

exempt from controls. Maybe it's time we took a look down from our lofty perches and wised up.

Jon D. McCracken
Vittoria, Ontario

Corrections to Crow Note

My note on "wing-tail flicking" as a means of separating crows from ravens in Volume 6(2):74-75 of *Ontario Birds* had a typographical error and an omission. In the first sentence of the third paragraph, replace "does" with "done". Add the words "in ravens" at the end of the third paragraph. In the future

would it be possible to send proofs to authors for checking before publication?

Ron Pittaway
Minden, Ontario

Editor's Note

Despite rigorous proofreading, errors and omissions do occasionally slip through in Ontario Birds. We are happy to send proofs to authors who specifically request this when they submit their manuscript, however, because of time constraints we do not have the luxury of doing this for all manuscripts.

D. M. Fraser

A Summary of the Breeding Status of Hooded Warblers in Ontario

by

M. E. Gartshore

Introduction

The purpose of the following paper is to bring together information on the Hooded Warbler (*Wilsonia citrina*) as it relates to summer occurrence in Ontario. In doing so I have attempted to summarize important occurrences and to put them into the context of habitat and known breeding distribution of the species. For the most part, I have relied on unpublished data and personal accounts, however, much of the earlier information has appeared in the literature and is

repeated here to provide background to the current information.

I have focussed on records in June, July, and August to eliminate the possibility of considering migrants. Given that Hooded Warblers begin nesting in May and may not leave until September, such a restriction may not be valid. In addition, I have not considered records from sand spits, islands, or known migration "hot spots" because wandering birds may linger well into the breeding season. I have made an exception for

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Rondeau Provincial Park, Kent Co., and Point Abino, Regional Municipality of Niagara, where I believe the species will be confirmed as breeding in the near future.

History

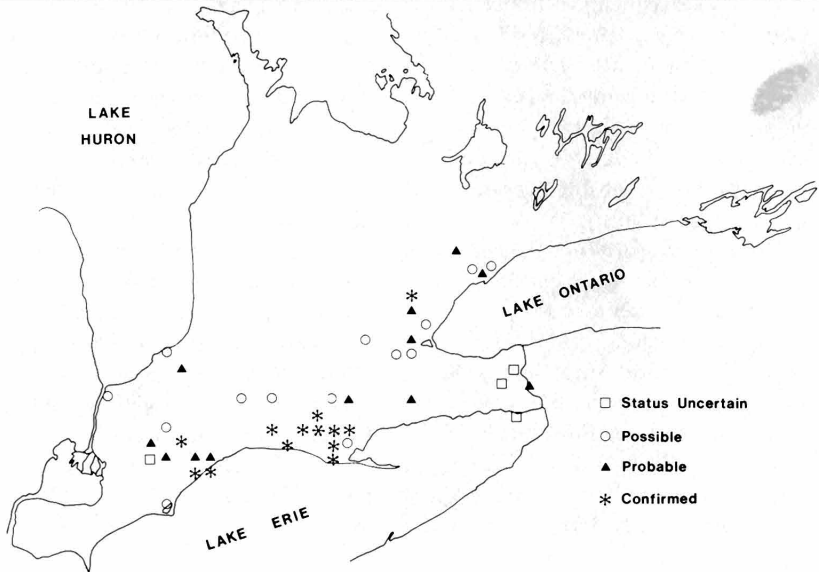
The first published Canadian record of the Hooded Warbler was one observed in the Hamilton area, Regional Municipality of Hamilton-Wentworth, by Thomas McIlwraith prior to 1860 (McIlwraith 1860). Possibly the same record was elaborated on by McIlwraith (1894) when he described it as a young male (likely a female) "carried away in the crowd" of spring migrants.

Thereafter, records of this species were reported sporadically

and were summarized by Baillie (1925), who concluded that the species was a "rare migrant". Baillie did not, however, rule out the possibility of breeding because of an immature (skull not ossified) female collected by W. E. Saunders at Point Pelee, Essex Co., on 21 August 1912 (and now deposited at the Royal Ontario Museum; J. Dick, pers. comm.).

It is of interest that a southwesterly gale produced no fewer than nine Hooded Warblers in Toronto, Metropolitan Toronto, around 6 April 1947 (Bodsworth, unpubl. ms.; Gunn and Crocker 1951). Several lingered into June and at least one female was seen carrying a caterpillar by I. Halliday on 4 June in Sherwood Park (Baillie 1962).

Figure 1: Summer occurrences of Hooded Warblers mapped with symbols relating to increasing levels of breeding following the criteria used by the *Atlas of the Breeding Birds of Ontario* (Cadman et al. 1987).



This was the first indication that the species would breed in Ontario.

