

American Bittern

Botaurus lentiginosus

A reclusive denizen of shallow cattail marshes with interspersed pools of water (Rehm and Baldassarre 2007), the American Bittern is known for its habit of “freezing” in an upright position, thereby blending exceptionally well with its surroundings. In this pose, the streaked brown plumage makes an individual nearly invisible, yet bitterns sometimes carry the imitation one step further, swaying from side to side to simulate the marsh grass moving in the wind. The distribution of this marshbird stretches from coast to coast in the mid-United States and northward to Canada (Gibbs et al. 1992).

Well camouflaged and quiet relative to most marshbird species, the American Bittern is easily overlooked. When a bird elicits the unmistakable “pump-handle” call, however, it can be heard for several hundred meters. Bitterns return to Vermont in late April, and by early May their distinctive vocalizations can be heard in many of the more extensive marshes. Based on five observations during the current atlas, fledged but dependent young have been recorded in Vermont as early as 11 June. The latest fledgling date in the current atlas was 4 July, but fledglings that left the nest later in the summer likely went undiscovered. Indeed, the first atlas recorded fledglings as late as 25 July (Kibbe 1985).

Data from the current atlas show American Bitterns well distributed among the larger marsh systems of the northern portion of the state. The species occurred in more than 70 percent more blocks than in the first atlas. Much of the increase was in the Northeastern Highlands, Northern Vermont Piedmont, Northern Green Mountains, and Champlain Valley, while records of the species in the southern part of the state remained static or decreased slightly.

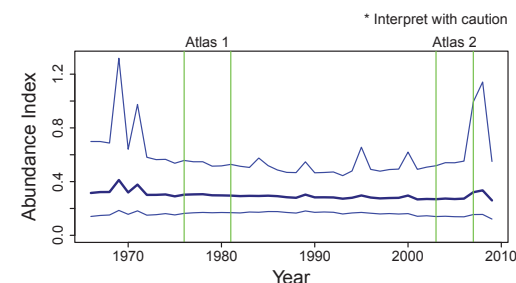
New York’s second atlas revealed a 10 percent decline in American Bittern records (McGowan and Corwin 2008), a decrease that closely mirrored the 8.8 percent yearly decline documented in a focused marsh-monitoring effort in the Great Lakes Basin from 1995 to 2003 (Crewe et al. 2005). In Ontario’s second atlas, a decline of 37 percent was found in only one region of the province: the Caro-

