



Natural Heritage & Endangered Species Program

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Massachusetts Division of Fisheries & Wildlife

Horned Lark *Eremophila alpestris*

State Status: **None**
Federal Status: **None**

SPECIES DESCRIPTION: Horned Larks are a songbird of large open areas with sparse vegetation, particularly coastal dunes, airfields and agricultural fields. They are somewhat drab in plumage, mostly shades of brown, but have distinctive horns (occipital feather tufts), a strong black bar across the throat, and a wash of yellow on the face and throat. Their twinkling metallic song is typically heard given in flight as the male circles above the breeding territory. In non-breeding situations, they can form large flocks that roam grasslands and dunes.

DISTRIBUTION AND ABUNDANCE: Horned Larks were not known as breeders in Massachusetts prior to the mid-19th century, but the extensive clearing of the state for agricultural set the stage for the prairie race, *Eremophila alpestris praticola*, to pioneer and exploit the recently created open habitat. Since that time, the Massachusetts range for breeding Horned Lark has retracted in concert with the loss of open land, and now they are found primarily associated with large dune systems on Cape Cod, the Islands, and the North Shore.

Only a few outlying populations remain in the agricultural fields in the Connecticut River Valley and interior airfields.

Massachusetts Breeding Bird Atlas 1 surveys found that Horned Larks were making a living at scattered locations inland, but their stringent habitat requirements meant that they were mostly coastal in distribution. The Marble Valleys had 10% Horned Lark occupancy, likely in areas of abandoned or fallow farmland. The Connecticut River Valley apparently had suitable breeding locations in 14% of the region, both in farm fields and at airports kept free of dense vegetation. Only a small scattering of occupied blocks bridged the gap from the Connecticut River Valley to the coast. The Coastal Plains had breeding Horned Larks on the beaches of Essex and Plymouth Counties, and the Bristol/Narragansett Lowlands reported several instances of inland breeding as well as nests found around the shores of Buzzards Bay. More than 60% of the species' statewide distribution fell in Cape Cod and the Islands, where sandy dune habitat was readily available for Horned Larks looking to settle down.

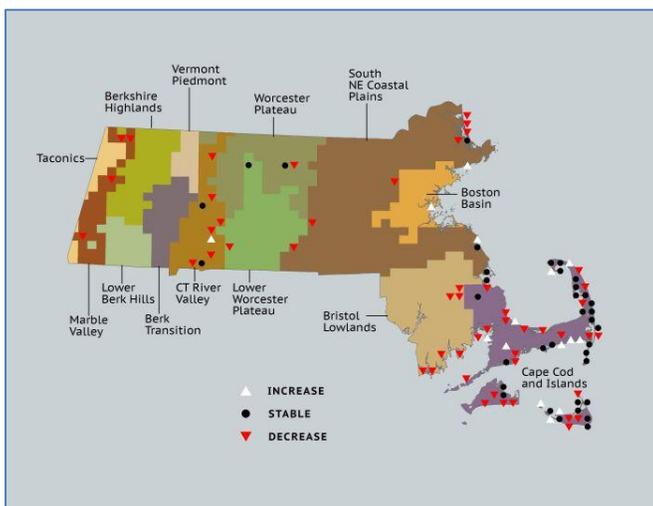


Figure 1: Changes between Breeding Bird Atlases 1 and 2.

Within the three decades between Atlas 1 and Atlas 2, the Horned Lark began to opt out of Massachusetts as a breeding species. Distribution patterns in Atlas II weakly mirror those of Atlas I: up the Connecticut River, sparsely spread eastward, with the species' most notable breeding strongholds in the southeastern Coastal Plains and on Cape Cod and the Islands. Horned Larks completely retreated from the far west and almost completely retreated from the Bristol/Narragansett Lowlands. The birds posted only a symbolic guard in Essex County, and even in their stronghold on Cape Cod and the Islands they disappeared from a dozen of the most well-surveyed blocks.

A Species of Greatest Conservation Need in the Massachusetts State Wildlife Action Plan

Massachusetts Division of Fisheries & Wildlife

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Horned Lark Breeding Bird Survey data is not available for Massachusetts, but across North America there is an annual decline of 2.38 percent from 1966-2013.

HABITAT DESCRIPTION: Horned Larks in Massachusetts are associated with large, open, and often barren situations. Breeding habitat is now primarily limited to large coastal dune systems dominated by bare sand and sparse dune grass (*Ammophila*). Sandplain grassland is a secondary breeding habitat, though aside from a few large airfields, this habitat has practically been lost from the state. Large fallow fields used for row crops, particularly in the Connecticut River Valley, occasionally support breeding Horned Larks.

Flocks of Horned Larks form in winter, sometimes numbering in the 100s, and utilize large patches of open, sparsely vegetated habitat similar to breeding habitat, though patches may be smaller. Harvested cornfields and mowed hayfields are important winter and migratory habitats in interior Massachusetts.

THREATS: The population decline and retraction of range for Horned Larks in Massachusetts can be directly attributed to habitat loss, specifically the loss of expansive open areas either to development or succession. Conflicting mowing practices at airfields may result in reduced breeding success at airfields, as can the tilling/seeding of large agricultural fields during the breeding season.

MANAGEMENT: Habitat loss is the primary limiting factor of Horned Lark distribution in Massachusetts: protecting large tracts of suitable habitat and managing existing habitats at a very early stage of succession is a key conservation action.

Timing mowing and agricultural activities at airfields and on farmlands to be compatible with breeding attempts by Horned Larks is important.

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