In 1941 W. E. Saunders wrote to F. Bodsworth concerning E. M. S. Dale's observation of a territorial Hooded Warbler in 1940 and 1941 in Fred White's Woods (Springwater Forest) near Orwell, Elgin Co., saying "looks like a steady thing" (Brooman 1954). Not until 1949 was the first nest for Canada discovered at this site by Bodsworth (see below).

Only five more nests were recorded in the province over the next 36 years, although other evidence of breeding may have been observed. The Ontario Breeding Bird Atlas project provided an important focus for further investigations. Between 1985 and 1988 a minimum of 41 confirmed breeding records have been documented, most of these in Elgin and Haldimand-Norfolk and two from Middlesex Co. During and since the *Atlas*, observers may have tended to establish confirmed breeding through indirect evidence (e.g., observations of adults carrying food/fecal sac, fledged young) and this may account for the increased records in general.

However, most (37) of the recent records are a result of the Natural Areas Inventory of Haldimand-Norfolk (NAIH-N), the Kent-Elgin Natural Areas Survey (KENAS), and follow-up studies by myself and the Long Point Bird Observatory (LPBO). Fig. 1 maps summer occurrence according to level of breeding evidence.

Habitat

Hooded Warblers occur in a variety of forested situations in southern Ontario. Where deciduous trees dominate, territories are usually established in small clearings in forests which have been selectively logged (Fig. 2). The nests are often located in regenerating shrubs in the middle of log-skidder trails. Hooded Warblers invade areas 1-5 years after harvesting and will remain for up to 12 years or longer or until saplings exceed 5m in height and begin to shade out ground cover. At Springwater Forest, where Hooded Warblers were once common, but have since disappeared, the former dense shrub layer consists of maple saplings which are now 5-10m high. The ground is virtually devoid of cover. Where coniferous trees are dominant, Hooded Warblers will occupy the dense deciduous shrub layer or regenerating hardwoods without the benefit of logging activities. In the southern United States it is standard forestry practice to burn off the low deciduous layer in pine stands and this can be detrimental to local Hooded Warbler populations (Hamel 1980).

At six Haldimand-Norfolk nest sites I measured the vegetation using the quantitative methods recommended by James and Shugart (1970). The canopy height averaged 27.7m, the canopy cover was 88 per cent and the shrub cover was 87 per cent. Shrub stem counts ranged from 3.3 to 27.9 per m², with an average of 10.5 per m².

In my analysis, I broke down shrub stem density by species. A total of 66 species of woody plants were involved in the sample of six territories. The dominant species in the shrub layer were maple-leaved viburnum (*Viburnum acerifolium*), red raspberry (*Rubus idaeus* var. *strigosus*), black raspberry (*R. allegheniensis*), white ash (*Fraxinus americana*), choke cherry (*Prunus virginianus*), and red maple (*Acer rubrum*). In Ontario, Hooded Warblers appear to require mature, open, mesic forest with a dense deciduous shrub layer. Forests which have been severely high-graded and have therefore lost height of canopy and the ability to regenerate woody vegetation are not usually occupied.

Distribution

An aspect of distribution, which was originally suggested to me by D. A. Sutherland, is the strong correlation between the occurrence of Hooded Warblers and sand plains or sand deposits in southern Ontario. In Fig. 3 I have mapped summer records of Hooded Warblers and the distribution of sand plains. The data have been broken down by decade. Most of the records fall on large sand plains and the remainder can probably be accounted for by local soil conditions. For example, at Cayuga, Haldimand-Norfolk, a Hooded Warbler territory was located at the south end of the Oriskany sandstone formation where there is rich sandy loam in a landscape dominat-

Figure 2: Typical habitat in the Wilson Tract, Norfolk Tp. Mun., Regional Municipality of Haldimand-Norfolk, where several pairs of Hooded Warblers have bred 1985-88. Photo by M. E. Gartshore.



ed by the Haldimand clay plain.

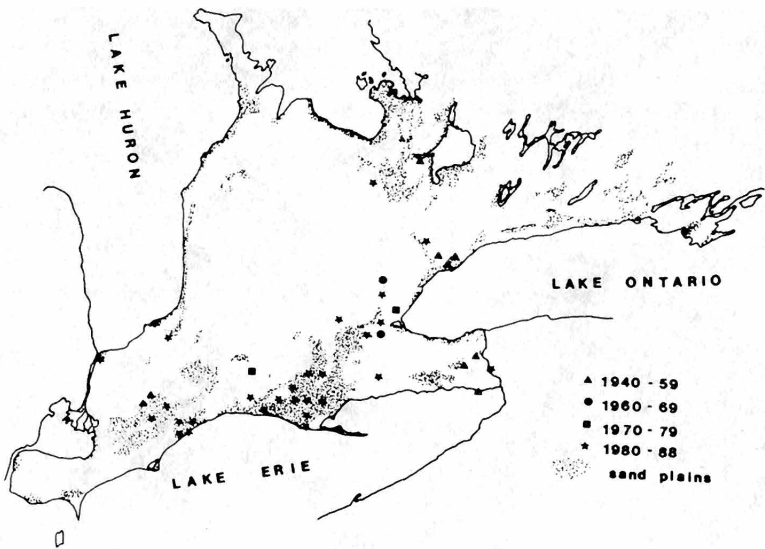
Hooded Warblers tend to occur where good forest cover remains. Eastern Elgin and western Haldimand-Norfolk still support 16-25 per cent forest cover.