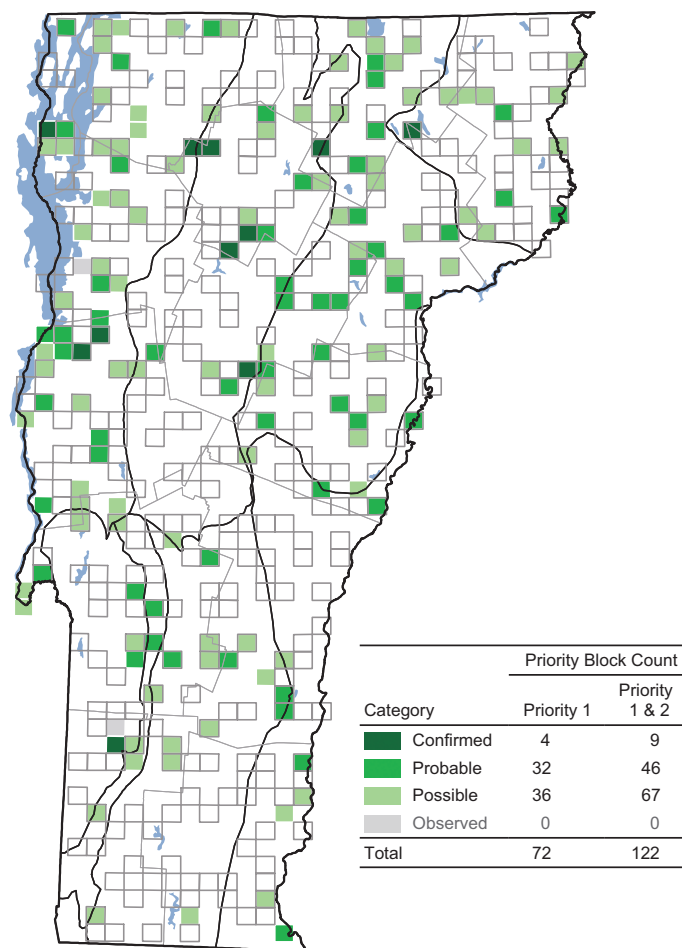
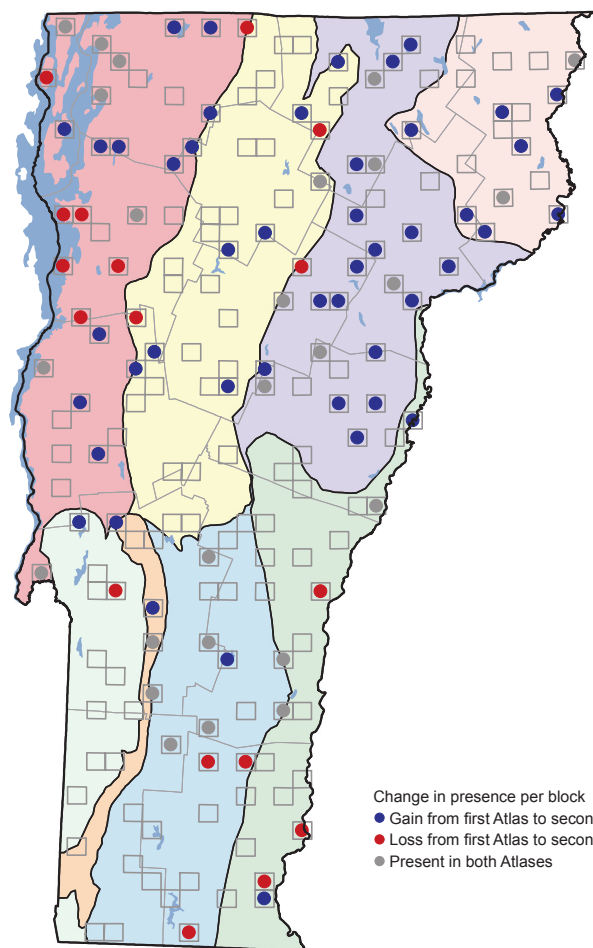


linian, on the northern border of Lake Erie (Cadman et al. 2007). In Pennsylvania, where suitable breeding habitat is relatively scarce, atlas results showed a 42 percent decline (Wilson et al. 2012). Range-wide, Breeding Bird Survey data indicate that the population has been stable since the early 1980s after experiencing declines during the two previous decades, particularly in the central BBS region (Sauer et al. 2011).

Vermont had classified the American Bittern as a Species of Special Concern, but recently delisted it, based in part on atlas data. Conway (2007) recommends standardized survey protocols including use of recorded vocalizations in surveys for this bittern. Although recorded vocalizations are commonly used to elicit responses from rails, use of playbacks is much less frequently attempted with bitterns. Using a standardized survey protocol and increasing monitoring efforts would provide a better understanding of the population changes in Ver-

RELATIVE ABUNDANCE OVER TIME





CHANGE IN DISTRIBUTION BETWEEN ATLASES

Biophysical Region	First Atlas	Second Atlas	Change	% Change
Champlain Valley	14	18	+ 4	+ 29
Northeastern Highlands	2	9	+ 7	+ 350
Northern Green Mountains	3	8	+ 5	+ 167
Northern Vermont Piedmont	7	22	+ 15	+ 214
Southern Green Mountains	9	7	- 2	- 22
Southern Vermont Piedmont	5	4	- 1	- 20
Taconic Mountains	1	1	+ 0	+ 0
Vermont Valley	1	3	+ 2	+ 200
Totals	42	72	+ 30	+ 71

DISTRIBUTION IN CURRENT ATLAS

Biophysical Region	% of region species occupies	% of all records for this species found in region
Champlain Valley	42	25
Northeastern Highlands	32	10
Northern Green Mountains	29	16
Northern Vermont Piedmont	50	27
Southern Green Mountains	23	11
Southern Vermont Piedmont	17	6
Taconic Mountains	14	2
Vermont Valley	50	3

mont. These efforts are especially important given the population decrease suggested by recent data from surrounding states and provinces.

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