



Natural Heritage & Endangered Species Program

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Massachusetts Division of Fisheries & Wildlife

Common Nighthawk *Chordeiles minor*

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

SPECIES DESCRIPTION: The Common Nighthawk is an aerial insectivore most often seen in Massachusetts during its southern migration, when it passes overhead in loose flocks along river valleys in the last days of August. It is a fairly distinctive bird with long pointed wings marked with white wing bars, a fluttery but strong flight habit, and a sharp, nasal call often given in flight. Autumnal flocks can reach numbers into the hundreds, but as breeders the Common Nighthawk has all but disappeared from the state.

DISTRIBUTION AND ABUNDANCE: Massachusetts Breeding Bird Atlas 1 surveys found a scattering of nighthawks all over the state, particularly in the Marble Valleys, the Lower Worcester Plateau, the Coastal Plains, and to a lesser extent the Cape and Islands. The only strongholds of the species during the late 1970s were the Boston Basin and the Connecticut River Valley, which together accounted for almost half of all occupied nighthawk blocks in Atlas 1. The Boston and Springfield metropolitan areas in particular had large concentrations of breeding nighthawks because a plethora of electric lights attracted an abundance of aerial prey and gravel rooftops offered suitable opportunities for nesting. During Atlas 2, only a handful of reports affirmed the bird's presence in the state during the breeding season, and not a single nesting confirmation was submitted. In fact, the species' footprint declined 70% between the Atlases, making them one of the most steeply declining birds in the Commonwealth.

Breeding Bird Survey data shows that the population of Common Nighthawk in Massachusetts has experienced a strong decline in Massachusetts and throughout its range (range wide -2.2% annual decline, 1966-2011).

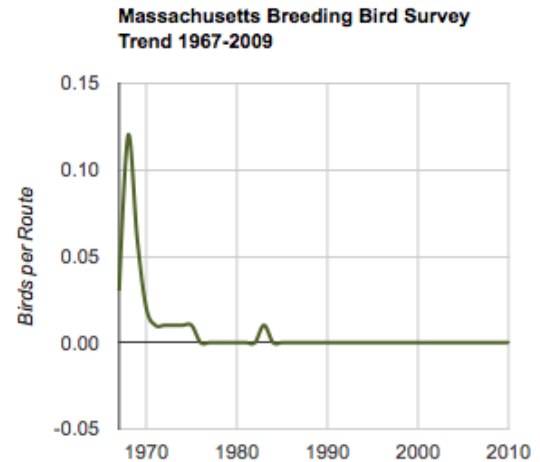


Figure 1: Massachusetts Breeding Bird Survey results, 1966-2009.

Originally known as ground nesters in Massachusetts, historically Common Nighthawks occurred in moderate numbers in large pine barrens, coastal dunes, and occasionally on agricultural land across the state. However, the last documented ground nesting was documented in the barrens of Myles Standish State Forest in Plymouth (1982). Common Nighthawks began nesting on flat gravel rooftops in the 1800s allowing them to thrive in urban areas for decades. By the 1950s, the majority of breeding occurrences of Common Nighthawks were associated with urban areas: Boston, Worcester, Springfield, Northampton, and Pittsfield. However, gravel roofs have largely been replaced by rubber, and as a result, the Common Nighthawk has nearly disappeared in the state.

Although there is just one relatively recently confirmed breeding location known in Massachusetts, there have been recent observations of nighthawks in dunes along the north shore that suggests they are again breeding in natural habitats in Massachusetts.

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

Massachusetts Division of Fisheries & Wildlife

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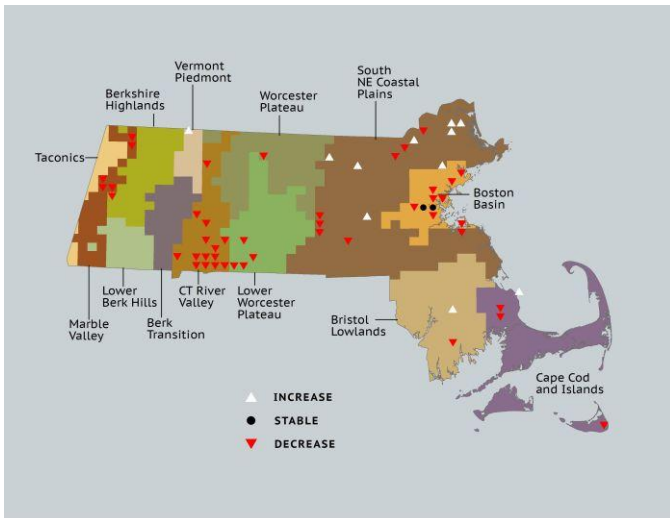


Figure 2: Changes between Breeding Bird Atlases 1 and 2.

HABITAT DESCRIPTION: Common Nighthawks are ground nesters, and modern occurrences in Massachusetts are most often associated with gravel rooftops in urban areas. Natural nesting habitat, though not documented as being utilized in Massachusetts since 1982, includes large coastal dune systems, large barrens, and occasionally large patches of agricultural land. Migrating flocks of Common Nighthawks are often observed associated with river valleys where they hawk for insects on the wing.

THREATS: Specific reasons for the overall decline of Common Nighthawks in Massachusetts are not clear, but the availability of suitable nesting habitat is thought to be a primary factor. In urban areas, a movement away from gravel rooftops is to blame. Reforestation of barrens may play a role in the decline of natural breeding occurrences, as well as an increase in mesopredators in coastal areas. Another contributor may be declining insect populations and changes in insect community structures.

MANAGEMENT: Placing gravel pads in the corners of flat, smooth roofs has been suggested as a strategy for attracting breeding Common Nighthawks in urban areas. Managing large areas of existing and historic pine barrens with prescribed fire (and timber harvesting when necessary) may create appropriate conditions to attract breeding Common Nighthawks.

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