

Blue-winged Teal

Anas discors

Sporting a white crescent offsetting a blue-gray face, the male Blue-winged Teal is a flashy and easily identified duck. In contrast, females are cryptically colored to provide camouflage at the nest. Principally a duck of the Prairie Pothole Region of the north-central United States and adjacent Canada, the Blue-winged Teal is one of the few species of prairie-nesting waterfowl in which the majority of the population winters outside the United States, including South America, Central America, and the Greater Antilles (Rohwer et al. 2002). The species breeds from Newfoundland to Alaska and as far south as the Gulf Coast, where winter rains increase the availability of suitable nesting habitat (Rohwer et al. 2002). Although Vermont sits on the eastern edge of the species' range, breeding densities away from the Prairie Pothole Region are low.

This small duck prefers seasonal and semi-permanent wetlands surrounded by grasses or other herbaceous vegetation. Highest densities occur where there is a diverse and abundant population of aquatic invertebrates (Murkin and Kadlec 1986). Although females with broods are relatively conspicuous, those that nested in small, isolated, wetlands could have been overlooked in the Vermont atlas. Atlasers reported females with broods ($N = 5$) between 25 June and 4 August. Probably due to their long migrations, Blue-winged Teal is the last duck species to start nesting in Vermont, usually early to mid-May (W. Crenshaw pers. comm.).

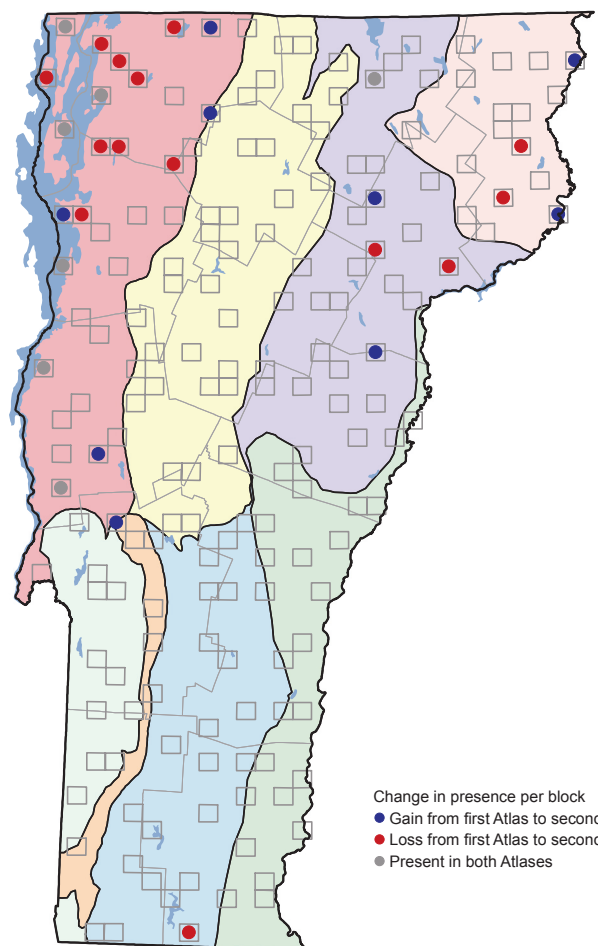
The number of blocks with Blue-winged Teal decreased 21 percent between the two Vermont atlases, and the number of CO records declined by 50 percent. The overall change in distribution was complex. Teal disappeared from 14 of 21 blocks, but appeared in 9 new blocks. The Champlain Valley remains the stronghold for this duck, despite a 33 percent decline in the number of occupied blocks. Most of the remaining occupied blocks were in the Northeastern Highlands and the Northern Vermont Piedmont, primarily in the upper Connecticut River Valley. Data from other atlases parallel Vermont's declines. New York reported a 63 percent decline (Mc-



Gowan and Corwin 2008); Ontario, 36 percent (Cadman et al. 2007); Pennsylvania and Maryland, 66 and 68 percent, respectively (Wilson et al. 2012, Ellison 2010).

