

# Henslow's Sparrows: An Up-Date

by  
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## Introduction

In Canada, Henslow's Sparrow (*Ammodramus henslowii*) has been known to breed in Ontario and in southwestern Quebec. In recent years, Henslow's Sparrow has been known to breed only in Ontario, with the majority of nesting sites in the mid-1980s being located in the southern part of Hastings, Lennox-Addington, and Frontenac Counties, and in Prince Edward County. It also has occurred in Grey, Bruce, and Dufferin Counties. Figure 1 shows the breeding distribution of Henslow's Sparrow in Ontario, based on data from the Breeding Bird Atlas and the Ontario Rare Breeding Bird Program (ORBBP).

This article provides an up-date on the status of Henslow's Sparrow and summarizes the results of survey efforts since Knapton (1986).

## Population trends and status in Ontario

Population declines have been reported in Ontario within the last 30 to 40 years, and the species' range within the province has also been reduced. Henslow's Sparrow numbers appeared to have decreased in the late 1970s or early 1980s in Ontario (Knapton 1982; Speirs 1985). Declines have also been noted in the number of individual Henslow's Sparrows reported during spring migration in Ontario from 1986-1993: 17, 17, 18, 0, 3, 5, 7, and 8 (R. Weir, pers. comm., 1992; R. Ridout, pers. comm., 1993).

Knapton (1982) reported that only 17 individuals in seven widely scattered areas across southern Ontario were detected during the 1981 breeding season. In 1983, the known Ontario population of Henslow's Sparrows was 25 to 29 individuals at 13 sites (Ontario Breeding Bird Atlas; Risley 1983). During the Atlas of the Breeding Birds of Ontario, the Henslow's Sparrow was found in only 38 squares, and in only 8% of these was breeding confirmed (Cadman *et al.* 1987). At this time, it was unlikely that the total provincial population exceeded 50 pairs in any given year (Knapton 1987). The ORBBP received information on only 23 Henslow's Sparrow sites, seven of which were active during the 1986 to 1991 period. However, breeding site information from the Kingston area was not reported to the ORBBP.

Active colonies reported in Ontario Seasonal Summary reports during the summers of 1986 - 1991 included: Shelburne area (T. Sabo) and Walpole Island (C. Spitz) in 1986; Shelburne area (T. Murray) and Kortright, Kleinburg (B. Edmunds) in 1987; three birds in Arkell Hills, Guelph in 1988; and Conn area in Grey County (*vide* T. Murray) (R. Weir pers. comm. 1992).

## Current Status

In 1986, Henslow's Sparrow was listed as Threatened by the Ontario Ministry of Natural Resources. Based on the ORBBP's review of available

