

American Black Duck

Anas rubripes



The American Black Duck breeds in a diversity of wetland types across eastern North America, from the shores of Hudson Bay to the tidal marshes of North Carolina (Longcore et al. 2000a). Historically, the Black Duck was a common species in the Northeast and Great Lakes regions. Until the mid-1980s, Black Ducks had declined throughout most of their range and the adaptable Mallard, which was released in many states, filled vacated habitats.

In Vermont, the Black Duck is a year-round resident and is widely distributed from the emergent and forested wetlands of the Champlain Valley to riparian marshes of the Connecticut River Valley. It remains common along the open waterways of both Lake Champlain and the Connecticut River (NAS 2009). American Black Ducks form pair bonds in late fall and early winter. In Vermont, females with young have been seen as early as 20 May, which suggests that egg-laying may begin as early as mid-April. Although the American Black Duck is thinly distributed across the state, it can be overlooked because its plumage is similar to that of female Mallards and Mallard–Black Duck hybrids.

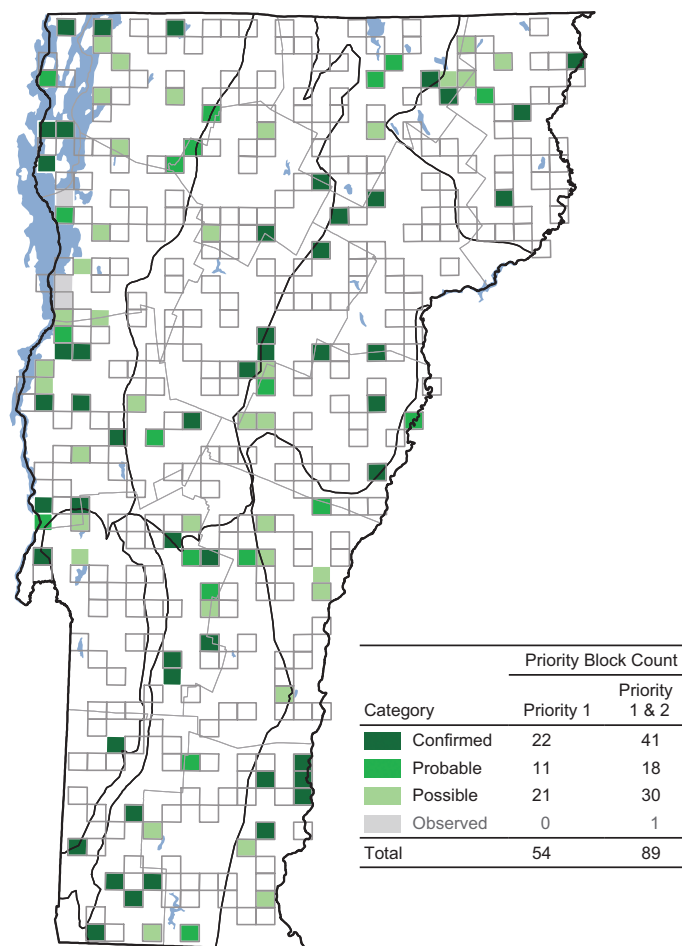
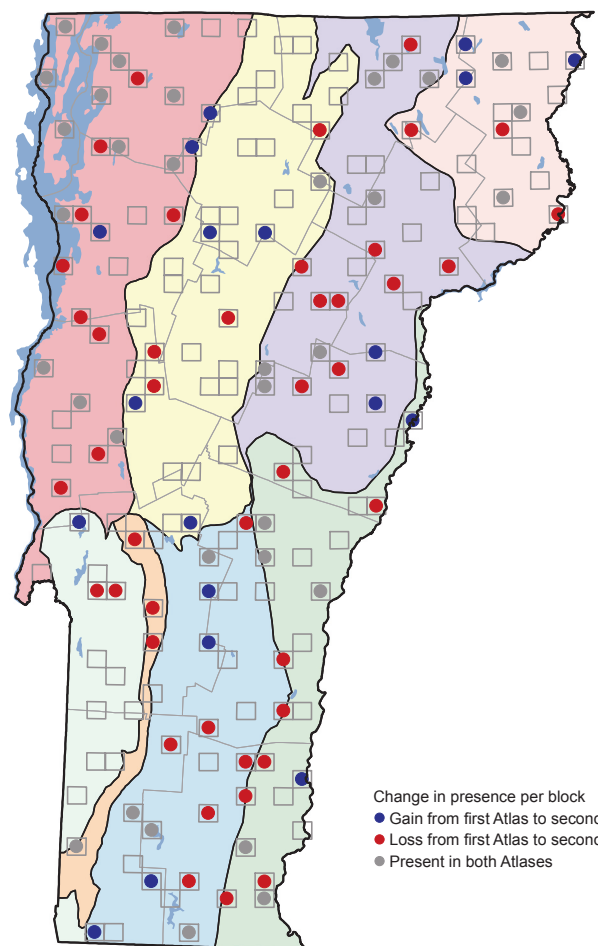
Except for southwestern Vermont, where it was rarely encountered, the American Black Duck was widespread across the remainder of the state. Block occupancy was highest in the Champlain Valley, the Northern and Southern Vermont piedmonts, and the Southern Green Mountains, where most of the breeding records were associated with major water bodies: Lake Champlain and the Connecticut and Winooski rivers. Black Duck was found in one-third fewer blocks in the second atlas. Losses were evenly distributed across the state, suggesting a systemic change as opposed to a region-specific change in land use.

