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Program**

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Massachusetts Division of Fisheries & Wildlife

**Broad-winged Hawk
*Buteo platypterus***

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

SPECIES DESCRIPTION: The Broad-winged Hawk is a small, forest-dwelling buteo ranging from 14 to 19 inches in length. Both sexes have similar plumages, but females are slightly larger and heavier. Two color morphs occur; the light morph is most common in Massachusetts. The adult has a brown back, cinnamon or chestnut barring on the underparts, a whitish throat, and conspicuous black-and-white tail bands. The wings have a prominent black band along the trailing edge. Juvenal plumage is similar to that of an adult, but the underparts are white with brown streaks, and the upperparts are whiter throughout. The tail is buff-colored with narrow dark brown bands, and the wing undersurface has a dusky band along the trailing edge.

DISTRIBUTION AND ABUNDANCE: Broad-winged Hawks are a fairly common breeder in Massachusetts, except they are rare on Cape Cod and absent from the Islands (Petersen and Meservey 2003). Broad-winged Hawks are especially visible during fall migration, when thousands pass through the state in mid-September. The North American Breeding Bird Survey indicates a declining Massachusetts population trend of -9.4% annually from 1966-2003 (Sauer et al. 2004). Migration surveys from 1990 to 1994 also detected a declining population trend in the Northeast (Goodrich et al. 1996).

HABITAT DESCRIPTION: Broad-winged Hawks occupy continuous hardwood and mixed conifer/hardwood forests with canopy openings, such as small clearings, lakes, ponds, or marshes (DeGraaf and Yamasaki 2001). They are generalist predators, catching amphibians, young birds, insects, and, especially, small mammals, by hunting from perches often located at the forest edge or in openings. Broad-winged Hawks construct nests in trees of many different species, but usually choose to nest in the most abundant locally available tree species (Goodrich et al 1996). Nests are built of twigs and sticks, usually at the main crotch of a

deciduous tree, or on a platform of horizontal branches against the trunk of a conifer.

THREATS: Little is definitively known regarding the threats to Broad-winged Hawks in Massachusetts. Habitat fragmentation appears to be the primary threat; breeding habitat for this species apparently increased in the Northeast as a result of reforestation following agricultural abandonment, but it has been suggested that Broad-winged Hawks require large tracts of continuous forest with openings (Goodrich et al 1996). Pesticides have negatively impacted reproductive success in other buteos, but pesticide impacts on Broad-winged Hawks have not been studied. Broad-winged Hawks rely more heavily on amphibians than other buteos, suggesting that regional pollution could potentially impact the population, but again, this is unknown (Goodrich et al. 1996). Research is needed to evaluate the importance of these potential threats and to identify others.

REFERENCES:

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- Petersen, W.R., and W.R. Meservey. 2003. *Massachusetts Breeding Bird Atlas*. Massachusetts Audubon Society and University of Massachusetts Press, Amherst, Massachusetts.
- Sauer, J.R., J.E. Hines, and J. Fallon. 2004. *The North American Breeding Bird Survey, Results and Analysis 1966 - 2003. Version 2004.1. USGS Patuxent Wildlife Research Center, Laurel, Maryland.*

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

Massachusetts Division of Fisheries & Wildlife

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