

# Eastern Meadowlark

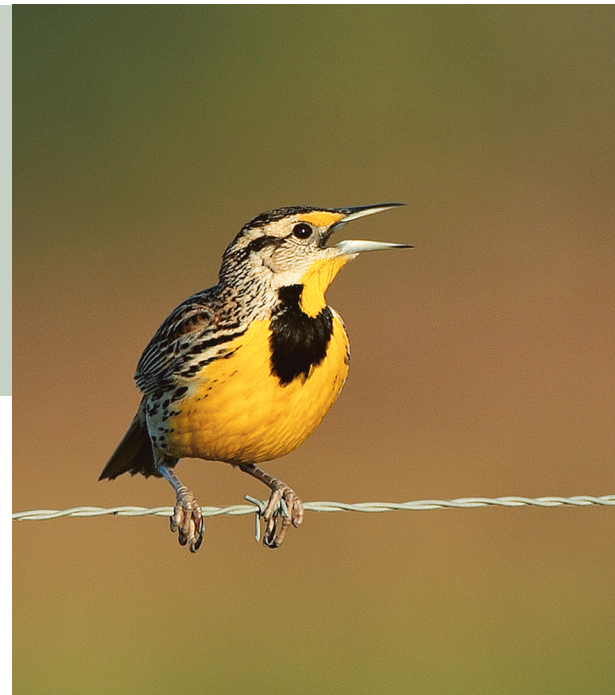
*Sturnella magna*

Whether the bird is sailing over open fields or perched on a fence post, the Eastern Meadowlark's bright yellow breast and slurred, plaintive song are unmistakable. Historically a bird of the prairies, the Eastern Meadowlark adapted to secondary, agricultural grasslands, and its populations expanded into the Northeast as forests were cleared. Vermont lies at the northeastern edge of this species' widespread North American range, which spans from Arizona north to Minnesota, then eastward through the Gulf states and southern Canada to the East Coast (Lanyon 1995).

The Eastern Meadowlark nests in large fallow fields, meadows, hayfields, and pastures, preferring drier sites with moderate vegetation height and density (Lanyon 1995). It is a conspicuous, easily identifiable species. From 2003 to 2007, Perlut and Strong (unpubl. data) found 20 nests in Chittenden County; the mean clutch size was  $4.25 \pm 1.10$  ( $N = 16$  nests). The earliest nest was backdated to initiation on 8 May, while the latest nest was initiated 11 July; the latest observed hatch date was 23 July. The incubation and nestling periods both averaged 12 days. Nests were built on the ground and constructed with dried grass. The nest opening generally faced northwest or southwest.

The distribution of Eastern Meadowlark has contracted in the eastern two-thirds of Vermont since the late 1970s. The first atlas showed the species to be "thinly" distributed throughout Vermont, more common in the lowlands of the Champlain Valley and the Taconic Mountains, and patchily dispersed elsewhere. Today, the majority of the state's population still resides in the Champlain Valley, but its statewide distribution has become more limited. From the Green Mountains eastward, as well as in valleys of the Taconic Mountain region, land-use changes such as development, farm abandonment, agricultural intensification, and reforestation have reduced suitable habitat for the Eastern Meadowlark to the point where it is now an uncommon breeder.

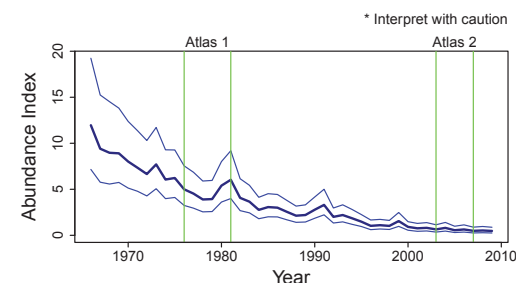
Paralleling the species' range contraction in Vermont, Eastern Meadowlark populations in the state have markedly declined. The species was detected in fewer than half