Hooded Warblers appear to be absent from western Kent Co. and southern Lambton Co. where sand plains occur but the forest cover is as low as 3 per cent. However, the sand plain may not support the right kind of habitat. For instance, at Dunnville, Haldimand-Norfolk Co., the sand plain does not appear to support Hooded Warblers, even though the per cent forest cover is high (NAIH-N data). However, the

soils in this area are alluvial in origin and contain a higher proportion of organic material. Aspen (*Populus* sp.), willow (*Salix* sp.), and weedy herbaceous species tend to invade open sites.

From the available records, Hooded Warblers appear to avoid an area (roughly bounded by the towns of Flesherton, Teeswater, Seaforth, Woodstock, and Guelph) which is termed the "Ontario Island", land which first emerged during the retreat of the Wisconsin ice sheet (Chapman and Putnam 1984). It is an area of higher elevation, usually greater than 300m asl.

Figure 3: Hooded Warbler summer occurrences mapped in relation to the distribution of sand plains in southern Ontario (after Chapman and Putnam 1984). Records are mapped using different symbols to indicate decades. Where applicable, earlier records are superseded by more recent records.



Population Trends

Without good long-term data, it is very difficult to assess population trends realistically. A quick glance at the Ontario data would suggest that Hooded Warbler numbers are increasing. More likely the species is being found in places where few people had searched previously. In order to provide some insight into population trends I looked at 15 sites in Elgin and Haldimand-Norfolk which had been monitored (albeit in a cursory fashion) in at least two out of four years (1985-88). In six cases Hooded Warbler numbers were about the same, in seven they had decreased and in only two had they increased. However, Hooded Warblers are somewhat temporary tenants in any given situation, so these figures may not present an accurate picture.

Table 1 summarizes, by county and regional municipality, the number of breeding pairs of Hooded Warblers which I believe occur at present in southern Ontario. If projections seem high for Elgin and Haldimand-Norfolk it is because

many potential woodlots possessing suitable breeding habitat have yet to be surveyed for this species.

Another exercise which might prove useful in assessing trends is to look at migration tallies from around the Great Lakes. This task is arduous, but preliminary results suggest that there has been a dramatic increase in the number of Hooded Warbler sightings over the past two decades, particularly in the 1980s. However, this may be an artifact of more field observers and caution should be taken in interpreting the significance of these data.

Confirming Breeding in Hooded Warblers

It is relatively easy to confirm breeding in Hooded Warblers. The species arrives early and leaves late. The earliest date for territorial birds in my study site this year was 9 May (D. A. Sutherland, pers. comm.) and the last date was 28 September (N. Mahony, pers. comm.). The males sing throughout the season (at least until early

Table 1: Summary of estimated number of breeding pairs of Hooded Warblers (*Wilsonia citrina*) in Ontario in 1988.

County/RM	Pairs	Comments
Elgin	17-50	many areas of good habitat
Haldimand-Norfolk	50-100	many areas of good habitat
Hamilton-Wentworth	1-2	a few areas of good habitat
Halton	1-2	a few areas of good habitat
Lambton	4-5	several areas of good habitat
Kent	1-2	several areas of good habitat
Middlesex	4-10	several areas of good habitat
Oxford	2-4	a few areas of good habitat
Waterloo	0-1	good habitat restricted
Total	80-176	

September) and throughout the day, even when the weather is hot and humid. Hooded Warblers are often the only species singing.

Male Hooded Warblers tend to wander widely, probably for the purpose of engaging in extra-pair copulations, so they may not be in exactly the same spot on successive visits.

Nesting pairs can be remarkably secretive, however. In a few instances, nests were located beside well-travelled paths or near mist net lanes and were not detected by us until the young were close to fledging. In other instances, the adult birds would chip constantly and feed nestlings without caution. Through quiet observation, an approximate nest site can be located. The nest cup can be spotted in the dense shrubbery by getting down on hands and knees and scanning upwards. Nests can be observed relatively easily at a distance of 6-10m without disturbing the site. It is important not to approach the nest further, in view of the fact that predators frequently follow human trails and find nests.

Nestlings fledge at around eight days after hatching and, although they are sparsely feathered, seem to survive well. Adults feed and care for fledglings for as long as eight weeks after they hatch. At five to six weeks after hatching, fledglings complete post-juvenile moult and assume basic plumage. At this stage they can only be distinguished from their parents with difficulty. The best clue is the colour of the bill,

which is yellowish in young and black in adults. Since adults and young spend so much time together it is relatively easy to locate family groups.

