

Species Listing PROPOSAL Form:
Listing Endangered, Threatened, and Special Concern Species in Massachusetts

Scientific name: *Ammodramus henslowii*

Current Listed Status (if any): Endangered

Common name: Henslow's sparrow

Proposed Action: Add the species, with the status of: _____ Remove the species Change the species' status to: _____

Change the scientific name to: _____

Change the common name to: _____

(Please justify proposed name change.)

Proponent's Name and Address:Chris Buelow
MA NHESP 100 Hartwell Road
West Boylston, MA 01583

Phone Number: (508) 389 - 6350

E-mail: chris.buelow@state.ma.us

Association, Institution or Business represented by proponent: MA NHESP

Proponent's Signature:

Date Submitted:

Please submit to: Natural Heritage & Endangered Species Program, Massachusetts Division of Fisheries & Wildlife, 1 Rabbit Hill Road, Westborough, MA 01581**Justification**

Justify the proposed change in legal status of the species by addressing each of the criteria below, as listed in the Massachusetts Endangered Species Act (MGL c. 131A) and its implementing regulations (321 CMR 10.00), and provide literature citations or other documentation wherever possible. Expand onto additional pages as needed but make sure you address all of the questions below. The burden of proof is on the proponent for a listing, delisting, or status change.

(1) Taxonomic status. Is the species a valid taxonomic entity? Please cite scientific literature.Yes¹.**(2) Recentness of records.** How recently has the species been conclusively documented within Massachusetts?

The last documented breeding of Henslow's sparrow occurred in Lincoln during the summer of 1994^{2, 3}. Prior to this, there were three modern (post 1950) observations of Henslow's sparrow in breeding situations observed in the state^{2, 3}: Windsor (1988), Worcester Airport (1974) and Common Pasture in Newburyport (1974). The last observed Henslow's Sparrow in a potential breeding situation occurred in a hayfield in Montague during the summer of 2009, but despite near daily observations by many birders over the course of several weeks, only a single singing male was observed, suggesting that no breeding occurred⁴. Henslow's sparrow has never been common in Massachusetts, and long-term records suggest that the species has not occurred in a viable breeding population Massachusetts in at least a half-century⁵.

(3) Native species status. Is the species indigenous to Massachusetts?Yes⁶.**(4) Habitat in Massachusetts.** Is a population of the species supported by habitat within the state of Massachusetts?Yes. Henslow's sparrows nest in large wet meadows⁷.**(5) Federal Endangered Species Act status.** Is the species listed under the federal Endangered Species Act? If so, what is its federal status (Endangered or Threatened) No.


04 June 2014

(6) Rarity and geographic distribution.

(a) Does the species have a small number of occurrences (populations) and/or small size of populations in the state? Are there potentially undocumented occurrences in the state, and if so, is it possible to estimate the potential number of undocumented occurrences?

It is unlikely that Henslow's sparrow still occurs in Massachusetts as a breeding species. There has not been a confirmed nesting observation of Henslow's sparrow in the state since 1994, and since that time, there have only been one report of observations suggestive of potential breeding. This was of a Henslow's sparrow seen and heard singing over the course of several weeks in a hayfield in Montague. However, despite near daily observations of the site by numerous birders, no breeding evidence (or even a female) was detected⁴.

It is certainly possible that there could be undetected breeding of Henslow's sparrow in Massachusetts, but numbers of undetected pairs would be expected to be very low (especially considering that MA recently concluded Breeding Bird Atlas II). If the occasional undetected nest were to occur, historic occurrences of breeding Henslow's sparrows have proven to be very ephemeral in the state^{2, 3, 5} and would be unlikely to be considered as a viable population.

(b) What is the extent of the species' entire geographic range, and where within this range are Massachusetts populations (center or edge of range, or peripherally isolated)? Is the species a state or regional endemic?

Henslow's sparrows breed from South Dakota, Minnesota, Wisconsin, Michigan and Ontario south to Kansas, Missouri, Illinois, Kentucky, West Virginia, Virginia, and North Carolina and locally in Texas. The core of the population occurs in the U.S. prairie states⁷.

There are possibly two sub-species of Henslow's sparrow, though this differentiation is considered weak and is not always accepted⁷. *A. h. henslowii* occurs over the majority of the species' range, which is west of the Appalachians. *A. h. susurrans* was described as occurring east of the Appalachians, but it is unclear if the subspecies, even if it is indeed a true sub-species, is still extant⁷.

Massachusetts is on the eastern edge of the range⁷.

(7) Trends.

