, beaver ponds, freshwater marshes, and along streams and rivers near forests. It is one of seven North American ducks that regularly nest in natural cavities, particularly those found in trees. The wood ducks’ body and eyes are well adapted to the wooded habitat it favors. Its slim body allows it to fit into natural tree cavities to nest and its large eyes help the wood duck avoid limbs and branches as it flies through the forest canopy.

Description

The drake, or male wood duck, is one of the most strikingly beautiful ducks of any species. Its head has a large crown, or crest, and is colored with iridescent greens, blues, and purples. The drake’s distinctive facial pattern includes a white throat with finger-like extensions onto the cheek and neck. The eyes are a deep red and the bill is colored red, white, and yellow with a black tip. The drake’s breast is burgundy, and the belly is white. Dark, bronze-green and black feathers cover the back. The hen has a drab plumage in comparison, which helps conceal her from predators during nesting and brood rearing. The brownish-to-gray female wood duck is distinguished by a pronounced white patch surrounding the eye, white throat and gray chest.

History and Status

Beginning in the late 1800’s, wood duck populations plummeted due to over-harvest, deforestation, and loss of wetland habitats. Many ornithologists believed the wood duck might go extinct by the early 20th century. In 1918, the Migratory Bird Treaty Act protected the wood duck from legal harvest in the United States and Canada. Since that time, the use of artificial nesting boxes, expanding beaver populations, which create some of its favored wetland habitat, and restrictive harvests have contributed significantly to its remarkable comeback. Today, wood duck populations are stable throughout its range, despite continued losses of wetland habitat.

Habitats & Habits

In late summer, wood ducks began forming breeding pairs, continuing into fall and winter. Wood ducks migrating to northern breeding areas are paired prior to their arrival in early spring. Hens will select a suitable nesting cavity and begin laying eggs as early as late January in southern latitudes such as North Carolina, in March and April in more northern breeding locations. Hens prefer natural cavities in large, mature trees high above the ground in wooded swamps and bottomlands, old beaver ponds, freshwater marshes, and along creeks, streams and rivers. Hens choose sites near good brood-rearing habitat, which consist of low, shrubby vegetation such as buttonbush, willow, and alder, or dense stands of emergent plants such as arrow arum, duck potato,
Human & NCWRC Interactions

Overharvest was a primary contributing factor in the sharp decline in wood duck populations in the early twentieth century. Since that time, regulated hunting of wood ducks through the Migratory Bird Treaty Act has not adversely affected wood duck populations, and, in combination with sound habitat management, wood ducks will continue to thrive. Wood ducks are the most popular species with waterfowl hunters in North Carolina, and are the number one harvested duck in N.C. As human populations grow, loss of suitable nesting habitat continues to be the largest threat to wood duck populations. However, to offset this, wildlife managers continue to focus efforts on maintaining older stands of swamp and bottomland timber, which provide suitable nest cavities, stable beaver populations, which provide brood rearing areas, and active nest box programs to supplement existing natural cavities.

Each year during the summer, NCWRC biologists trap and place leg bands on wood ducks throughout the state. Wood ducks are enticed into wire traps or captured using large nets powered by explosive rockets after the trap or netting site has been pre-baited with corn. Once the ducks are captured, biologists determine the sex and age of each duck by examining the plumage, the wear on certain wing feathers, and the presence, size and shape of the sex organs. An aluminum band with a unique series of identifying numbers is placed on the duck’s leg before it is released at the capture site. The band number, location of banding, and the sex and age of the bird are recorded and sent to the federal Bird Banding Laboratory, which maintains information for all birds banded in the United States in a database.

The band has information on how to contact the Bird Banding Lab. When hunters harvest a wood duck with a leg band and contact the lab with information on when and where the band was recovered, they are sent a certificate of appreciation with information about the bander, where the wood duck was captured, and the sex and age of the bird. The band recovery data supplied by hunters are used to examine distribution and migration patterns, and to estimate wood duck harvest and survival rates, which are critical data when establishing annual hunting regulations.

Wild Facts

Classification
Class: Aves
Order: Anseriformes

Average Size
Length: 17 to 21 inches
Weight: 1.5 pounds

Food
Seeds, fruits, vegetative parts of aquatic plants, and aquatic and terrestrial invertebrates. Also wheat, corn, rice left in agricultural fields.

Breeding/Young
Pair formation complete by December. Nesting begins from late January in south to early May in north, peak in April. Only North American duck that regularly produces two broods in one breeding season; will quickly nest again after the first brood becomes independent, or after the first nesting attempt fails.

Life Expectancy
Short-lived. About 45% of immature wood ducks die during the first year of life, with about 48 percent mortality in each year thereafter.

References
Bellrose, Frank C. Ducks, Geese and Swans of North America (Harrisburg, Pa.: StackpoleBooks, 1980).

Credits
Written by Doug Howell, NCWRC. Updated 2018.