In Ontario, Hooded Warblers are apparently single-brooded, but will renest throughout the summer until successful or until the progression of the season prevents further attempts. My last date for fledged young (about two days out of the nest) was 16 August.

Potential Breeding Areas

Territorial Hooded Warblers have been observed in Lambton, Hamilton-Wentworth, Kent, and the Regional Municipality of Waterloo, yet breeding has not been confirmed in any of these counties to date.

The Regional Municipality of Niagara has few recent summer records, although good habitat remains at Point Abino, Short Hills, and below the Niagara Escarpment. However, the Hooded Warbler is generally absent as a breeding species in Niagara and northern Erie counties, in adjacent New York State (Eaton 1988). Although considerably to the north, the extensive sand plains around Lake Simcoe and Midland, Simcoe Co., are potential sites for new breeding records. Similarly, recent increases in Hooded Warbler observations in spring and fall at Prince Edward Point, Prince Edward Co., and the Kingston, Frontenac Co., area would suggest possible breeding either at those localities or farther

to the north (Weir 1989). This seems even more likely in view of the breeding concentration of this species in New York State just to the south of Lake Ontario (Eaton 1988).

Hooded Warblers seem to wander widely (see below) and I consider them to be somewhat opportunistic breeders. Any summer occurrence therefore should be closely monitored with the expectation that breeding will occur outside currently recognized areas.

Extralimital Records

It is worth reviewing extralimital records of wandering males in light of the possibility of breeding attempts north of the species' presently known breeding range. These records represent a sample rather than an exhaustive search of the literature. Reports of Hooded Warblers north of the southern extent of the Canadian Shield are few. The most extreme record is that of a male-plumaged bird observed by M. Jennings and A. Wormington on Shippensand Island at the mouth of the Moose River, Cochrane District, on 27 September 1976 (A. Wormington, *in litt.*). Mills (1981) reported what he considered to be a hypothetical record from near Huntsville, Muskoka District, a male on 26 August 1964. In Ottawa, Regional Municipality of Ottawa-Carleton, a Hooded Warbler was seen on 30 July 1975 by B. DiLabio and J. Harris (Goodwin 1975). On 22 May 1988 near a creek leading into Dog Bay,

Baptiste Lake, Hastings Co., D. A. Sutherland (pers. comm.) heard a Hooded Warbler singing in dense maple saplings in a maple, beech, hemlock, white pine (*Pinus strobus*) forest. I searched the site the next day and although the bird was not seen the habitat looked suitable.

South of the Canadian Shield but outside the Carolinian Zone there are a few scattered records, as follows. A male was heard singing on 9 June 1959 near Tollendal, Simcoe Co. It was observed for about one hour and was not seen again (F. Westman, *in litt.*). A bird was observed at South Baymouth, Manitoulin Island, Manitoulin District, on 13 August 1968 by G. McKeating and R. Knapp (Goodwin 1969). A singing male was reported to the *Atlas* in 1985 near Terra Nova, Dufferin Co., by H. Hart. Unfortunately, most details are lacking. I searched this area with V. Martin in July 1987 without luck, although at least one area looked similar to prime habitat in Haldimand-Norfolk.

Acknowledgements

Warm thanks to Peter Carson for undertaking the often tedious task of searching regional journals for details on Hooded Warblers. Special thanks go to Don Graham, Nancy Mahony, and James Holdsworth, who worked diligently over the past summer on Hooded Warblers and rare birds in general through the Long Point Bird Observatory.

I wish to thank the following

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A Hooded Warbler status report is presently being prepared for World Wildlife Fund and the Committee on the Status of Endangered Wildlife in Canada (COSEWIC). I wish to thank COSEWIC for permission to publish preliminary findings of the report. Nancy Mahony and Don Graham were hired through a federal SEED grant and James Holdsworth was hired through a provincial Environmental Youth Corps grant.

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Appendix I

Summary of Summer Occurrences of Hooded Warbler in Ontario

In the following list I present a summary of Hooded Warbler occurrences by district, township, and local name. Specific localities are omitted for reasons of security, but dates, breeding evidence, and observers are detailed.

ELGIN COUNTY

Aldborough Tp. Mun.

Eagle: An agitated pair was seen in a large woodlot on 22 July 1986 NE of Eagle (A. Wormington, pers. comm.).

Port Glasgow: An adult male carrying food was noted NE of Port Glasgow in 1986 by W. Lamond (A. Wormington, pers. comm.). V. Martin and I visited the area again in 1987 but no birds were found.