Steep declines in Black Duck block occupancy have been documented in the second atlases of Ontario (22 percent; Cadman et al. 2007), New York (34 percent; McGowan and Corwin 2008), Maryland (31 percent; Ellison 2010), and Pennsylvania (60 percent; Wilson et al. 2012). Winter populations declined sharply from 1955 through

the 1970s (USFWS 2008). Since then, changes in the distribution of Black Duck may in part underlie the continued, albeit more moderate declines indicated by mid-winter survey data, because new regions harboring the species are not adequately surveyed (Brook et al. 2009). This may explain, in part, why breeding population estimates show an increasing trend since 1994, while mid-winter population counts suggest declines over the same period.

The long-term decline (since the 1950s) in their population (e.g., Longcore et al. 2000a and references therein) is likely the result of several factors. On the breeding grounds, drainage and clearing of forested wetlands for agriculture have led to substantial habitat losses (Bordage and Reed 1996). On the wintering grounds, coastal erosion, filling of wetlands along estuaries, and subsequent residential development also have led to substantial loss of habitat (e.g., Jantz et al. 2005). In Vermont, lakeshore development has likely led to habitat loss and increased disturbance levels (e.g., Morton 1998). Additionally, hunting has been shown to be an additive mortality factor (Longcore et al. 2000b). Although competition with Mallards has been hypothesized as causing Black Duck population declines, data are equivocal (Ankney et al. 1987, McAuley et al. 1988, 2004). Over the last 50 years, Mallards have become a common feature of urban waterways, where supplemental feeding has supported large winter populations (Heusmann and Burrell 1984). Black Ducks and Mallards show a 99.4 percent genetic overlap (Kerr et al. 2007), and in Mallard–Black Duck aggregations, an estimated 13.2 percent are hybrids (Kirby et al. 2000); this suggests that introgressive hybridization is a concern.

The American Black Duck was recently listed as a Species of Special Concern in Vermont, and its declining trend merits year-round monitoring. Data from radio-



CHANGE IN DISTRIBUTION BETWEEN ATLASES

Biophysical Region	First Atlas	Second Atlas	Change	% Change
Champlain Valley	23	17	- 6	- 26
Northeastern Highlands	6	6	+ 0	+ 0
Northern Green Mountains	5	5	+ 0	+ 0
Northern Vermont Piedmont	16	9	- 7	- 44
Southern Green Mountains	12	8	- 4	- 33
Southern Vermont Piedmont	11	7	- 4	- 36
Taconic Mountains	2	1	- 1	- 50
Vermont Valley	4	1	- 3	- 75
Totals	79	54	- 25	- 32

DISTRIBUTION IN CURRENT ATLAS

Biophysical Region	% of region species occupies	% of all records for this species found in region
Champlain Valley	34	28
Northeastern Highlands	21	9
Northern Green Mountains	13	10
Northern Vermont Piedmont	24	18
Southern Green Mountains	30	19
Southern Vermont Piedmont	30	13
Taconic Mountains	4	1
Vermont Valley	12	1

tagged Black Ducks in Quebec and Vermont documented that 80 percent of deaths of marked ducks were attributed to hunting (Longcore et al. 2000b). Given the decline in this species' population in the state and region, close monitoring of annual harvests is warranted.

ALLAN STRONG