

# Wood Duck

*Aix sponsa*



Whether idling on a pond or winging around the perimeter of a marsh, the handsome Wood Duck is arguably Vermont's most arresting species of waterfowl. It breeds across southern Canada from the Maritimes to British Columbia. In the United States, the Wood Duck ranges throughout the Mississippi River drainage and all of the eastern states. A somewhat disjunct population occurs in the Pacific Northwest southward to California (Hepp and Bellrose 1995). During the winter, the majority of the eastern birds retreat south to the riverine wetlands of the Southeast and Gulf Coast. In the late 1800s, Wood Duck populations declined due to overhunting, deforestation, and loss of wetlands. Davenport (1907) considered the Wood Duck a rare breeder in Vermont. Hunting was suspended from 1918 to 1941 throughout the United States for fear that the species was in danger of extinction (Hepp and Bellrose 1995). By the end of the 1970s, the continental population had rebounded to over 3 million birds (USFWS 1986) and the annual harvest was estimated to exceed 900,000 (Hepp and Bellrose 1995).

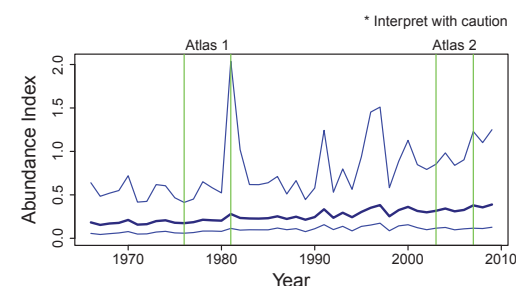
The cavity-nesting Wood Duck breeds wherever mature trees offer nesting cavities along the riparian corridors of streams and rivers, in woodlands adjacent to beaver ponds, and in swamps and freshwater marshes. Although water is a key prerequisite for suitable habitat, Wood Ducks have been known to nest up to 3.2 kilometers (2 miles) from water (Bellrose and Holm 1994). Hens with broods may appear on farm ponds and lakes, but generally seek out slow-moving waterways, swamps, and marshes. Wood Ducks are early breeders, returning to Vermont in late March or early April. They do not excavate their nest cavities, but rather take advantage of natural wood rot (Hepp and Bellrose 1995). Clutches are typically 10 to 14 eggs; larger clutches are usually the result of multiple females contributing to a "dump" nest. Incubation lasts from 28 to 37 days. Newly emerged nestlings in Vermont have been recorded from 6 May to 5 August (N = 158); peak hatching occurs during late May and early June. As in the first atlas, sighting a brood was the most frequent source of CO breeding records.

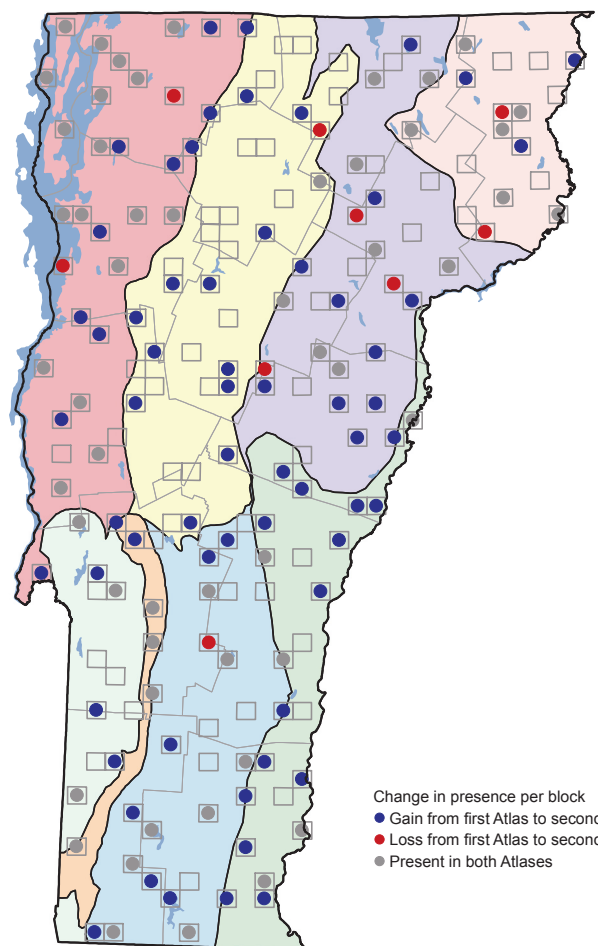
During the first atlas, Wood Ducks were found primarily in the Champlain Valley and the southern half of the state. With the exception of the Northern Green Mountains, the species was well distributed throughout most of the rest of the state, reflecting an increase that occurred throughout the continent in the mid-1900s (Hepp and Bellrose 1995). The second atlas showed an 87 percent increase in block occupancy. The greatest changes were reported in the Northern Green Mountains and Southern Vermont Piedmont. In the high-mountain areas and portions of the northeastern part of the state, Wood Ducks were somewhat more sparsely distributed.