Rodney: Two singing males were noted SW of Rodney on 9 June 1986 by A. Wormington (pers. comm.). V. Martin and I heard one singing male on 20 July 1987. Two singing males were seen in same woods on 10 and 19 June 1987 by W. Rayner (*in litt.*). In a nearby woodlot

just E of Rodney one pair was involved in a courtship chase in a grape tangle on 30 June 1985. On 5 July the female was not observed and the male was silent (W. Priekšaitis, pers. comm., Atlas files).

Malahide Tp. Mun.

Copenhagen: A pair was found feeding fledged young near Silver Creek just E of Copenhagen on 26 July 1988 and a second male could be heard singing farther upstream (D. Graham field notes).

Orwell: Springwater Forest S of Orwell was the site of the first recorded nesting of the Hooded Warbler in Canada. E. M. S. Dale first noted a singing male at this locality in 1940 and again in 1941 (Brooman 1954). A nest with eggs was found by F. Bodsworth on 27 July 1949. It contained young on 4 August, which had fledged by 11 August (F. Bodsworth, unpubl. ms.). On 9 June 1952 five singing males were heard and a nest containing four eggs was discovered. Another nest was found on 22 June of the same year which contained three warbler and two Brown-headed Cowbird (*Molothrus ater*) eggs (Field and Robertson 1952). During the rest of the 1950s observations were as follows: seven singing males on 30 June 1953 and several singing males on 29 May 1954, 1955, and 1956 (Baillie 1953; Field 1954; Sutton 1957). Although no location is given for these latter two dates it is presumed to refer to Springwater. A female was reported in July 1957 and males were reported 24 May 1958 and again in 1959 but not in 1960 (Sutton 1957; Lemon 1958, 1959). In the 1970s birds were noted at Springwater during 1970, 1971, and 1974 (Speirs and Frank 1970; Field 1972; Goodwin and Rosche 1974). Speirs and Frank (1970) carried out a Breeding Bird Census and estimated 10 pairs per 40 ha. The species ranked fifth in abundance amongst 20 breeding species in the plot. On 12 July 1982 J. Lemon reported an agitated pair and a single bird was seen again in 1983 (Atlas files). This appears to be the last time a Hooded Warbler was recorded at Springwater. P. Carson and I searched the forest in 1987 and D. Graham in 1988 without success.

Bayham Tp. Mun.

Calton: Two males and a pair were seen N of Calton along Big Otter Creek on 18 July 1986 (W. Lamond, pers. comm.; A. Wormington, Atlas files). Two fighting males were noted by W. Lamond on 8 June 1987 (Atlas files) and I saw a pair carrying food and could hear a singing male in the distance on 15 June. The area was searched by D. Graham, W. Rayner, and R. Kingswood (pers. comm.) in 1988 but none was found.

Eden: Two singing males were recorded S of Eden along a branch of Little Otter Creek on 19–20 June 1986 (A. Wormington, pers. comm.). I noted only one singing male on 6 July 1987. On 25 June 1988 a nest containing four young was found in a small Norway spruce (*Picea abies*) (D. Graham, field notes).

Richmond: Two singing males and a pair were recorded at the confluence of Big Otter and Little Otter Creeks in the summer of 1986 (A. Wormington, pers. comm.). At the same site on 28 June 1988, D. Graham (field notes) found a female feeding two fledged young and, nearby, another female was feeding a fledged young male.

HALDIMAND-NORFOLK RM

The first published reference to Hooded Warbler in the region is given in McIlwraith (1894) as the following: "Mr. Norval reports finding it occasionally at Port Rowan". No other details are known of either Mr. Norval or his sightings.

Delhi Tp. Mun.

Silver Hill: A singing male was observed E of Silver Hill on 29 May 1988 (D. A. Sutherland, pers. comm.). The area was searched but the bird was not found again.

Smith Tract: This is a rich woodlot SW of Walsh which contains a stand of cucumber magnolia (*Magnolia acuminata*). During extensive survey work carried out in this tract in 1985–86 by the

NAIH-N no Hooded Warblers were noted. I found two singing males here on 14 June 1987 and at least four singing males, one feeding fledged young, were observed on 11 July 1988 (D. Graham, field notes). Another bird was singing across the road in King Tract.

Vanessa: One or two territories have been noted SW of Vanessa annually from 1985 to 1988 (NAIH-N data; D. Graham, field notes).

Town of Haldimand

Cayuga: A singing male was observed NE of Nelles Corners on 13 May 1981 and 8 May 1982. The site was visited again 12 June 1982 by G. North and the bird was still present. A singing male was noted again in 1983 from 10–12 May 1983 (M. Furber, pers. comm.; North 1982).

Norfolk Tp. Mun.

Backus Woods: A pair of Hooded Warblers was noted by G. North in Backus Woods on 4 June 1939 (McCracken 1987). There are no recent records for Backus, to my knowledge.

