Wood Duck

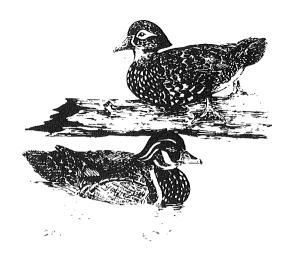
Aix sponsa

Strictly a North American species, the Wood Duck breeds in North America east of the Rocky Mountains and south of the taiga of Canada, and along the Pacific Coast from British Columbia to southern California. Breeding habitat requirements include natural or man-made cavities for nest sites, persistent shallow waters, an adequate supply of food (acorns, aquatic plants, and invertebrates), and some form of brushy cover to serve as a retreat (McGilvrey 1968). In Vermont, Wood Ducks resort to drowned trees fringing man-made ponds, beaver ponds, swamps, marshes, and slow-moving stretches of rivers. Distance from water appears to be unimportant in the selection of a nest site (Grice and Rogers 1965).

An early spring migrant, the Wood Duck generally arrives in Vermont from late March on; an extreme early date of March 10 was recorded in 1984 (RVB, Spring 1975–84). Migration peaks in April. Pair bonds are formed on the wintering grounds, and the drake returns with the hen to the area where she bred during the preceding year (Bellrose 1980).

Courtship occurs on the water: the male, resplendent in the "bridal array" to which the species' Latin name refers, raises his head and crest high, and swims in a circle around his mate. Both birds engage in bill dipping and mutual preening (Johnsgard 1975).

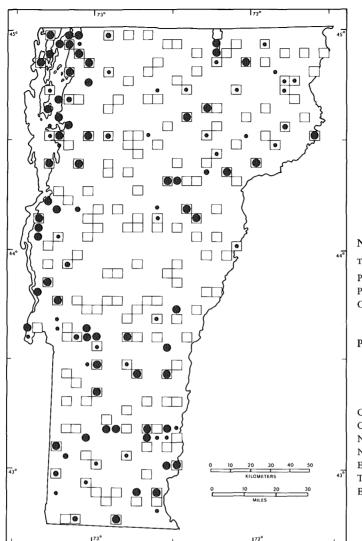
The drake accompanies the hen as she searches for a nesting cavity. Minimal nesting requirements include trees of at least 41 cm (16 in) DBH, possessing cavities with entrances of at least 8–13 cm (3–5 in) wide and interiors at least 20 cm (8 in) in diameter. The optimum natural cavity is 6–15 m (20–50 ft) high, with an entrance 10 cm (4 in) in diameter and a cavity depth of 61 cm (24 in) (McGilvrey 1968). The species will readily accept man-made nesting boxes. The eggs are laid on the wood chips or debris already in the cavity, to which the hen adds large quantities of down plucked from her



underparts. Eggs number from 10 to 15; the average clutch is 12 (Bellrose 1980). Eggs are laid at a rate of 1 per day until the clutch is complete. Atlas Project workers recorded an egg date of May 28. Beginning about 3 to 4 days before the onset of incubation, down is added to the nest. The down insulates the eggs when the hen leaves the nest, and is formed into such a tight mat that it can be lifted in one piece. The off-white eggs, which are dull when laid, attain a high gloss as incubation progresses. An incubation period of 28 to 37 days, with an average of 30 days, has been reported (Bellrose 1955).

The young are equipped with sharp nails for climbing out of the cavity, and leave the nest within 24 hours of hatching; with much peeping, they leap to the ground in response to calls from their mother, regardless of the height of the nest. She leads them as quickly as possible to the concealing vegetation of the nearest water. Atlas Project workers recorded downy young on dates ranging from May 18 to July 25 (nine records), and recently fledged young on dates from June 23 to August 3 (eight records).

At the turn of the century there was concern among some that the Wood Duck might become extinct because of eight-month duck hunting seasons, which put little restriction on the number of Wood Ducks a hunter could take, and extensive habitat destruction (Bellrose 1980). The Migratory Bird Treaty Act of 1918 led to more careful management of waterfowl including the



No. of priority blocks in which recorded

TOTAL 62 (35%)

Possible breeding: 22 (35% of total)
Probable breeding: 28 (13% of.total)
Confirmed breeding: 32 (52% of total)

Physiographic regions in which recorded

	no, of priority blocks	% of region's priority blocks	% of species total priority blocks
Champlain Lowlands	20	65	32
Green Mountains	9	17	15
North Central	8	42	13
Northeast Highlands	7	44	11
East Central	5	26	8
Taconic Mountains	6	38	10
Eastern Foothills	7	29	II

"woodie." Restricted seasons during the 1920s and 1930s led to a dramatic recovery in the number of Wood Ducks. By 1941, 14 states allowed a limit of 1 Wood Duck per bag (Bellrose 1980). Between 1964 and 1971 the average yearly adult population of the Wood Duck in the eastern United States and Ontario was 1.3 million (Bellrose 1980). In Vermont, Davenport (1907) listed the Wood Duck as a "rare summer resident," and Fortner et al. (1933) indicated that while the species was still rare, it "probably increased somewhat under protection." Sutherland (1971) estimated the species' breeding population in Vermont in 1965 to be on the order of 15,000.

During the Atlas Project the Wood Duck was recorded in a little more than a third of the 179 priority blocks. The highest frequency of occurrence was in the Champlain Lowlands, and the lowest was in the Green Mountains. The species was confirmed in just over 50% of the priority blocks in which it was located. The majority of records referred to the sighting of a brood attended by a hen.

ELEANOR ELLIS WALTER ELLISON