

Eastern Screech-Owl

Megascops asio

The *screech* call is only a small part of the Eastern Screech-Owl's vocal repertoire, used only when it is extremely agitated. The more familiar *trill* and *quaver* are better representatives of this owl's songs. Weighing no more than a red squirrel, the Eastern Screech-Owl averages 20 centimeters (8 inches) tall. The only polymorphic North American owl, it occurs as both gray and red morphs. The gray morph is better able to survive harsh winters and greatly outnumbers the red morph in Vermont (Van Camp and Henny 1975, Mosher and Henny 1976). Vermont is at the northeastern edge of the species' range, which includes all of the eastern United States, westward to the Rocky Mountains, southward to northeastern Mexico, and northward to southern Canada (Gehlbach 1995). The Eastern Screech-Owl is a permanent resident throughout its range (Van Camp and Henny 1975, Gehlbach 1995), surviving cold northern winters by roosting in holes.

Eastern Screech-Owls breed in a wide variety of habitats, including deciduous and mixed woodlands—ranging from early successional to mature—as well as apple orchards and other populated environments from rural to urban, in both lowland areas and at higher elevations. The common requirement across these habitats is the availability of hollows needed for roosting and nesting. Natural tree hollows, old woodpecker holes, and nesting boxes all suffice. Apple, cottonwood, and pine trees are frequent host species (Gehlbach 1995), as these trees all have weak limbs likely to break off and create cavities. Breeding records from the second atlas give dates of 15 April to 31 May for owls on a nest ($N = 4$), 22 May to 10 June for nests with young ($N = 3$), and 15 June to 12 July for fledgling dates ($N = 4$).

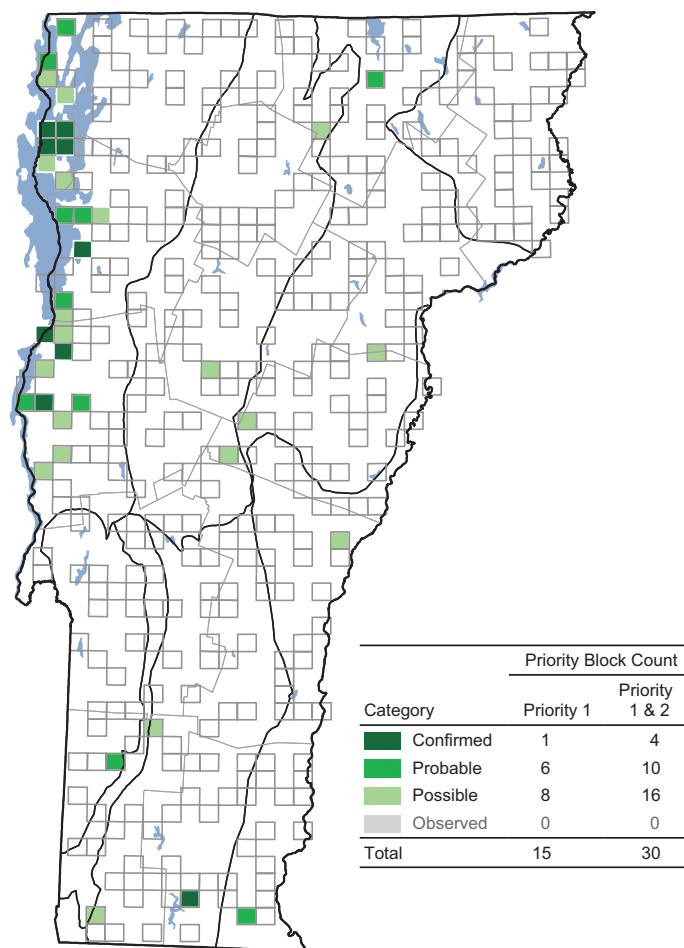
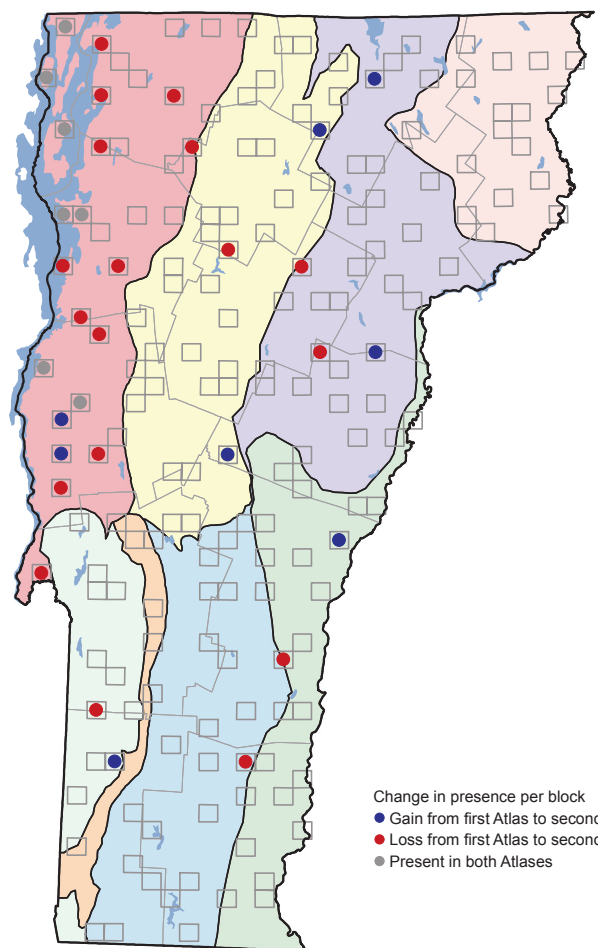
In Vermont, Eastern Screech-Owls are concentrated in the more temperate Champlain Valley. Scattered records occur throughout the state in all but the Northeastern Highlands, where the climate can be most harsh. The current distribution is similar to that during the first atlas, although they were recorded in 53 percent fewer