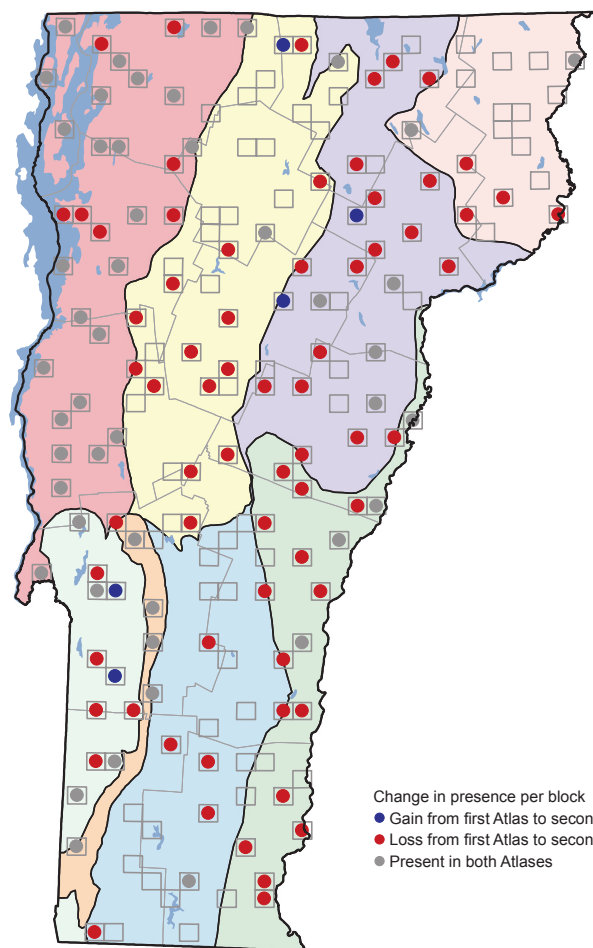


of the Priority 1 blocks where it was found in the first atlas. This trend is consistent with Breeding Bird Survey data, which indicated a significant 8.2 percent annual population decline in Vermont from 1982 to 2007 (Sauer et al. 2011). Even in the Champlain Valley, where block occupancy was highest, density was very low. Seven years of grassland bird research (from 2002 to 2008) found that Eastern Meadowlark pairs generally occurred in isolation; in one instance, a male was mated to two females (N. Perlut and A. Strong unpubl. data). Elsewhere, the Eastern Meadowlark was found in fewer blocks in the second atlases of New York, Pennsylvania, and Ontario (McGowan and Corwin 2008, Wilson et al. 2012, Cadman et al. 2007). Range-wide, the species' populations have declined significantly by 3.3 percent annually from 1982 to 2007 (Sauer et al. 2011). Despite its widespread distribution, concern over consistent and often-steep population declines have earned the Eastern Meadowlark conservation priority status in several states, including New Hampshire, New York, and Vermont, where it is a Species of Special Concern.

Although Vermont has never constituted an Eastern

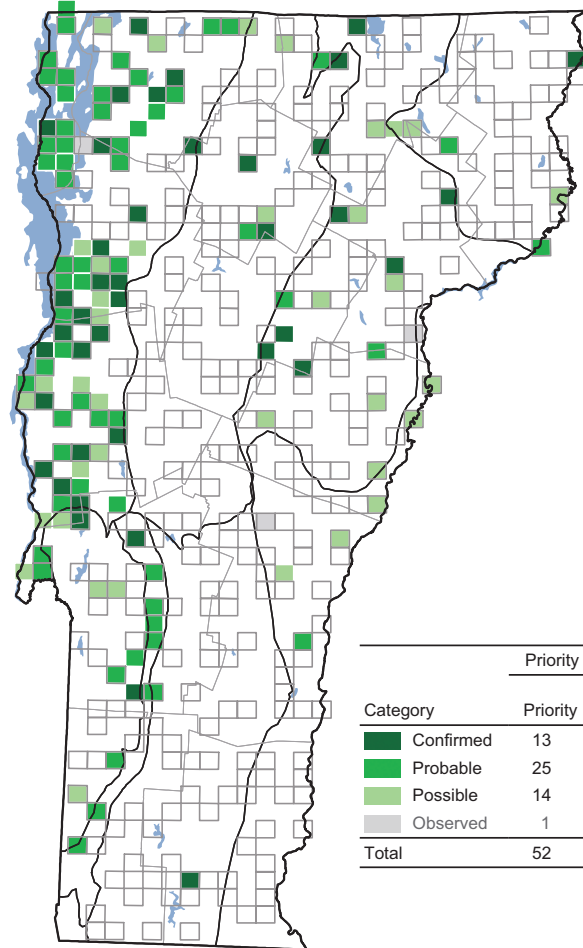
RELATIVE ABUNDANCE OVER TIME





**CHANGE IN DISTRIBUTION BETWEEN ATLASES**

| Biophysical Region        | First Atlas | Second Atlas | Change | % Change |
|---------------------------|-------------|--------------|--------|----------|
| Champlain Valley          | 32          | 25           | - 7    | - 22     |
| Northeastern Highlands    | 6           | 2            | - 4    | - 67     |
| Northern Green Mountains  | 16          | 3            | - 13   | - 81     |
| Northern Vermont Piedmont | 21          | 6            | - 15   | - 71     |
| Southern Green Mountains  | 9           | 2            | - 7    | - 78     |
| Southern Vermont Piedmont | 17          | 4            | - 13   | - 76     |
| Taconic Mountains         | 9           | 6            | - 3    | - 33     |
| Vermont Valley            | 5           | 4            | - 1    | - 20     |
| Totals                    | 115         | 52           | - 63   | - 55     |



| Category  | Priority Block Count |                |
|-----------|----------------------|----------------|
|           | Priority 1           | Priority 1 & 2 |
| Confirmed | 13                   | 31             |
| Probable  | 25                   | 44             |
| Possible  | 14                   | 24             |
| Observed  | 1                    | 3              |
| Total     | 52                   | 99             |

**DISTRIBUTION IN CURRENT ATLAS**

| Biophysical Region        | % of region species occupies | % of all records for this species found in region |
|---------------------------|------------------------------|---------------------------------------------------|
| Champlain Valley          | 72                           | 54                                                |
| Northeastern Highlands    | 13                           | 5                                                 |
| Northern Green Mountains  | 10                           | 7                                                 |
| Northern Vermont Piedmont | 23                           | 15                                                |
| Southern Green Mountains  | 3                            | 2                                                 |
| Southern Vermont Piedmont | 12                           | 5                                                 |
| Taconic Mountains         | 28                           | 6                                                 |
| Vermont Valley            | 75                           | 6                                                 |

Meadowlark stronghold, population declines in both core and peripheral areas of the species' range warrant conservation actions wherever quality habitat exists, and a working group is establishing priority areas in which to focus grassland bird management activities. Researchers have recommended targeting larger grass-based fields, more than 5 hectares (12.4 acres) in size, preferably embedded in a matrix of open habitat (Lanyon 1995). Federal wildlife conservation programs offer incentives for farming and non-farming landowners to set aside all or part of their lands for grassland bird production. Management

strategies include maintaining nesting habitat through control of woody invasive species and altered mowing regimes, including delaying mowing until at least 15 July, or establishing an early mowing around Memorial Day, followed by a 65-day wait before the second mowing, to allow adequate time for successful breeding (Perlut et al. 2006). Promoting structural diversity by planting a variety of grass and forb species (such as warm-season grasses) also can enhance habitat for Eastern Meadowlarks (Jones and Vickery 1997).

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