Big Creek: At least four singing males have been recorded annually from 1986–88 on the east side of Big Creek S of Walsingham (NAIH-N data; D. Graham, field notes). In 1987 I found a nest containing two young and one cowbird on 19 July. On the west side of Big Creek one or two singing males have been recorded annually from 1985–88. On 6 July 1985 two recently fledged males responded to "pishing" and in 1988 an agitated female was observed on 15 August (NAIH-N data; D. Graham, field notes).

Cultus: A singing male was found NW of Cultus on 10 June 1985. The area was checked in 1986–87 but no birds were found.

Deer Creek: Hooded Warblers were first recorded in the Deer Creek Valley NW of Walsingham 4 June 1986. Up to four territories were suspected and I observed an agitated pair on 19 July (NAIH-N data). Surprisingly, only one bird stayed in the area for a short time in 1987 and none could be found in 1988 although the area still offers good habitat (D. Graham, field notes).

Langton: A male was heard singing NE of Langton on 7 June and seen carrying food on 19 June 1985 (D. A. Sutherland, NAIH-N data). Two pairs were present in 1986, including a nest with eggs on 18 July and a singing male was present again on 4 July 1987. No birds were present in 1988 (D. Graham, field notes).

St. Williams Forestry Station: A singing male was noted in rather marginal habitat at the northern edge of the forestry station from 23 May to 5 June 1985 and was never seen again (B. Jones, pers. comm.; NAIH-N data).

South Walsingham: This is an area of extensive forest about 5 km SW of Walsingham. Hooded Warblers were first suspected to be breeding in this area when R. Smith noted a singing male on 14 June 1984 (Atlas files). In 1985 B. Jones discovered a pair and an additional male at the same site on 23–25 May. At least 11 territories were found in the area in 1985, including seven singing males, three carrying food or feeding fledged young, and a nest with young being fed by adults on 8–9 June 1985 (NAIH-N data). In 1986, at least 13 territories existed, of which nine had singing males, two had adults carrying food, one a pair and one a nest with young on 15 July (NAIH-N data). Again in 1987 at least a dozen territories were recorded, including several with adults carrying food and five nests with young. In 1988, an LPBO-sponsored study of this population was undertaken. This resulted in the colour-banding of 60 adults and nestlings and the discovery of 14 active nests. We estimated that banded birds probably represented no more than 70 per cent of the Hooded Warblers in the area. Additional pairs of birds were found peripheral to the study area by D. Graham on 16 August 1988.

Tillsonburg: In 1957 A. R. Weeks discovered the second Canadian nesting of Hooded Warbler SE of Tillsonburg. The nest contained four Hooded Warbler eggs on 14 June and four young by 26 June 1957 (Weeks 1958). Very near this site M. Alton found a singing male in a small woodlot on 23 June 1985 (Atlas files). Despite several visits to the site in 1985–87 the bird was not seen again. A pair was noted SW of Tillsonburg near Big Otter Creek in 1982 by D. Bucknell (*vide* J. Holdsworth, pers. comm.). In 1988 two pairs were again seen in the area,

including a female carrying food and another female carrying a fecal sac on 7 June 1988 (J. Holdsworth, pers. comm.).

Venison Creek: Two territories of Hooded Warblers were located along Venison Creek SW of Walsingham on 1 July 1986 (NAIH-N data). A nest containing three young and a cowbird was discovered on 14 June 1988 SW of Walsingham in a small eastern hemlock (*Tsuga canadensis*) and another singing male was heard upstream on the east side of Venison Creek on 15 June 1988 (D. Graham, field notes).

Wyecombe: Two males were noted NW of Wyecombe by D. A. Sutherland on 5 June 1985. One male was recorded in 1986 but in 1987 no birds could be located.

HALTON RM

Halton Hills Tp. Mun.

Mansewood: These records are of particular interest because they represent the northernmost confirmed breeding locality in Canada. Summer records for the Milton area include observations of a singing male by H. Moore in one of his father's woodlots from 31 July to 19 September 1954. A singing male was also seen the following year from 20 June to 14 September 1955 and again on 22 May 1956 (J. Dowall, *in litt.*; North 1954, 1955, 1956). On 16 June 1969 a nest containing eggs was found 3.3km W of Mansewood by K. Carmichael and J. L. Baillie (Ontario Nest Records Scheme (ONRS)). On 27 June the nest was found disturbed by felled timber and was collected (K. Carmichael, pers. comm.). The most probable location for these observations is an old growth forest which was acquired by the Halton Region Conservation Authority in 1958 from J. K. Moore (B. Axon, pers. comm.). Two birds were seen by J. Lamey in June 1972 at "the mountain above Milton" and this likely refers to the above site (North 1972).

Milton Tp. Mun.

Rattlesnake Point: I observed a singing male in Nassagaweya Canyon just west of Rattlesnake Point on 5 July 1979 in a recently logged clearing on the rich slope of the valley. A singing male was observed from 6–19 July 1986 in a clearing of maple saplings east of Crawford Lake on the brow of the escarpment in an area that had been heavily logged in 1979 (M. Jennings, pers. comm.).

