

***The Northern Harrier, formerly called the Marsh Hawk, is a rare breeder and uncommon migratory and wintering species in the Hudson River Valley.***

### Conservation Status

This hawk is listed as a Species of Greatest Conservation Need and as Threatened in New York State, and as a species of Regional Concern by Partners in Flight in Bird Conservation Region 13. Breeding Bird Atlas data indicate a slight increase in breeding areas in the Hudson River Valley in the past 20 years.



The Northern Harrier flies low over fields searching for food.

### Identification

This slim, medium-sized hawk has long, broad wings and a long, barred tail. Females are larger than males. The adult male is pale gray above and white below with reddish spots on the underparts and wingtips edged with black. The adult female is dark brown above and buffy below, with some streaking on the underparts. The immature harrier is similar to the adult female. The call given by adult and immature harriers when they are alarmed or excited has been described as a "rapid chattering," "ke-ke-ke," or "chek-ek-chek-ek." This hawk is easily identified as it glides tipsily low along the ground, hunting for prey in generally open terrain. It roosts on the ground and perches on low objects such as fence posts or tree stumps.

### Habitat

This species breeds and hunts in marshy meadows, wet, lightly grazed pastures and old fields, as well as freshwater and brackish marshes, and open habitats dominated by thick vegetation growth. During spring and fall migration, it can be seen in both open wetlands and old fields. In the winter, it can be found in a variety of open habitats dominated by herbaceous cover, including coastal sand dunes, pasturelands, croplands, upland and lowland grasslands, old fields, estuaries, open-habitat flood plains, and salt- and freshwater marshes.

### Food

This bird may hunt throughout the day, but generally is active in the early morning and late afternoon. It hunts over open land or marshes, usually flying low, capturing prey on the ground. Depending on availability, the Northern Harrier eats small mammals, especially voles, small and medium-size birds, reptiles, amphibians, large insects, and carrion. During the breeding season, young are fed primarily small mammals and birds.

### Nesting

The nest is on the ground in open habitats, including drained wetlands and nesting success may be higher with increasing soil moisture content. Most nests are built in patches of dense, tall, vegetation in undisturbed areas such as abandoned fields, wet hayfields, salt marshes, and cattail marshes. The nest is constructed of reeds, grasses, forbs, weeds, and water plants, usually with a base of thick-stalked plants such as cattails, alder, and willow. In general, nests built over the water are deeper, thicker, and bulkier than nests on dry ground.

**Threats**

- Loss of habitat from development.
- Destruction of wetlands.
- Reforestation of agricultural lands.
- Conversion of pasture and grasslands to row-crops.
- Nest destruction or abandonment because of human activities such as mowing.
- Predation of eggs and young by skunks, raccoons, feral cats and dogs, as well as other raptor species.
- Trampling of nests by deer and livestock.
- Reduction of prey availability due to the widespread use of insecticides and rodenticides.

**Management Recommendations**

- Maintain fields in early successional stages, including planted grass and legume species.
- Use prescribed burning, grazing, and mowing to maintain an old field/grassland state.
- Avoid disturbance of suitable habitat (e.g., mowing) during the breeding season, April 1 to late July.
- Preserve of wetlands and wet meadows.
- Protect nests from disturbance by recreational activities, such as off-road vehicle use and agricultural operations such as mowing and plowing.
- Create buffer zones around nest sites where human-related disturbance is likely to occur. An exact size for a buffer is not known, but nesting success is relatively high in fields 75 acres or more in size.
- Maintain prey base by decreasing use of insecticides and rodenticides.
- Maintain patches of undisturbed vegetation.

**This management summary was adapted from Macwhirter and Bildstein 1996, NatureServe 2008, and NYNHP 2008.**

**For additional information, see the following references:**

Illinois Natural History Survey. 2008. Northern Harrier.

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Macwhirter, R. Bruce and Keith L. Bildstein. 1996. Northern Harrier (*Circus cyaneus*), 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/210>.

NatureServe. 2008. NatureServe Explorer: an Online Encyclopedia of Life [web application]. Version 7.0. NatureServe, Arlington, VA. . <http://www.natureserve.org/explorer>.

(NYNHP) New York Natural Heritage Program. 2008. Online Conservation Guide for *Circus cyaneus*. Available from: <http://acris.nynhp.org/guide.php?id=6812>. Accessed April 25th, 2008.

