Articles

The Yellow-throated Warbler: Soon to Breed in Ontario?

by

Brendon Larson

The Yellow-throated Warbler (Dendroica dominica L.) is a southern warbler associated with bald cypress and sycamore swamps and pine woodlands. Over the past few decades, this warbler has extended its breeding range northward within the United States (Robbins et al. 1986). Extralimital colonizations were generally preceded by an increasing number of spring migrants, and eventually by the presence of solitary singing males in the breeding season. Increases in the number of spring "overshoot" migrant Yellowthroated Warblers recorded in Ontario and two recent breeding season records conform to this pattern and suggest that this species may soon nest in Ontario. This article will provide evidence for this possibility by summarizing recent trends in observations of this species in Ontario and adjacent areas of eastern North America.

Although four subspecies of Yellow-throated Warbler have been described, only two have been reported from Ontario: the yellowlored *D. d. dominica* which typically breeds in pine lands east of the Appalachians, and the whitelored *D. d. albilora* (called the Sycamore Warbler because of its association with Sycamore trees), which is found farther west. The

area referred to as the "lores" in these subspecies is actually above the lores and should be called the supraloral area (Dunn 1993; J.L. Dunn, pers. comm.). Jaramillo (1993) suggested that white-lored Yellow-throated Warblers may be either subspecies, and that only vellow-lored strays can be subspecifically identified. However, albilora may have a pale yellow supraloral area (J.L. Dunn, pers. comm.), so the subspecies can be quite difficult to distinguish. Details regarding variations in supraloral colour and other characters which may be useful for distinguishing the four subspecies are discussed elsewhere (Parkes 1953; Baird 1958; Ficken et al. 1968; Dunn 1993). If Yellowthroated Warblers are found breeding in Ontario they will most likely be the albilora subspecies, since this subspecies constitutes most Ontario records.

The Yellow-throated Warbler was first recorded in Ontario near Niagara Falls, on 20 May 1943 (Sheppard 1994). Prior to 1970, there were only two other Ontario records, but since then, there has been a gradual increase in the annual number of spring records (Figure 1). This may reflect an increase in the number of birders and/or an improvement in birding skills. However, it is extremely difficult to quantify these observer effects, in order to determine whether Yellow-throated Warbler numbers are actually increasing. Despite this difficulty, records of the species in southern Ontario have increased to the point that it was recently delisted by the Ontario Bird Records Committee (Bain 1994).

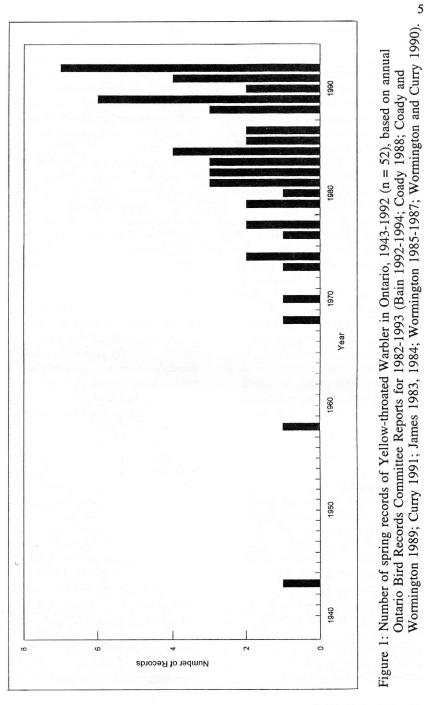
The Yellow-throated Warbler is one of the first warblers to return in the spring, so it begins breeding relatively early. In Michigan, territorial pairs arrive by mid to late April, and breeding extends into early June (Evers 1991). Yellowthroated Warblers may be done nesting by mid-June in Pennsylvania (Ickes 1992). In Ohio, one pair was observed visiting a nest on 6 June, but another male was found singing in early July, with its young likely fledging in late July (Baird 1984).

Until 1993, there were no breeding season records of Yellowthroated Warbler in Ontario (e.g., Cadman et al. 1987, and Austen et al. 1994, do not discuss the Yellowthroated Warbler). Ontario's first breeding season record was on 23 June 1993, when Dawn Brenner and Peter Burke observed a singing male on a Breeding Bird Survey plot near Gravelly Bay on Long Point (Figure 2). The bird was heard over a three hour period on this day, but was not detected a couple of days later. On 7 June 1994, the author found a singing male along the Thames River northwest of Byron. It remained for a couple of days (P. Read, pers. comm.) and

was likely a territorial bird (R. Ridout, pers. comm.).