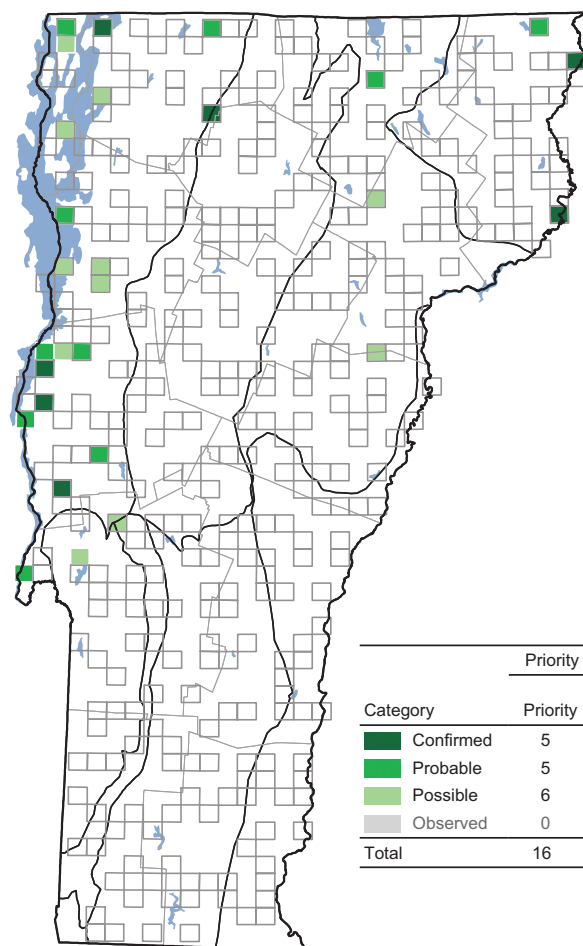
Continent-wide, Blue-winged Teal populations have fluctuated dramatically. There was a low in 1990 of approximately 2.8 million birds and a record high ten years later of 7.4 million. By 2005, the population had declined again to 4.2 million (USFWS 2008). During the second atlas, the continental population averaged about 5.4 million, approximately 15 percent above population goals set for the Cinnamon and Blue-winged Teals combined (NAWMP 2004).

Because Blue-winged Teal nest in grassy areas close to water, farm abandonment and the replacement of pasture/hay with row crops such as corn and soybeans may have led to a loss of nesting habitat in Vermont. Earlier and more frequent mowing of hayfields (Troy et al. 2005) have probably also had a negative impact on Blue-winged Teal nesting success over the past thirty years. Galatowitsch and van der Valk (1996) showed that the ephemeral wetlands in the Prairie Pothole Region favored by Blue-winged Teal have been more negatively affected by agricultural practices than permanent wetlands. Favorable water conditions that linger into the breeding season, however, may entice pairs to nest in areas that had not previously provided suitable habitat (Bellrose 1980).



CHANGE IN DISTRIBUTION BETWEEN ATLASES

Biophysical Region	First Atlas	Second Atlas	Change	% Change
Champlain Valley	15	10	- 5	- 33
Northeastern Highlands	2	2	+ 0	+ 0
Northern Green Mountains	0	0	+ 0	+ 0
Northern Vermont Piedmont	3	3	+ 0	+ 0
Southern Green Mountains	1	0	- 1	- 100
Southern Vermont Piedmont	0	0	+ 0	+ 0
Taconic Mountains	0	0	+ 0	+ 0
Vermont Valley	0	1	+ 1	+ 100
Totals	21	16	- 5	- 24



Category	Priority Block Count	
	Priority 1	Priority 1 & 2
Confirmed	5	7
Probable	5	7
Possible	6	8
Observed	0	0
Total	16	22

DISTRIBUTION IN CURRENT ATLAS

Biophysical Region	% of region species occupies	% of all records for this species found in region
Champlain Valley	20	68
Northeastern Highlands	8	14
Northern Green Mountains	0	0
Northern Vermont Piedmont	4	14
Southern Green Mountains	0	0
Southern Vermont Piedmont	0	0
Taconic Mountains	0	0
Vermont Valley	12	5

Consequently, blocks in which Blue-winged Teal were not detected for one or two years might support nesting in subsequent years. Although hydrologic conditions in the Northeast are more stable than in the Prairie Pothole Region, fluctuations could potentially influence detection rates in blocks monitored for a single year.

Although never a common nesting species in Vermont, the Blue-winged Teal has recently been deemed a Species of Special Concern. It has not been listed in any neighboring states, despite the population declines noted above. Its population should be carefully monitored dur-

ing the coming decades. Protection of grasslands adjacent to emergent wetlands would be a useful management strategy.

ALLAN STRONG