

Turkey Vulture

Cathartes aura



Recent research has revealed that many bird species have a developed sense of smell (Steiger et al. 2008). The Turkey Vulture, however, absolutely depends upon odor to locate its food—a necessity for a scavenger that trolls for carcasses hidden below the forest canopy. For the past century, the Turkey Vulture has steadily expanded its range northward. The most widely distributed vulture in the Americas, it breeds across south-central Canada, coast to coast in the United States, and southward to Tierra del Fuego in southern South America. Vermont was once on the northern threshold of the range, but birds now regularly breed in southern Ontario and Quebec (Kirk and Mossman 1998).

Turkey Vultures are birds of field and forest, but in areas dominated by forest their home ranges may have greater proportions of roads and open fields relative to the general landscape (Coleman and Fraser 1989). They nest in dark cavities that are protected from human disturbance, including cliffs, boulder caves, rock overhangs, banks, burrows, hollow logs, brush piles, thickets, inactive hawk nests, and abandoned buildings (Jackson 1983). No nest is constructed nor is food carried in the bill; hence, it is virtually impossible to be certain that a bird is visiting a nest site.

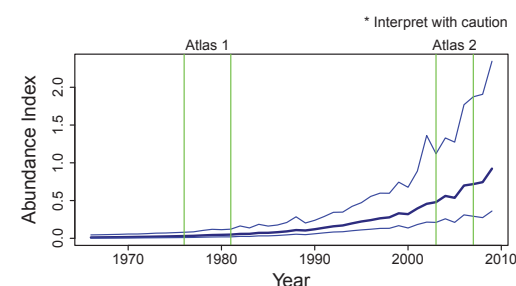
Although the Turkey Vulture is a conspicuous bird aloft and spends a third of the day in flight (Coleman and Fraser 1989), it is extremely effective in concealing its breeding location. Of the more than 270 records in the second atlas, only two were confirmed breeding, the lowest confirmation rate for a species regularly breeding in the state. Nestlings were found on 21 June. Turkey Vultures are rarely seen in Vermont after mid-October until their return in mid-March, but individuals have been reported during winter months (VBRC unpubl. data). Nest sites may be visited for weeks prior to nesting. In southern Wisconsin, at latitudes similar to those of Vermont, eggs are usually laid in late April, and most hatch from 23 May to 5 June. Young first fly around the end of July and join communal roosts in mid to late August (Kirk and Mossman 1998).

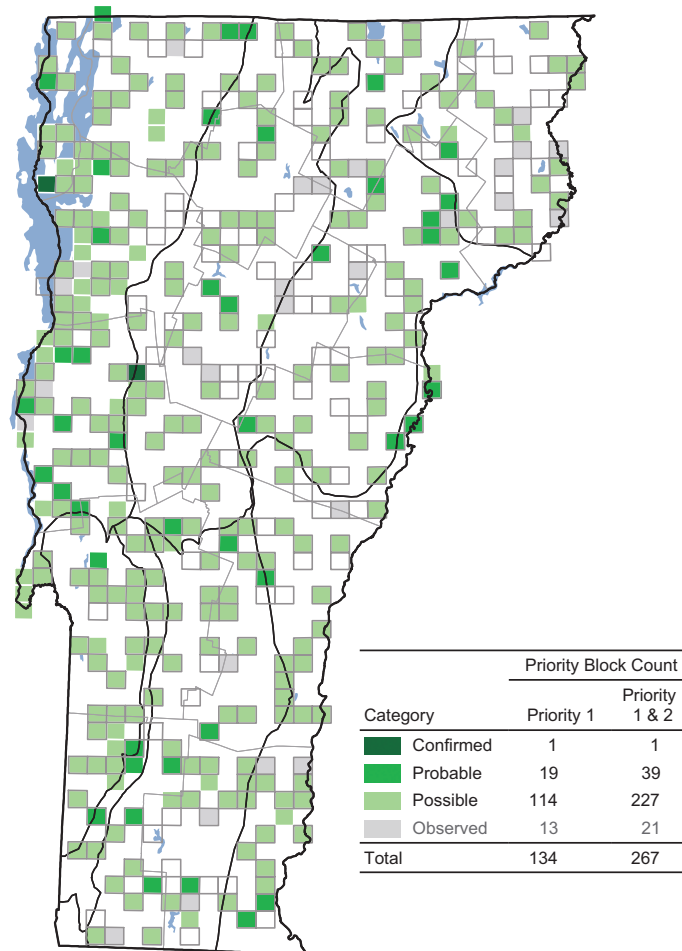
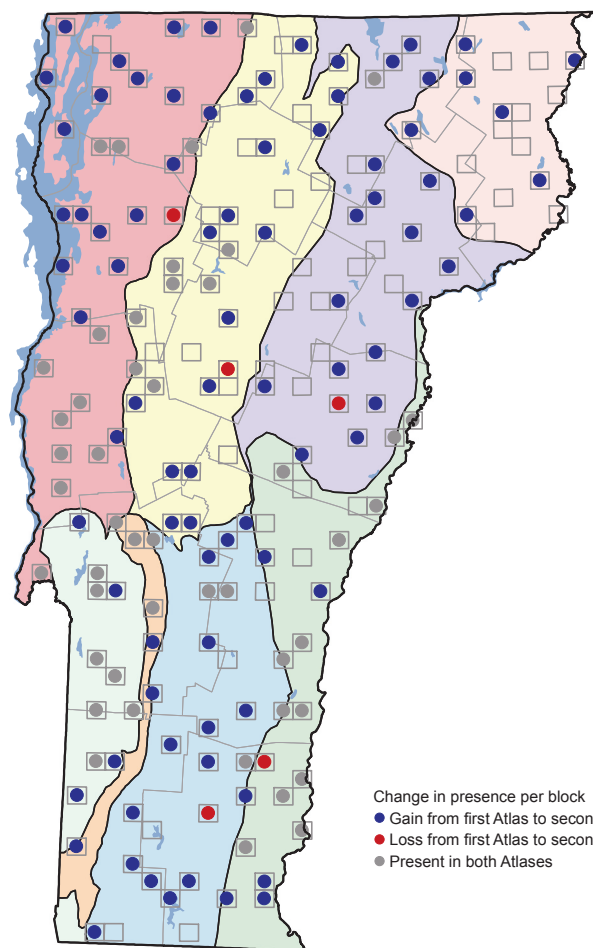
In the first atlas, most of the Turkey Vulture records were from the Taconic Mountains, Southern Piedmont, and the southern Champlain Valley (Martin 1985). Results of the second atlas revealed records in more than twice as many Priority 1 blocks, with increases in every region of the state.

