

STATUS OF NORTHERN HARRIER IN THE CHAMPLAIN VALLEY OF CLINTON COUNTY, NEW YORK

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In New York State the Northern Harrier (*Circus cyaneus*) is classified as a threatened species. Therefore, there is a continuing need to monitor both its distribution and abundance. The results of The New York State Breeding Bird Atlas Project (1980-1986) provided good baseline data which permit us to detect changes in distribution with time. During the spring and summer of 1993 I conducted field surveys of rare birds, including the Northern Harrier, for the New York Natural Heritage Program. I made 49 trips into the Champlain Valley of Clinton County, looking for evidence of breeding Northern Harrier and other rare birds. Coverage was extensive, including approximately 3500 miles by car. This paper discusses some trends in Northern Harrier distribution.

Smith (1988) states that "comparisons of Atlas data with historical data suggest its current distribution is more fragmented." This seems to be true for the state as a whole, and for Clinton County as well. Northern Harrier is not distributed uniformly throughout the Champlain Valley of Clinton County. It shows definite preferences for certain portions of the Champlain Valley. I refer to these areas as "clusters," meaning concentrations of sightings that I made during 1993 (Fig. 1).

A total of 32 individual sightings of this species were made during the period. The largest number of sightings (21, or 66%) were concentrated in an area that I call the Chazy Rivers cluster. This cluster is bordered on the east by Lake Champlain and its adjacent wetlands, on the north by the Great Chazy River, on the west by the VLY (an extensive swamp) and Lake Alice Game Management Area, and on the south by the Little Chazy River. Another smaller cluster occurs in the area surrounding Monty Bay State Wildlife Management Area and Riley Brook. The Monty Bay cluster produced 22% of the sightings. The third cluster, 12% of the sightings, came from the Ausable Game Management Area and the Little Ausable River region. These formed the Ausable cluster.

All three clusters are centered in major wetland areas that are protected by New York State as either State Game or Wildlife Management Areas. All three clusters also are within agricultural regions. The affinity of Northern Harrier to each of the clusters depends on the confluence of both wetland and open agricultural spaces.

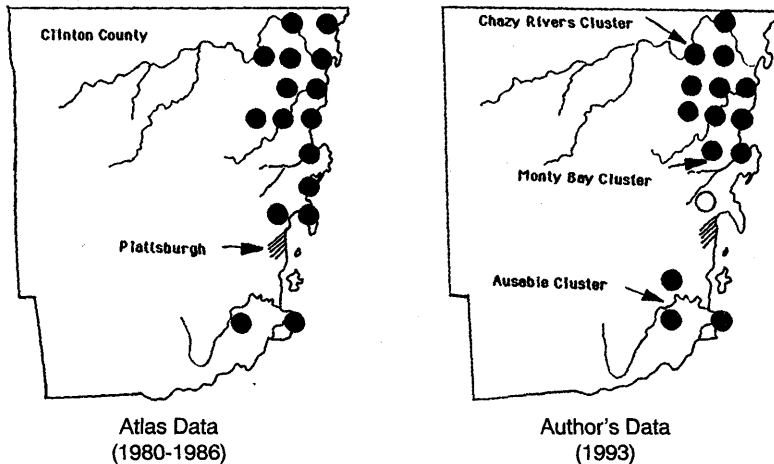


Figure 1. Changes in the distribution of Northern Harrier in the Champlain Valley of Clinton County, Atlas data (Smith 1988) left, 1993 data right. Closed circles designate Atlas blocks that contained Northern Harrier (left) or observations by the author (right). Open circle designates confirmed sightings by other during the 1993 season.

Agricultural areas alone may not be sufficient to attract breeding Northern Harrier. There was a noticeable absence of harriers in some of the more upland agricultural areas, especially those with large consolidated cultivated fields, lacking hedge rows and scattered wood lots. The ideal habitat type was a mix of protected wetlands for nesting, surrounded by open agricultural land for hunting. It was my impression that the increased edge, provided by a mix of woodland and open area provided a better mix of hunting opportunities and cover than did large consolidated agricultural fields.

There was a noticeable absence of harrier sightings in the area surrounding the city of Plattsburgh. A comparison of the author's data, with that of the Atlas data (Fig. 1) suggests that, if anything, the gap in the harrier distribution around Plattsburgh is getting larger. Within the last 10 or so years, there has been more residential development north of Plattsburgh, in the vicinity of Cumberland Head. Also, Point Au Roche State Park to the north of Cumberland Head is a new State Park that has attracted many more tourists to this region. The naturalist at Point Au Roche State Park did not observe harriers there during the 1993 season. This further confirms the impression that this area has undergone

changes that have negatively impacted harrier distribution. The author questioned others about the presence of harriers in the Cumberland Head region, and received only one confirmed sighting to the west of Cumberland Head (Fig. 1). This expanding area of human disturbance might explain the widening gap in the Northern Harrier distribution to the north of Plattsburgh. With this exception however, the distribution of harriers I observed is very similar to that reported by Smith (1988).

Little data are available on the area utilized by nonbreeding harriers (Serrentino 1992). It must be assumed that the hunting range varies with availability and abundance of prey species, habitat type and other factors. The author repeatedly watched three immature harriers hunting over an area measuring 1.2 miles by about 2 miles, or about 2.5 miles² (6.455 km²). This was an open agricultural area in the Chazy Rivers cluster adjacent to Lake Champlain. This open habitat type was mostly fields of clover or alfalfa alternating with fields of corn. There was scarce hedgerow cover, and only a few patches of woods along the periphery of the hunting area.

Eventually, the Atlas project will be repeated in New York State. In the interim, however, monitoring trends in the distribution and abundance of species, especially those that are Endangered, Threatened, or of Special Concern, is valuable. The New York Natural Heritage Program is helping this effort by continuing to monitor the distribution and abundance of many species of wildlife.

ACKNOWLEDGEMENTS

This study was supported by a grant from Return-A-Gift-To-Wildlife to the New York Natural Heritage Program. The author wishes to thank both Paul Novak and Kathryn Schneider for giving him the opportunity to participate in the study.

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