

ABOUT THE COVER

Wood Duck

Arguably the most beautiful of all North American ducks, the Wood Duck *Aix sponsa* has recovered from near extinction at the beginning of the twentieth century to become one of our most abundant ducks. About half the size of a Mallard, and about the size of the Hooded Merganser with which it competes for nesting cavities, the male Wood Duck is unmistakable. His pronounced crest and glossy green head slashed with white, contrasting with a white throat and face pattern, buffy flanks, reddish-purple breast delicately spotted buff, and shining green back and rump, are all punctuated with a red bill and large, gaudy, bright red eye — a truly awesome sight. The female is drab gray and brown but has a pronounced crest and white teardrop-shaped patch around her eye. The male in eclipse plumage resembles the female but lacks the pronounced eye patch. In flight Wood Ducks are distinctive. They have long tails and proportionally broad wings, both presumably adaptations for flight among trees, and appear large-headed.

Our knowledge about Wood Ducks dates back to Catesby's 1731 *Natural History of Carolina, Florida and the Bahama Islands*; earlier, American Indians featured Wood Duck motifs on pottery and ceremonial pipes. Originally designated *Anas sponsa* by Linnaeus in 1758, the Wood duck has since been placed in seven genera at one time or another, and has acquired 23 common names, including "Summer Duck" and "Carolina Duck." Its sole congener is the Mandarin Duck *A. galericulata*.

Wood Ducks breed throughout the territorial USA and southern Canada and along the west coast. In the East they breed as far north as Newfoundland, and most of the population north of the Carolinas is migratory, wintering as far south as Mexico. However, a few birds winter along the immediate coast as far north as Cape Cod. In Massachusetts, Wood Ducks are considered a common resident and migrant that arrive in early March, and depart in October and November.


Wood Ducks are seasonally monogamous and in the southern USA routinely produce two broods. They usually breed first at one year of age. They live primarily in deciduous forest ecosystems, and are found predominantly in areas heavily populated with humans. They nest in more wetland habitats than any other North American duck, e.g., creeks, rivers, ponds, lakes, swamps, and marshes. They have benefited from the recovery of beavers in North America, and will utilize farm ponds and ditches. In winter they prefer to roost in shallow water with low cover. Males molt into eclipse plumage (basic plumage) earlier than any other North American duck, and molt again into nuptial plumage (alternate plumage) in the fall, six or seven months before nesting. Courtship and pairing begin in the fall and continue until spring. Females give courtship calls that attract groups of males and ritualized displays of amazing variety follow. Males whistle and give *ji-ihb* calls and up to 21 identifiable displays, the female responding with up to 11. On the water displays include bill-jerks, bill-jabs, chin-lifting, wing and tail flashing, rushing, and turn-the-back-of-the-head accompanied by

jib...jib...jib calls. Males utter *pet peet* calls, and have alarm calls described as *hoo eeh* or *cr-r-e-ek*. The female flight call has been described as *oo-eeek*.

Wood Ducks nest in natural cavities or in nest boxes. They prefer nesting in live trees and enclosed cavities with side entrances. Their small size may be an adaptation for nesting in Pileated Woodpecker holes. The nest cavity is often lined with wood chips and down. In eastern Massachusetts Wood Ducks nest mostly in nest boxes, but in the western sections of the state mostly in natural cavities in swamps. The usual clutch size is 10-15 dull white eggs, with clutches of up to 50 eggs resulting from the common Wood Duck practice of "egg-dumping," where several (or many) females may lay eggs in nests that are not their own. The incubation period is four to five weeks with the female doing all the incubation. The young remain in the nest for about a day and then use their sharp claws to climb out of the cavity. The female calls the young from the nest with notes of increasing frequency. The young routinely drop and flutter to the ground without injury from heights of up to 50 feet, and have been reported to fall over 250 feet! Females have been reported to carry chicks from the nest to water on their backs or in their beaks, but this is very rare or apocryphal. The female stays with the young and may give wildly splashing distraction displays to lead potential predators from her chicks. The young can fly in about two months.