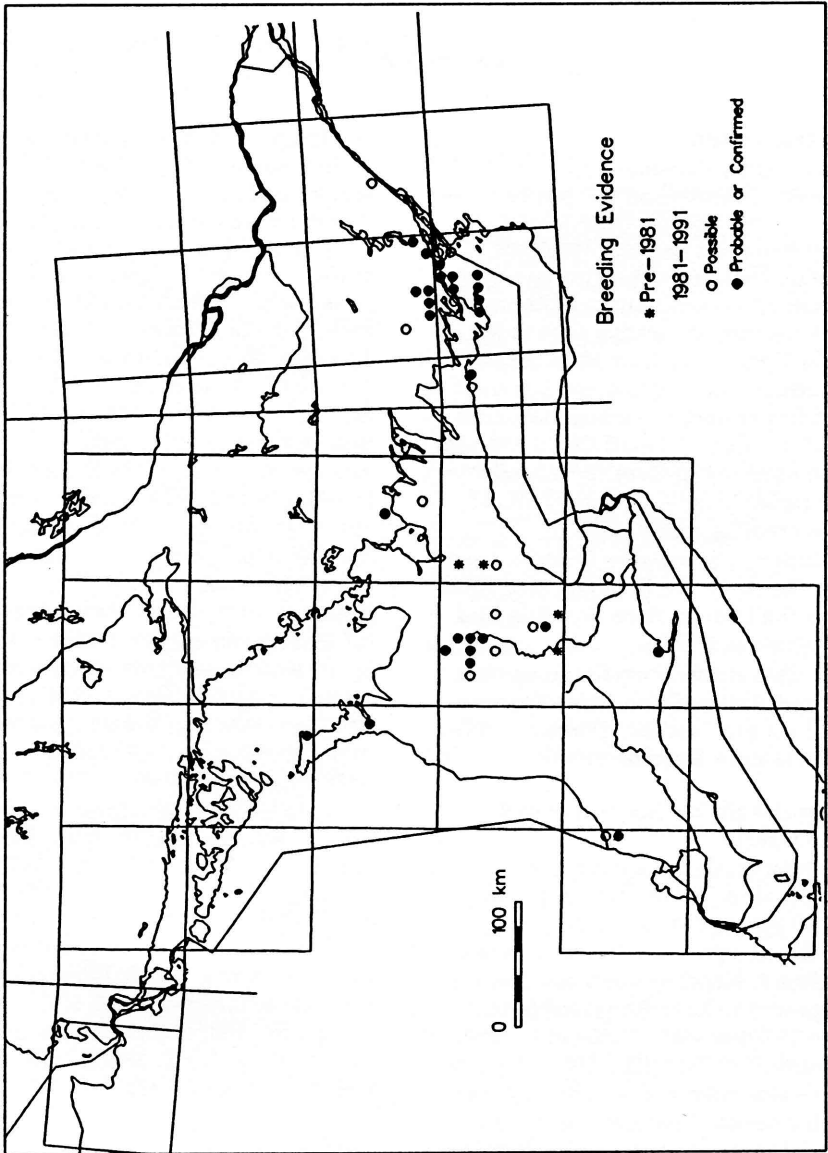


Figure 1: 10-km squares in which the Henslow's Sparrow was reported to the Breeding Bird Atlas and the Ontario Rare Breeding Bird Program in southern Ontario.

information on the population trends and status of Henslow's Sparrow in Ontario and across North America, the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) designated the Henslow's Sparrow as Endangered in Canada in April, 1993. The species was formally registered under the Ontario Endangered Species Act in May of 1994 to give the species and its habitat legal protection.

### Recent surveys in Ontario

A thorough survey for Henslow's Sparrows had not been conducted in core breeding areas in Ontario since Knapton (1986). In June of 1988, 1989 and 1990, ORBBP staff and volunteers surveyed the southern portion of Grey County and sections of Dufferin County for Henslow's Sparrows; two birds were found in 1988, one singing male was found in 1989, and no birds were found in 1990. Volunteers also surveyed north Wellington for Henslow's Sparrows during the ORBBP but no birds were located. In 1989, a site with 10 territories was located in Haldimand-Norfolk Regional Municipality, but the colony was "abandoned mysteriously" during the breeding season (D. McRae, pers. comm.).

In 1992 and 1993, surveys for Henslow's Sparrows were conducted in various areas of southern and eastern Ontario using census techniques similar to Risley (1983) and Knapton (1986). In the summer of 1992, thirty 10-km squares in which the species occurred during the Atlas were surveyed. Squares were located in Grey, Wellington, Dufferin, Northumberland, Prince Edward, Hastings, Frontenac,

Lennox-Addington, Leeds-Grenville, and Stormont-Dundas-Glenarry Counties. Eighteen former Henslow's Sparrow sites were visited in 1992, but no Henslow's Sparrows were located. Only three sites (Tuttles Hill, Frontenac Co.; Arkell Hill, Wellington Co.; and a site west of Dundalk, Grey Co.) still had habitat that was apparently suitable for the species. Approximately 150 other sites with suitable habitat or potentially suitable habitat were checked for Henslow's Sparrows in 1992. One singing male was found in eastern Ontario on June 25 and 26, well into the breeding season. The bird was found in an old hayfield, approximately 3 ha in size, that is dominated by grasses (0.5 - 1 m in height), but is beginning to be invaded by shrubs.

In 1993, suitable sites were checked for Henslow's Sparrows in Prince Edward County, Amherst Island, and Walpole Island by Ridout and Austen (1993). Some historic sites and suitable areas in Haldimand-Norfolk and Niagara Regional Municipalities were surveyed by volunteers. Two sites near Sarnia (Lambton County) were also checked for Henslow's Sparrows: the Bunyan location where a pair was present in 1984 (Knapton 1984, 1986), and the Sarnia Airport where a singing male was reported in 1985. In 1993, Henslow's Sparrows were found only at the site located in eastern Ontario during the 1992 survey.

The results of the 1992 and 1993 surveys suggest that far fewer than 50 pairs (probably less than 10 pairs) are breeding in the province. It is possible that there are other active Henslow's Sparrow sites that remain

undetected, but surveys by Risley (1983), Knapton (1986), Austen and Kubisz (1992), and Ridout and Austen (1993) all suggest that the Ontario population of Henslow's Sparrow is continuing to decline. Clearly, Henslow's Sparrows are critically imperilled in Ontario and worthy of Endangered status.