blocks in the Champlain Valley. The second atlas in New York found the species essentially stable (McGowan and Corwin 2008), and the second Ontario atlas noted no significant change in distribution province-wide, although there was an increase in the Southern Shield (Cadman et al. 2007). Christmas Bird Count data for Vermont show a slight increase from 1979 to 2007. Range-wide, there has been no long-term decline.

As with all owls, nighttime surveys must be conducted to adequately document Eastern Screech-Owl populations. Owl surveys were conducted during both atlases, and although equal effort between atlases cannot be statistically proven, a 40 percent decline between atlas periods should not be dismissed. Historical records for Vermont suggest cyclic trends. Smith (1934) called the bird common at low elevations, Spear (1976) noted declines from the 1940s through the 1970s, and Laughlin (1985) noted a stable population that was "healthier than many Vermont ornithologists would have predicted." Reasons for declines are unknown. Collisions with cars are a major source of mortality for owls in North America (Gehlbach 1995), and factors affecting nesting habitat or productivity—such as availability of nesting cavities, competition for nesting cavities, or predation—could also be contributors.

Currently, there are no management concerns for the species, although park, cemetery, farm, and woodland managers should be encouraged to leave appropriate trees with nesting hollows. The use of nest boxes has been suggested in areas where hollows are lacking, especially in areas undergoing reforestation (Gehlbach 1995). The Eastern Screech-Owl's widespread distribution, ability to use a wide variety of habitats, and tolerance for human activity should allow for stable populations. Tar-



CHANGE IN DISTRIBUTION BETWEEN ATLASES

Biophysical Region	First Atlas	Second Atlas	Change	% Change
Champlain Valley	19	9	- 10	- 53
Northeastern Highlands	0	0	+ 0	+ 0
Northern Green Mountains	1	2	+ 1	+ 100
Northern Vermont Piedmont	2	2	+ 0	+ 0
Southern Green Mountains	1	0	- 1	- 100
Southern Vermont Piedmont	1	1	+ 0	+ 0
Taconic Mountains	1	1	+ 0	+ 0
Vermont Valley	0	0	+ 0	+ 0
Totals	25	15	- 10	- 40

DISTRIBUTION IN CURRENT ATLAS

Biophysical Region	% of region species occupies	% of all records for this species found in region
Champlain Valley	24	60
Northeastern Highlands	0	0
Northern Green Mountains	4	10
Northern Vermont Piedmont	4	10
Southern Green Mountains	5	10
Southern Vermont Piedmont	5	7
Taconic Mountains	4	3
Vermont Valley	0	0

geted monitoring of this nocturnal bird will provide a better understanding of whether the decline revealed in the atlas data is real, part of a natural cycle, or related to atlasing effort or methods.

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