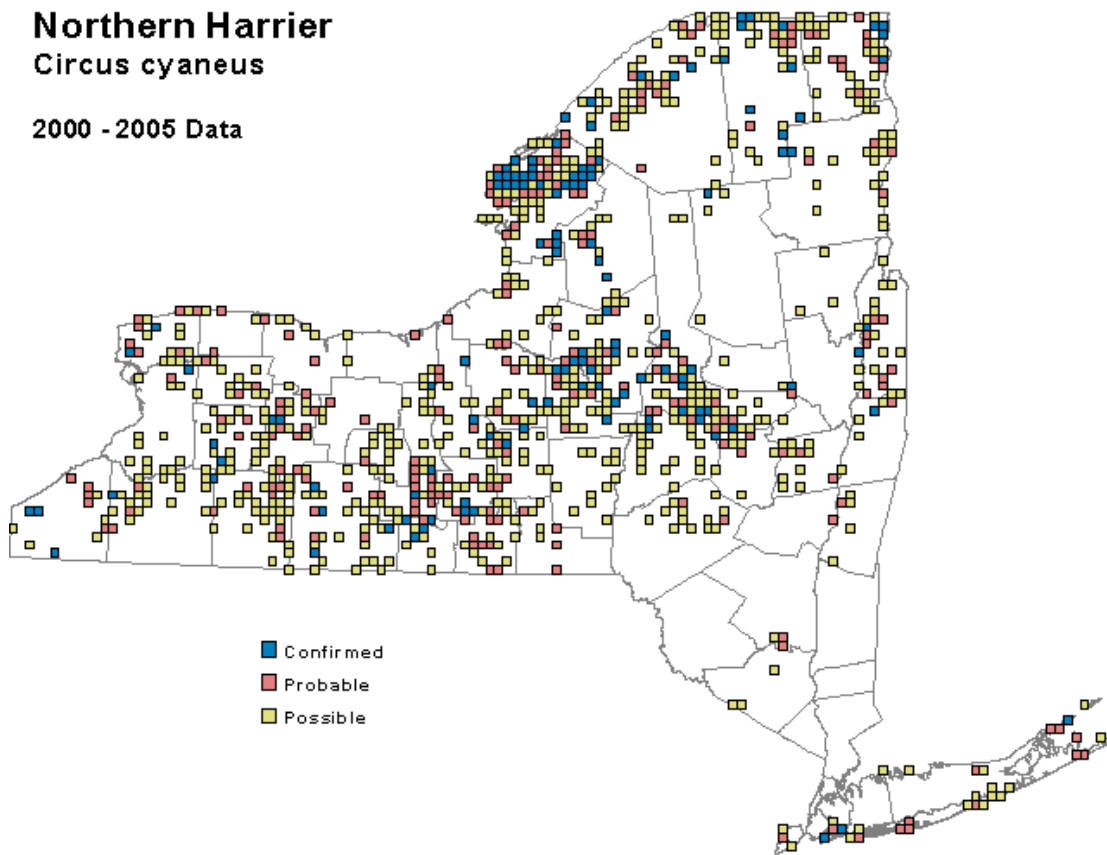
Serrentino, P. 1992. Northern Harrier, *Circus cyaneus*. Pages. 89–117 in *Migratory Nongame Birds of Management Concern in the Northeast* (K. J. Schneider and D. M. Pence, eds.). U.S. Fish and Wildlife Service, Newton Corner, MA.

Serrentino, P, with revisions by K. Schneider, G. Hammerson, M. Koenen, and D.W. Mehlman. 2001. Species Management Abstract for Northern Harrier. Nature Conservancy, Arlington, VA. <http://conserveonline.org/docs.2001/05/noha.doc>.

## NYS BREEDING BIRD ATLAS COMPARATIVE DATA

### Northern Harrier *Circus cyaneus*

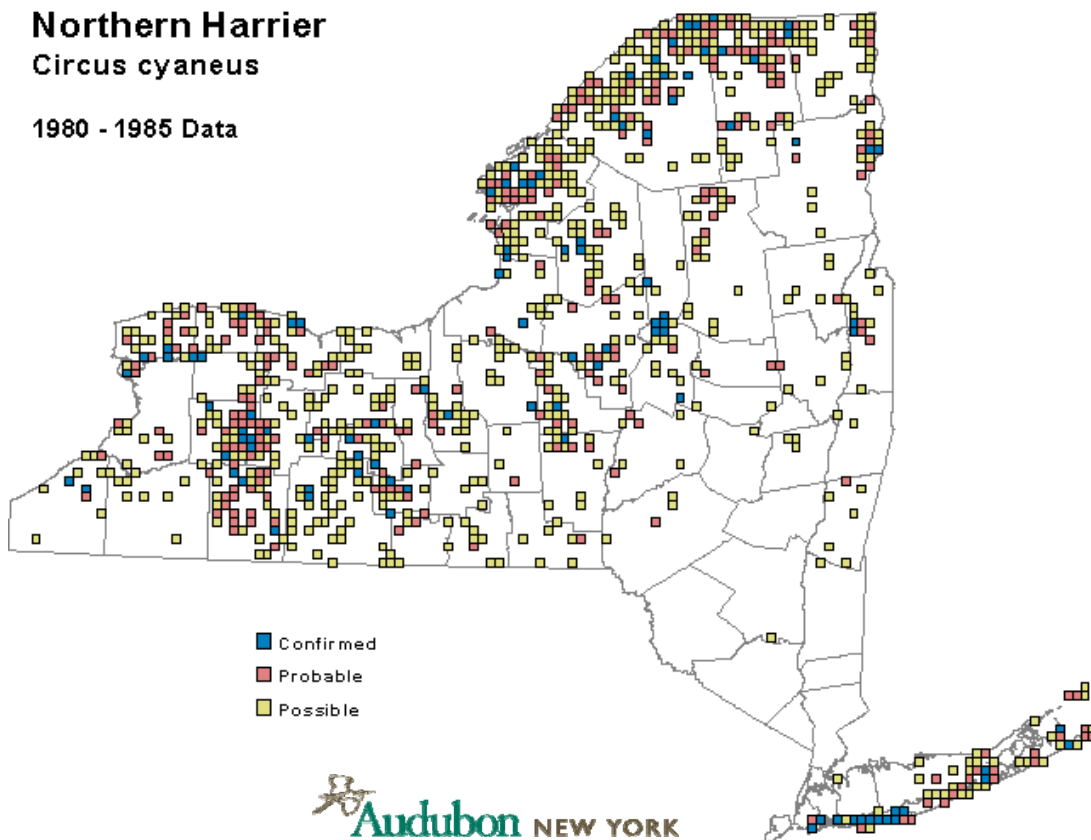
2000 - 2005 Data



- Confirmed
- Probable
- Possible

### Northern Harrier *Circus cyaneus*

1980 - 1985 Data



- Confirmed
- Probable
- Possible