The increase found in Vermont's second atlas mirrors changes in the status of the species throughout the northern edge of its range. The Breeding Bird Survey provides a poor indication of vulture trends because the bird's foraging flight begins late in the morning, near the end of the survey window. Nonetheless, the data are useful for indicating relative changes in the species' abundance and show a substantial increase of 4.2 percent in the eastern region from 1982 to 2007 (Sauer et al. 2011). New York atlas workers also found a considerable increase (71 percent) in block occupancy (McGowan 2008). Ontario's second atlas documented a fourfold increase in abundance and an expansion of the northern edge of the breeding range (Peck 2007). Farther south in Pennsylvania, a smaller increase in block occupancy of 12 percent was noted (Wilson et al. 2012), and in Maryland, where development has encroached on breeding habitat, a decrease of 6 percent was found (Ellison 2010).

Various reasons have been advanced to explain the increase in the Turkey Vulture population in the North-

RELATIVE ABUNDANCE OVER TIME





CHANGE IN DISTRIBUTION BETWEEN ATLASES

Biophysical Region	First Atlas	Second Atlas	Change	% Change
Champlain Valley	13	31	+ 18	+ 138
Northeastern Highlands	0	7	+ 7	+ 700
Northern Green Mountains	8	24	+ 16	+ 200
Northern Vermont Piedmont	3	19	+ 16	+ 533
Southern Green Mountains	6	21	+ 15	+ 250
Southern Vermont Piedmont	12	16	+ 4	+ 33
Taconic Mountains	7	11	+ 4	+ 57
Vermont Valley	3	5	+ 2	+ 67
Totals	52	134	+ 82	+ 158

DISTRIBUTION IN CURRENT ATLAS

Biophysical Region	% of region species occupies	% of all records for this species found in region
Champlain Valley	90	25
Northeastern Highlands	48	7
Northern Green Mountains	63	15
Northern Vermont Piedmont	69	17
Southern Green Mountains	73	15
Southern Vermont Piedmont	70	10
Taconic Mountains	95	7
Vermont Valley	100	3

east, including the banning of DDT, global warming, and greater numbers of roadkills (Martin 1985, Kirk and Mossman 1998). Certainly the likelihood of seeing this bird anywhere in the state is much greater than it was two decades ago, as predicted by Martin (1985). Rock climbing, however, has the potential to cause nest desertion during the incubation period (Coleman and Fraser 1989). Protecting potential nest sites from disturbance during the early summer would help this beneficial scavenger.

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