Increases in Wood Duck occurrence have been found in other states in the region. New York atlasers documented a 45 percent increase in Wood Duck occurrence, which was attributed to an increase in beaver populations (Swift 2007). The Pennsylvania and Ontario atlases showed 27 and 50 percent increases, respectively (Cadman et al. 2007, Wilson et al. 2012).

The Wood Duck's future in the Northeast appears secure, particularly if forests continue to mature and to be managed on longer rotations to develop saw logs, if beaver populations expand, and if wetland habitats are managed and protected from pollutants and siltation. In 2008 the permitted take in the Atlantic Flyway was increased

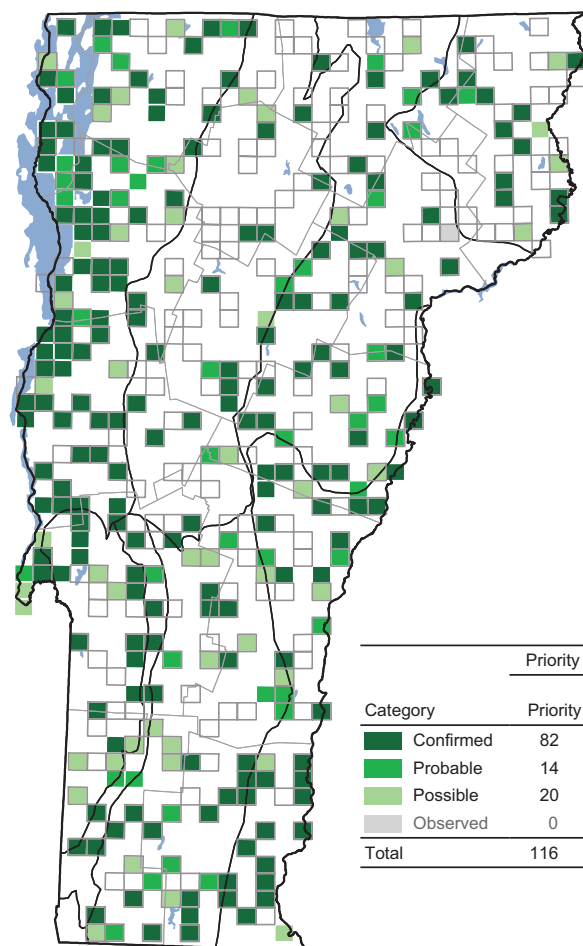
## RELATIVE ABUNDANCE OVER TIME





**CHANGE IN DISTRIBUTION BETWEEN ATLASES**

| Biophysical Region        | First Atlas | Second Atlas | Change | % Change |
|---------------------------|-------------|--------------|--------|----------|
| Champlain Valley          | 20          | 29           | + 9    | + 45     |
| Northeastern Highlands    | 8           | 9            | + 1    | + 13     |
| Northern Green Mountains  | 2           | 13           | + 11   | + 550    |
| Northern Vermont Piedmont | 11          | 19           | + 8    | + 73     |
| Southern Green Mountains  | 10          | 18           | + 8    | + 80     |
| Southern Vermont Piedmont | 5           | 17           | + 12   | + 240    |
| Taconic Mountains         | 3           | 6            | + 3    | + 100    |
| Vermont Valley            | 3           | 5            | + 2    | + 67     |
| Totals                    | 62          | 116          | + 54   | + 87     |



| Category  | Priority Block Count |                |
|-----------|----------------------|----------------|
|           | Priority 1           | Priority 1 & 2 |
| Confirmed | 82                   | 151            |
| Probable  | 14                   | 34             |
| Possible  | 20                   | 42             |
| Observed  | 0                    | 1              |
| Total     | 116                  | 227            |

**DISTRIBUTION IN CURRENT ATLAS**

| Biophysical Region        | % of region species occupies | % of all records for this species found in region |
|---------------------------|------------------------------|---------------------------------------------------|
| Champlain Valley          | 84                           | 27                                                |
| Northeastern Highlands    | 43                           | 7                                                 |
| Northern Green Mountains  | 33                           | 10                                                |
| Northern Vermont Piedmont | 60                           | 17                                                |
| Southern Green Mountains  | 71                           | 18                                                |
| Southern Vermont Piedmont | 72                           | 13                                                |
| Taconic Mountains         | 52                           | 5                                                 |
| Vermont Valley            | 100                          | 4                                                 |

from 2 to 3 birds per day for an “experimental” three-year period (USFWS 2008). Population estimates for the northeastern states have hovered around 370,000 since the early 1990s (USFWS 2009). Provision of nest boxes, once considered necessary to save the Wood Duck, may not have a significant effect on the global population; only an estimated 4 to 5 percent of the eastern population originates from boxes (Bellrose 1990). Boxes may, however, increase local Wood Duck densities in marsh systems where suitable nest trees are lacking.

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