Lowville: D. A. Sutherland and I heard a male singing in a small creek valley below the escarpment SE of Lowville on 7 July 1979.

HAMILTON-WENTWORTH RM

Town of Ancaster

Ancaster: A Hooded Warbler was recorded on the grounds of the Tamahaac Club 31 July and 1 August 1964 by H. Moore (North 1964).

Dundas Valley: While atassing near my family's farm I heard and saw a singing male on 13 July 1983 in a natural clearing created by summer grape (*Vitis aestivalis*).

Flamborough Tp. Mun.

Rock Chapel: A singing male was observed 28 June 1953 by G. North in the Royal Botanical Gardens at Rock Chapel (North 1953).

Hamilton City Mun.

Westdale Ravine: This is a steep wooded ravine skirting the south shore of Coote's Paradise. Hooded Warblers were possibly seen in the vicinity of the Westdale Ravine earlier than 1860 (McIlwraith 1860, 1894). The first summer record was noted for Westdale Park by G. North on 21 June 1941 and North's 21 June 1947 observation almost certainly refers to the same area (G. North field notes, *vide* R. Curry; F. Bodsworth unpubl. ms.). Other dates include 18 August 1966 by A. Epp, 23 August 1970 by A. Epp, female 30 July 1972 by A. Epp, 24 August 1974 and 22–29 May 1976 by R. Westmore, 27 August 1978 by R. Westmore, 16 August 1979 by

R. Curry, 8 June 1980 by R. Westmore (North 1966, 1970, 1972, 1974, 1976, 1978, 1979, 1980). Although breeding has never been confirmed, it is likely that Hooded Warblers have nested here intermittently since the early 1940s and perhaps earlier.

LAMBTON COUNTY

Bosanquet Tp. Mun.

Port Franks: During the Atlas, A Wormington heard a singing male NE of Northville on 24 July 1984 (Atlas files).

Thedford: A male Hooded Warbler was present for over a month S of Thedford near the Ausable River in 1979. The site was suitable and the bird exhibited agitated behaviour (T. Cheskey, pers. comm.). A singing male was recorded here again during the Atlas by A. Rider on 17 May 1984; however the bird failed to remain for the summer (A. Rider, pers. comm.).

Brooke Tp. Mun.

A male in full song was heard by F. S. Cook and J. K. Reynolds on 23 July 1947 in a woodlot near the SW corner of the township (Cook 1953).

Dawn Tp. Mun.

Florence: A singing male was heard along a forested tributary of the Sydenham River from 13–17 June 1947 by W. W. H. Gunn *et al.* (Cook 1953). An effort was made to find a nest, without success. Ten years later on 26 July 1957 a male and female were seen at the same locality by F. S. Cook and W. D. Sutton. The female was agitated and a non-singing, full-plumaged male was observed nearby (Sutton 1957).

Euphemia Tp. Mun.

County Line Woods: A singing male was heard NE of Bothwell from 18–23 June 1985 and on 26 June 1986 by S. Connop (*in litt.*; Atlas files).

Sarnia City Mun.

Sarnia Indian Reserve: A male was observed on 12 July 1984 by P. Dent and T. Dyson in a mature forest in the northern portion of the reserve. It responded to "pishing" with agitated behaviour (Atlas files).

KENT COUNTY

Orford Tp. Mun.

Moravian Indian Reserve: An agitated female was observed within the reserve in the summer of 1986 (W. Lamond, pers. comm.).

Harwich Tp. Mun.

Rondeau: There are numerous spring reports which suggest that Hooded Warblers are migrants only; however the possibility of this species breeding at Rondeau either currently or in the past must not be discounted. Apparently H. P. Attwater found Hooded Warblers in some numbers in June around 1878 in Rondeau (F. Bodsworth, unpubl. ms.). The species was also noted on 6 July one summer by Ussher (1965) and R. Simpson had one on 26 June 1971 (Goodwin and Rosche 1971).

Camden Tp. Mun.

Thamesville: Kelley (1978) suggests that Hooded Warblers were present in the Thamesville area before 1951. One was seen on 30 May 1952 at Thamesville by A. Wood and D. Middleton (Baillie 1952). To my knowledge there are no other records for this area.

METROPOLITAN TORONTO

Toronto City Mun.

The southwesterly gale of early April 1947 produced nine Hooded Warblers in the city of

Toronto. By late spring some birds were still present, including a female seen carrying a caterpillar on 4 June at Sherwood Park by I. Halladay (Baillie 1962). There is a good chance these birds attempted to breed in the ravines of Toronto.

Donalda Woods: A singing male was observed on 24 June 1951 by F. Bodsworth (Baillie 1951).