(c) Is the species decreasing (or increasing) in state distribution, number of occurrences, and/or population size? What is the reproductive status of populations? Is reproductive capacity naturally low? Has any long-term trend in these factors been documented?

Henslow's sparrow has never been a common breeding species in Massachusetts. Veit and Petersen describe Henslow's sparrow as a "rare to very rare, erratic and local breeder" in the state. In *Birds of Massachusetts* they note 11 breeding pairs occurring at 5 sites in 1954 and 1955, but describe all of those sites as being unoccupied by 1965 and currently no longer existing as suitable habitat. The remainder of modern records (post 1950) described by Veit and Petersen are limited and sporadic: Leicester Airport in 1965, 1973 and 1974; Chilmark in 1957 and 1960; West Newberry in 1974; and Windsor in 1983⁵. Interestingly, several of these records constitute multiple pairs (up to 4 in Windsor). Breeding Bird Atlas I (1974-1979) reported only 3 "probable" breeding occurrences³, all of which are captured by Veit and Petersen's numbers. A single breeding pair occurred in 1994 in Lincoln^{2, 3}, and one observation described as a "probable" breeder was documented in the Connecticut River Valley by Breeding Bird Atlas II³. No other breeding has been documented since.

Prior to 1900 Henslow's sparrow was indeed very rare in Massachusetts, reported only twice since 1860 (and not before)³. The range of Henslow's sparrow had increased around the turn of the century⁷, and by 1929 Forbush described Henslow's sparrow as a rare to common local summer resident⁸. However, by 1935 a major decline had begun for Henslow's sparrow³, likely owing at least partial cause to the seral succession that was overtaking much of the open pasture habitat left over from the agricultural boon of the mid-nineteenth century.

(8) Threats and vulnerability.

(d) What factors are driving a decreasing trend, or threatening reproductive status in the state? Please identify and describe any of the following threats, if present: habitat loss or degradation; predators, parasites, or competitors; species-targeted taking of individual organisms or disruption of breeding activity.

A paucity of suitable wet meadow habitat is likely at least partly to blame for the rarity of Henslow's sparrow in Massachusetts. However, this habitat was always a part of the Massachusetts landscape as a result of beaver activity, and it reached a high point in the mid-nineteenth century due to a peak in agriculture. Despite this fact, even during this agricultural peak Henslow's sparrow was not common (in fact it was quite rare at this time in Massachusetts), and therefore a lack of suitable habitat is likely not the sole cause for

the bird's scarcity. More likely, the range of Henslow's sparrow simply does not regularly extend east of the Appalachians into Massachusetts.

(e) Does the species have highly specialized habitat, resource needs, or other ecological requirements? Is dispersal ability poor?

Henslow's sparrow is somewhat specific in its habitat requirements, though as stated above, this fact alone likely does not explain the bird's rarity in Massachusetts.

Conservation goals.

What specific conservation goals should be met in order to change the conservation status or to remove the species from the state list? Please address goals for any or all of the following:

(a) State distribution, number of occurrences (populations), population levels, and/or reproductive rates

N/A

(b) Amount of protected habitat and/or number of protected occurrences

N/A

(c) Management of protected habitat and/or occurrences

N/A

Literature cited, additional documentation, and comments.

1. American Ornithologists' Union. 1983. Check-list of North American Birds. 7th edition. American Ornithologists' Union, Washington, D.C.
2. NHESP data (2014-February-18)
3. Breeding Bird Atlas I and II – Massachusetts Audubon Society
4. Buelow, Chris. Personal observation, 2014.
5. Bird of Massachusetts - Veit, Richard R.; Petersen, Wayne R. (1993). *Birds of Massachusetts*. Massachusetts Audubon Society.
6. BirdLife International (2014) Species factsheet: *Ammodramus henslowii*. Downloaded from <http://www.birdlife.org> on 25/02/2014. Recommended citation for factsheets for more than one species: BirdLife International (2014) IUCN Red List for birds. Downloaded from <http://www.birdlife.org> on 25/02/2014.
7. Herkert, James R., Peter D. Vickery and Donald E. Kroodsma. 2002. Henslow's Sparrow (*Ammodramus henslowii*), The Birds of North America Online (A. Poole, Ed.). Ithaca: Cornell Lab of Ornithology; Retrieved from the Birds of North America Online: <http://bna.birds.cornell.edu/bna/species/672> doi:10.2173/bna.672
8. Forbush – *Birds of Massachusetts and Other New England States Volume III*. MA Dept. of Agriculture 1929.