### **Henslow's Sparrow sightings**

A Henslow's Sparrow sighting was reported to *Birders Journal* in the summer of 1992 (location unknown, Henshaw and Kerr 1992), but according to the reporter the site was abandoned early in the summer. A Henslow's Sparrow was also reported singing at one of the first ten stops on the Roblin Breeding Bird Survey route in the Tweed area on 7 June 1992 (E. Hayakawa, pers. comm., 1992). Ron Weir (pers. comm.) estimated that there were about six active Henslow's Sparrow sites in the Kingston area in 1992: two sites in each of Prince Edward, Lennox-Addington, and Frontenac counties. However, no birds were found by ORBBP staff in the Kingston area in 1992, but these surveys were restricted to fields near roadsides.

In 1993, Henslow's Sparrows were reported during spring migration at Long Point, Point Pelee, Amherst Island, Hockley Valley near Orangeville (unconfirmed) and Unionville, but were not known to breed in these areas.

### **Population trends in North America and adjacent states**

Breeding Bird Survey (BBS) results from North America, eastern North America, and the United States show significant declines in Henslow's

Sparrow populations from 1966 to 1988, with an average rate of decline of 3.5 to 4.5% per year. Results from BBS routes in Canada during the period from 1967 to 1988 suggest a decline in Henslow's Sparrow numbers, but the species was not reported on enough routes to accurately determine a population trend (B. Peterjohn, pers. comm., 1991). The BBS is a roadside survey, conducted annually in mid-June in road-accessible areas across North America.

In the majority of the northeastern and northcentral United States where Henslow's Sparrow has been listed, the species is considered of Special Concern or Endangered. It is listed as Endangered in Massachusetts, New Hampshire, New Jersey, Vermont, and Virginia (proposed); Threatened in Connecticut, Illinois, Indiana, and Iowa; of Special Concern in Kentucky, Minnesota, New York, Maryland, West Virginia, and Wisconsin; and At Risk in Pennsylvania (Hands *et al.* 1989; Smith 1992). Henslow's Sparrow has been listed as a "migratory nongame bird of management concern" in the north-central region which includes Illinois, Indiana, Iowa, Michigan, Minnesota, Missouri, Ohio, and Wisconsin (United States Fish and Wildlife Service 1987). Butcher (1989) labelled Henslow's Sparrow as one of two species of management concern in the United States that are in the most danger of extinction.

Breeding Bird Atlas data from the northeastern and northcentral United States also confirm that Henslow's Sparrow is a rare breeding bird. Ohio is the only state listed that has

Henslow's Sparrows breeding in more than 10% of the atlas blocks surveyed, with birds reported in 18.5% of blocks surveyed.

### **Reasons for decline**

Declines of Henslow's Sparrows in the Northcentral and Midwest United States appear to track loss of grassland or old field habitats on the breeding grounds (Knapton 1986; Hands *et al.* 1989; McPeck 1991; Smith 1992). Reasons for the decline of Henslow's Sparrows in Canada are unknown, but the loss of suitable breeding habitat appears to be the most likely limiting factor. Many of the abandoned fields in which Henslow's Sparrows formerly bred have succeeded to shrub land or forest, have been subjected to changes in agricultural practices (e.g. rowcrop production, corn planting, continual use of fields with no fallow periods, annual or more frequent mowing, overgrazing, pesticide use, etc.), or have been lost to industrial and urban expansion.

Some sites still have apparently suitable habitat for Henslow's Sparrows, but birds are no longer breeding there. For example, in Grey County large areas (20-30 ha) of apparently suitable habitat still exist but no birds were found breeding in the southern part of the county in 1990. Similar situations occur in other counties such as Prince Edward, Lennox-Addington, and Frontenac. This suggests that other factors (e.g. loss of wintering habitat, mortality between breeding seasons, or population losses due to small numbers of individuals in isolated locations) are also influencing the Henslow's Sparrow population.

### **Recovery Efforts**

Although numbers of Henslow's Sparrows in Ontario are very low at present, there is still potential for the species to recover in the province. There are several active colonies nearby in Michigan and New York that may act as source populations, and the species is still being seen in spring migration at sites such as Long Point and Point Pelee.

A national recovery plan for Henslow's Sparrows is being drafted by M. Austen and the Henslow's Sparrow Recovery Team. The major recovery actions recommended for the species include: determination of population status and distribution; determination of the cause of the species' decline; determination of the habitat requirements of the species and the availability of that habitat during the breeding and wintering seasons; protection and management of breeding habitat; and the development of integrated grassland management programs.