The increasing number of Ontario sightings of the Yellowthroated Warbler and the more recent June singing records parallel documented expansions of this species in nearby American states over the past few decades. The Yellow-throated Warbler has expanded its range northward in Pennsylvania (Ickes 1992), West Virginia (Smith 1978), and Ohio (Peterjohn 1989) and into New York (Baird 1984, Carroll 1988) and Michigan (Evers 1991, 1994). An increasing population trend was also recorded during the first 15 years of the Breeding Bird Survey (Robbins et al. 1986). Populations in Illinois (Kendeigh 1982) and northern Indiana (Mumford and Keller 1984) are also increasing.

Historical population trends in Michigan and Ohio are congruent. Yellow-throated Warblers nested regularly in southern Michigan and throughout Ohio in the late 1800s, but became very rare and were essentially extirpated from this region (except southeastern Ohio) for the first few decades of this century (Peterjohn 1989; Evers 1991, 1994). This decline may have been the result of habitat loss (Evers 1991, 1994; but see Brewer et al. 1991). By the mid-1920s, nesting records began a slow northward march in Ohio, into the Alleghany Plateau after 1940, and reaching southwestern Ohio in the 1950s and the centre of the state in the 1960s. Spring migrants were not regular in northern Ohio until the 1970s and summering pairs (which



are still accidental to locally rare) only occurred after 1975 (Peterjohn 1989). Similarly, there were only two spring records between 1906 and 1969 in Michigan; but since then, Michigan numbers have increased and singing males have been present each year (Evers 1991, 1994). There are apparently no records of Yellow-throated Warbler in Ontario from the 1800s, but the possibility remains that they once nested in southern Ontario, and are only now recolonizing.

Yellow-throated Warblers often breed near water, like Prothonotary Warblers. They also confine themselves to the tops of tall trees (e.g., Evers 1994), where they often nest at heights of up to 20 metres (Mengel 1965, Baird 1984). If not for their loud and persistent song, they would be easy to overlook. At the northern limit of their contiguous range, in Illinois, Indiana, Ohio and Pennsylvania, they prefer to breed in bottomland forests with large sycamores (Graber et al. 1983, Mumford and Keller 1984, Peterjohn 1989, Ickes 1992). Illinois bottomland forests with the most sycamores tended to have the most Yellow-throated Warblers, but the correlation was not statistically significant. In addition, the floodplains of small upland streams well above large bottomlands sometimes had Yellow-throated Warblers, but the highest breeding densities were recorded in virgin floodplain forests (Graber et al. 1983). The only breeding population in Michigan (albilora) is found in the southwestern portion of the state,

along the Galien River. In this mature floodplain, emergent sycamores dominate the upper canopy, above a lower closed canopy of mature basswood, red and silver maple, ash and American elm, and a shrub layer dominated by spicebush and dogwoods (Evers 1991, 1994).

Despite their association with sycamore floodplains, Yellowthroated Warblers of the whitelored subspecies sometimes nest in pine woodlands (e.g., Mengel 1965, Peterjohn 1989, Baumgartner and Baumgartner 1992, Ickes 1992). In Ohio, one of the first breeding records was in a plantation of white, red and Scots pines, which was surrounded by mixed forest (Baird 1984). As early as 1965, Mengel recognized that D. d.albilora usually nested in sycamore floodplains, and only rarely in upland pine forests in western Kentucky, but that this preference was reversed in the eastern part of the state. Evidently, the two subspecies of Yellow-throated Warbler may be quite similar in both appearance (e.g., Jaramillo 1993) and habitat selection.

Evers (1994) considers the Michigan population an extralimital colonization of optimal breeding habitat - the largest, least disturbed sycamore-dominated floodplain in southern Michigan. Since there are no areas in southern Ontario where sycamore is a floodplain dominant (W. Bakowsky, M. Oldham, pers. comm.), this optimal habitat is apparently not present in Ontario. Breeding Yellow-throated Warblers



Figure 2: Male Yellow-throated Warbler at Long Point, *Haldimand-Norfolk* on 23 June 1993. Drawing by *Peter Burke*.

in Ontario could, however, occur in either suboptimal swamps with scattered sycamores, along floodplains, or possibly in pine woodlands.

Neither the Long Point nor the Byron singing males were in particularly suitable habitat. At Long Point, the bird was located in a white pine-cedar ridge in a low interdunal plot, but it showed no particular affinity for pine (P. Burke, pers. comm.). The Byron bird was singing mainly from a white pine in a closed-canopy coniferous woodland dominated by hemlock, on a slope of the Thames River valley. Although there is apparently no optimal breeding habitat for Yellow-throated Warblers in Ontario, they seem to

be at least exploring the possibility of breeding here anyway. Ontario birders are advised to visit rich floodplains and Carolinian swamps with sycamore in the breeding season, and also to keep their eyes and ears attuned elsewhere, for additional breeding season records of this species. It is certainly the most likely southern warbler yet to breed in Ontario, and it may be only a matter of time before it does so.