Wood Ducks dabble on the water surface, tip up, and may dive, propelling themselves under water by flapping partially open wings. They can swim underwater at speeds of more than two miles per hour, and can run on land at speeds up to seven miles per hour, making them the fastest of all North American ducks. They tend to feed in small flocks of up to a dozen, and seldom join flocks with other duck species. However, outside the breeding season they may congregate at communal roosts with up to 5000 birds. They eat a wide variety of plant and animal food, including acorns, seeds, berries, grain, rice, and aquatic and terrestrial insects.

Wood Ducks face many perils. They must compete for nesting cavities with, or are vulnerable to nest predation from, squirrels (including flying squirrels), raccoons, opossums, snakes, owls, flickers, and honeybees. They often must contest nest boxes with starlings. They historically have nested in areas with high human populations, and have suffered from habitat loss due to swamp drainage for agriculture or construction, deforestation that reduces the number of natural cavities, and hunting pressure. At the turn of the nineteenth century, Wood Ducks had been pushed to the threshold of extinction, largely from year-round and market hunting, exacerbated by habitat destruction. By 1912 all of the New England states had a closed season on Wood Ducks, and hunting was closed federally from 1918-1941. They responded with a remarkable comeback to the point where today they are the third most harvested duck in the USA after the Mallard and Green-winged Teal. Their comeback has suffered setbacks, however. The hurricane of 1938 reduced the breeding population in some areas of the east by an estimated 50 percent, due largely to the reduction in the number of available cavity trees. Wood Ducks are slow to reinvade areas from which they were extirpated because their site-faithful tendency makes them poor pioneers. Despite these heavy hunting pressures, nest-site competition and predation, and habitat destruction, Wood Ducks have recovered to become one of our most common ducks. They are the

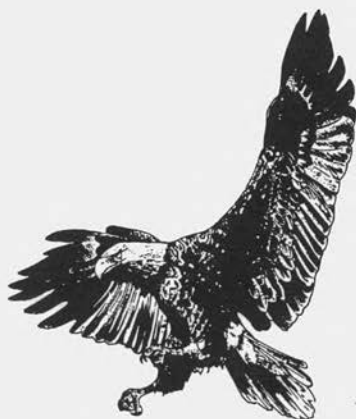
supreme generalist — highly adaptable to the vagaries imposed by human pressures. This adaptability has been the key to their recovery in the past and presumably the hope for this magnificent duck in the future.  *William E. Davis, Jr.*

About the Cover Artist

Barry Van Dusen, a wildlife artist and illustrator based in Princeton, Massachusetts, frequently contributes his insightful bird drawings to *Bird Observer*. Some of Barry's art will be appearing in "A Passion for Birds, The Art of James Coe and Barry Van Dusen," May 5-27, at Massachusetts Audubon's South Shore Regional Center in Marshfield, Massachusetts. For more information, call the Center at (781) 837-9400. Barry also manages production of the North American Birds Calendar 2001 for the Massachusetts Audubon Society. He is working on the cover for a forthcoming issue of *Birdwatcher's Digest*, and is contributing plates to *Birds of Peru* (Princeton University Press 2003).

Midwinter Eagle Survey

State Ornithologist Brad Blodget has released final figures for the 2000 Midwinter Bald Eagle survey. A total of 60 Bald Eagles and 1 Golden Eagle were recorded in the Bay State on or about the survey target date of January 7. Forty-seven adult and 13 immature Bald Eagles comprised the total. The birds were distributed across the state with 26 eagles reported at Quabbin Reservoir, 11 on the Connecticut River, 5 on the Merrimack River, 4 at Assawompsett Pond in Lakeville, 3 at Silver Lake in Pembroke, two on the Housatonic River in Sheffield and 1 at Wachusett Reservoir in Boylston. Two eagles were counted near Great Herring and White Island Ponds in Plymouth, 2 at Webster Lake, 2 at the Parker River National Wildlife Refuge in Newbury and single birds at Winnecunnet Pond in Norton and Cobble Mountain Reservoir in Blandford. The 60-bird figure compares favorably with the previous 10-year average of 62 eagles censused during the count period. A record 76 Bald Eagles were recorded during the 1998 survey. The year 2000 Midwinter Bald Eagle Survey marks *MassWildlife's* twenty-second year of coordinating the effort in the Commonwealth. During that time wintering eagle numbers have more than doubled in Massachusetts. Nationwide the eagle population has enjoyed a similar recovery with more than sixteen thousand eagles documented in the lower forty-eight states in January of 1999.



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