

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

Scientific name: *Accipiter striatus*
 Current Listed Status (if any): Special Concern
 Common name: Sharp-shinned Hawk

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.)

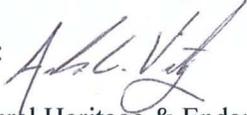
Proponent's Name and Address:

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Association, Institution or Business represented by proponent: MA Division of Fisheries and Wildlife

Proponent's Signature: 

Date Submitted: 6/3/2014

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?

Although nest records are not regularly kept for this species, nesting locations are generally found each year. Numerous nest records were also documented during the MA Breeding Bird Atlas².

(3) **Native species status.** Is the species indigenous to Massachusetts?
 Yes

(4) **Habitat in Massachusetts.** Is a population of the species supported by habitat within the state of Massachusetts?

Yes. This species nests in forests throughout the state from sea-level to montane habitat. They prefer mixed forests and often place nests in conifers³.

(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.

(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?

During the early 1900s Sharp-shinned Hawks were uncommon breeders in the state⁴, and this status persisted through most of the 20th century^{5,6}. Reasons for their rarity likely included human persecution, a decrease in forest cover, and DDT contamination³. More recently, as these pressures eased, Sharp-shinned Hawk numbers increased in Massachusetts^{2,7}. It is impossible to estimate the number of undocumented occurrences of nesting Sharp-shinned Hawks in Massachusetts because the species is a rather secretive breeder, and numerous nests undoubtedly go undetected.

(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?

Sharp-shinned Hawks have a broad breeding range that includes Alaska, the boreal forest, the western United States, the Great Lakes region, and the Northeast through the southern Appalachian Mountains. Massachusetts is considered to be on the edge of their range, and breeding records of these birds have been historically rare in the eastern half of the state^{2,3}. Recently however, Sharp-shinned Hawks have expanded their range to include the entire state of Massachusetts.

(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?

Breeding records of Sharp-shinned Hawks have substantially increased in Massachusetts over the last several decades. Breeding Bird Survey results have demonstrated an annual increase of 2.0% in Massachusetts and 3.2% in the New England/Mid-Atlantic region between 2002-2012⁷. Furthermore, the Massachusetts Breeding Bird Atlas 2 (2007-2011) detected Sharp-shinned Hawks during the breeding period in 169 more blocks than in the first Atlas (1974-1979). Although there were only 27 confirmed cases of breeding (i.e., nest, recently fledged young), this is undoubtedly the result of Sharp-shinned Hawks being secretive breeders making nests very difficult to locate. In conjunction with an increase in numbers, Sharp-shinned Hawks have apparently expanded their range in Massachusetts and now breed throughout the state including numerous records in Essex County and on Cape Cod³.

(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.

Most of the historic threats to this species no longer pose a substantial hazard to Sharp-shinned Hawk populations in Massachusetts. In fact, current landscape trends are favorable for this species, and we expect that they will continue to increase⁶.

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

Sharp-shinned Hawks are a generalist forest breeder and do not have highly specific habitat requirements³. As with most birds in North America, they have excellent dispersal ability. The winter survival of this species in Massachusetts is also able to be regularly supplemented by prey obtained at winter bird feeders.

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

The proposal to delist Sharp-shinned Hawks from the Massachusetts Endangered Species Act is based on the dramatic increase in the numbers of breeding birds and their range expansion to include eastern Massachusetts.

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

NA

- (c) Management of protected habitat and/or occurrences

NA

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. Massachusetts Breeding Bird Atlas 1 and 2. Massachusetts Audubon Society.
3. Bildstein, Keith L. and Ken Meyer. 2000. Sharp-shinned Hawk (*Accipiter striatus*), The Birds of North America Online (A. Poole, Ed.). Ithaca: Cornell Lab of Ornithology.
4. Forbush – *Birds of Massachusetts and Other New England States Volume II*. MA Dept. of Agriculture 1925.
5. Bird of Massachusetts - Veit, Richard R.; Petersen, Wayne R. (1993). *Birds of Massachusetts*. Massachusetts Audubon Society.
6. Sharp-shinned Hawk Fact Sheet. 2010. Natural Heritage and Endangered Species program. Massachusetts Division of Fisheries and Wildlife.
<http://www.mass.gov/eea/docs/dfg/nhesp/species-and-conservation/nhfacts/accipiter-striatus.pdf>
7. Sauer, J. R., J. E. Hines, J. E. Fallon, K. L. Pardieck, D. J. Ziolkowski, Jr., and W. A. Link. 2014. *The North American Breeding Bird Survey, Results and Analysis 1966 - 2012*.