Hogg's Hollow: On 7 June 1953 a persistently singing male was observed in a hemlock with fairly dense understory (G. Bennet, *in litt.*). It remained in the ravine for one week (Baillie 1953).

Sunnybrook Park: A male was observed by R. Stewart on 7-8 June 1953 (Baillie 1953).

MIDDLESEX COUNTY

London City Mun.

Reservoir Park: On 19-21 June 1966 a singing male was reported by W. and T. Maddeford at Reservoir Park (Jarman 1966). I have no information on the suitability of habitat at this site.

Delaware Tp. Mun.

Delaware: One was observed on 25 June 1971 by T. and W. Maddeford (Jarman 1971b).

Camp Kee Mo Kee: A singing male was observed from 25 May to early June 1985 in a clearing in woods by P. and S. Read but apparently did not stay for the breeding season (Atlas files).

North Dorchester Tp. Mun.

Dorchester Swamp: One was noted on 21 July 1971 by P. Prevett (Jarman 1971b).

Mosa Tp. Mun.

Middlesex County Forest: Hooded Warblers were first recorded in this forest in 1971 by T. Maddeford on several dates between 23 and 30 May (Jarman 1971a). At least two birds were noted on 23 May, 25 June, and 21 July 1971, probably also at this location, by T. Maddeford *et al.* (Jarman 1972a). At least three singing males were noted here on 16 June 1972 by J. Tabak and although no females were seen, nesting was suggested (Jarman 1972b). Birds were observed again on 2 June 1974 by W. R. Jarman (Goodwin and Rosche 1974). On 18 May 1979 a female was observed and later a male was observed on 20 May (Jarman 1979). Finally, in 1978 a nest containing four eggs was found on 9 June by T. Hayman and J. Grom (ONRS). This was the first confirmed breeding for Middlesex County. Another nest was discovered 7 July 1985 by A. Wormington and M. Matheson, which contained two young, one unhatched egg, and a cowbird (*A. Wormington, in litt.*). A pair was seen on 9 June and a female was observed carrying food on 19 June 1987 and there were as many as four singing males in the area on 4 and 23 June 1988 (S. Connop, *in litt.*).

NIAGARA RM

There are surprisingly few summer records for this area given the availability of good habitat. D. Gamble and W. Brockner have noted summer occurrences of Hooded Warbler in the Niagara region in the vicinity of Decew Falls, Niagara Falls, and Welland, probably during the 1940s (F. Bodsworth, unpubl. ms.; Baillie 1962). According to B. Farnan (pers. comm.) there are no recent summer occurrences.

Niagara City Mun.

Navy Island: On 23 May 1985 a pair was seen by G. Meyers in a clearing of a blowdown area of mature forest. The site was revisited on 6 June 1985 but no birds were noted (Atlas files).

Fort Erie Town Mun.

Point Abino: A bird was noted in early June 1947 by B. Nathan (Baillie 1962).

St. Catharines City Mun.

Decew Falls: A Hooded Warbler was noted in the breeding season (date unknown) by W. Brockner (Baillie 1962).

OXFORD COUNTY*Norwich Tp. Mun.*

Otterville: A singing male was seen NW of Hawtreby by D. A. Sutherland (pers. comm.). Although the habitat looked suitable, I saw no birds on a visit to the site on 22 June 1987.

Tillsonburg Tp. Mun.

Tillsonburg: Two singing males were observed on the south side of Big Otter Creek in July 1988 (J. Holdsworth, pers. comm.). Two pairs were confirmed in Haldimand-Norfolk RM farther upstream at the same time.

WATERLOO RM*North Dumfries Tp. Mun.*

Sudden Tract: A singing male was observed on 16 June 1987 (T. Cheskey, pers. comm.). Unfortunately, the site was not visited again that summer. There are one or two other records for spring and fall in the Waterloo Region.

YORK RM*Vaughan Town Mun.*

Kortright Conservation Area: A singing male was noted from 26 May to mid-June 1985 by C. Ellingwood *et al.* in a maple-ash forest with raspberry canes and saplings (Atlas files).

First Breeding Record of the Lawrence's Warbler in Ontario

by

Donald S. Graham and Alan Wormington

On 1 July 1988, Alan Wormington observed an adult female Lawrence's Warbler (*Vermivora chrysoptera* x *V. pinus*) at the edge of a clearing in a large wooded area northwest of Vanessa, Regional Municipality of Haldimand-Norfolk (42°59'N, 80°25'W). The bird was identified as a female on the basis of its dark grey mask and throat patch and its pale dirty yellow underparts and crown. In the male

Lawrence's Warbler these parts are solid black and brighter yellow, respectively (see National Geographic Society 1983:355).

At this time the bird remained relatively close (about 10m) to the observer for a period of 5 to 10 minutes; 10X50 binoculars were used during the observation. The female became quite agitated in response to occasional "spishing", indicating the nearby presence of a

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