Recovery activities will be concentrated in Ontario. Although there are historical records for the species in Quebec, the species has not been reported breeding in the province since 1968 (Knapton 1986) and is not recorded on Quebec's list of rare and threatened species. Due to the small size of the population in Ontario and the limited success of recent survey efforts, emphasis will now be placed on establishing and managing a network of grassland areas suitable for Henslow's Sparrows and other grassland species.

### **Integrated Grassland Management**

In the United States and Canada, efforts are being made to protect

major grassland remnants in national parks, national grasslands, wildlife refuges and nature reserves. The protection of large grasslands appears to have helped maintain some Henslow's Sparrow populations in Iowa (Drilling 1985 in Smith 1992), Illinois (Herkert 1991) and Kansas (Zimmerman 1988). Similar efforts which maintain open, grassy fields in agricultural areas or protect and restore remnant tall grass prairie and grassland habitats must be undertaken in Ontario. This will necessitate active management in some areas (e.g. grazing, mowing, or prescribed burns) to maintain and enhance populations of grassland species, including Henslow's Sparrow.

This year, funding has been sought from the Endangered Species Recovery Fund, Canadian Wildlife Services (Ontario Region), and the Ontario Ministry of Natural Resources to develop guidelines that allow for an integrative management program for Henslow's Sparrows and other grassland species. A pilot site management plan will be drawn up for an area in eastern Haldimand-Norfolk R.M., and will outline activities that should be undertaken to benefit grassland species that could potentially breed in the area (e.g. Short-eared Owl, Barn Owl, Northern Harrier, Grasshopper Sparrow and Henslow's Sparrow). Ideally, a network of protected grassland areas would be established in the province for the benefit of grassland flora and fauna.

### **How to locate Henslow's Sparrows**

#### *1. Identify areas with suitable habitat.*

Henslow's Sparrow is believed to have originally been adapted to the

tall grass prairie community (Knapton 1982). However, with the loss or alteration of many grassland and prairie habitats in North America this species often inhabits pasture land and hayfields (Knapton 1982; Hands *et al.* 1989).

In Ontario, Henslow's Sparrows occupy fairly specific habitats which often include a high percent, and a moderate to high density, of grass cover; a thick mat of ground cover from previous years' vegetation (i.e. no gross disturbance to the vegetation for a period of at least one year); a height of dense vegetation of about half a metre; no current disturbance in the form of grazing livestock; and a low-lying wet area (Knapton 1982, 1984, 1986; Peterson 1983; Risley 1983). Colonies have been located in abandoned fields, ungrazed or lightly grazed pasture, fallow hayfields with high clover and alfalfa content, grassy swales in open rolling farmland, wet meadows, or infrequently mowed fields with an abundance of dead stalks from previous years' growth (Cuddy 1984). Despite this, the species will occur in areas with marginal habitat or areas that do not correspond with "typical habitat descriptions" for the species (M. Cadman, pers comm.).

The minimum area required by Henslow's Sparrows for breeding is estimated at 30 ha (Peterson 1983; Zimmerman 1988), but minimum area requirements are far from proven and may not hold for all regions. In Illinois, Henslow's Sparrows have been documented as being more sensitive to habitat fragmentation than other grassland species including Upland Sandpiper, Savannah Sparrow, Bobolink, Grasshopper Sparrow, Sedge Wren,

Eastern Meadowlark, and Dickcissel (Herkert 1991).

## 2. Learn the "song".

Henslow's Sparrows have a very short, insect-like song ('tslick') that can be difficult to hear at a distance when other grassland birds (e.g. Bobolinks, Eastern Meadowlarks, Savannah Sparrows, etc.) are singing. Therefore, it is often best to listen for the species' song later in the evening when other bird species have stopped singing. On calm nights, Henslow's Sparrows can be heard from 200 m or more (Risley 1983). At a site in New York, a singing male was heard from a distance of 240 m in a field occupied by singing Bobolinks, Grasshopper Sparrows and Savannah Sparrows on a calm night.

Henslow's Sparrows may be found in association with other grassland or wet meadow species such as Northern Harrier, Ring-necked Pheasant, Common Snipe, Upland Sandpiper, Sedge Wren, Bobolink, Horned Lark, Eastern Meadowlark, Vesper Sparrow, Grasshopper Sparrow, Swamp Sparrow, and Savannah Sparrow.

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