Acknowledgements

Thanks to Margaret Bain, Jane Bowles, Peter Burke, Mike Cadman, Paul Catling, Bruce Di Labio, Jon Dunn, Jarmo Jalava, Doug McRae, Ron Pittaway, Pete Read and Ron Ridout for information and suggestions. Wasyl Bakowsky, Mike Oldham and Don Sutherland at the Ontario Natural Heritage Information Centre also provided information and encouragement.

My studies along the Thames River were part of the City of London subwatershed life science inventory studies, being carried out on behalf of the Corporation of the City of London by the Upper Thames River and Kettle Creek Conservation Authorities.

Literature cited

Austen, M.J.W., M.D. Cadman and R.D. James 1994. Ontario Birds at Risk: Status and Conservation Needs. Federation of Ontario Naturalists, Don Mills, and Long Point Bird Observatory, Port Rowan, Ontario.

Bain, M. 1992. Ontario Bird Records Committee report for 1991. Ontario Birds 10: 43-63.

Bain, M. 1993. Ontario Bird Records Committee report for 1992. Ontario Birds 11: 46-63.

Bain, M. 1994. Ontario Bird Records Committee report for 1993. Ontario Birds 12: 41-58

Baird, J. 1958. Yellow-throated Warblers collected in sycamores along the Delaware River in New Jersey. Urner Field Observer, January 1958: 1-3.

Baird, T. 1984. A first record of nesting Yellow-throated Warblers in New York State. Kingbird 34: 221-223.

Baumgartner, F.M. and A.M. Baumgartner. 1992. Oklahoma Bird Life. University of Oklahoma Press, Norman, Oklahoma.

Brewer, R., G.A. McPeek and R.J. Adams (editors). 1991. The Atlas of Breeding Birds of Michigan. Michigan State University Press, East Lansing, Michigan.

Cadman, M.D., P.F.J. Eagles and F.M. Helleiners (compilers). 1987. Atlas of the Breeding Birds of Ontario. University of Waterloo Press, Waterloo, Ontario.

Carroll, J.R. 1988. Yellow-throated Warbler. Pp. 384-385 in Andrle, R.F. and J.R. Carroll (editors). The Atlas of Breeding Birds in New York State. Cornell University Press, Ithaca, New York.

- Coady, G. 1988. Ontario Bird Records Committee report for 1987. Ontario Birds 6: 42-50.
- *Coady, G. and A. Wormington.* 1989. Ontario Bird Records Committee report for 1988. Ontario Birds 7: 43-54.

Curry, R.H. 1991. Ontario Bird Records Committee report for 1990. Ontario Birds 9: 18-44.

Dunn, J.L. 1993. Comments on the 1992-1993 Holmes County wintering warblers. Ohio Cardinal 16: 70-74.

- Evers, D.C. 1991. Yellow-throated Warbler. Pp. 410-411 in Brewer, R., G.A. McPeek and R.J. Adams (editors). The Atlas of Breeding Birds of Michigan. Michigan State University Press, East Lansing, Michigan.
- Evers, D. 1994. Expansion of the Yellowthroated Warbler in the southern Great Lakes region. Michigan Birds 1: 2-9.
- Ficken, R.W., M.S. Ficken and D.H. Morse. 1968. Competition and character displacement in two sympatric pinedwelling warblers (*Dendroica*, Parulidae). Evolution 22: 307-314.
- Graber, J.W., R.R. Graber and E.L. Kirk. 1983. Illinois Birds: Wood Warblers. Illinois Natural History Survey Biological Notes No. 118, Champaign, Illinois.
- Ickes, R. 1992. Yellow-throated Warbler. Pp. 322-323 in Brauning, D.W. (editor). Atlas of Breeding Birds in Pennsylvania. University of Pittsburgh Press, Pittsburgh, Pennsylvania.

James, R.D. 1983. Ontario Bird Records Committee report for 1982. Ontario Birds 1: 7-15.

James, R.D. 1984. Ontario Bird Records Committee report for 1983. Ontario Birds 2: 53-65.

Jaramillo, A. 1993. Subspecific identification of Yellow-throated Warblers. Birders Journal 2: 160.

Kendeigh, S.C. 1982. Bird populations in east central Illinois: fluctuations, variations and development over half a century. University of Illinois Press Biological Monograph 52, Champaign, Illinois.

Mengel, R.M. 1965. The Birds of Kentucky. Ornithological Monographs No. 3. American Ornithologists' Union, Washington, D.C. Mumford, R.E. and C.E. Keller. 1984. The Birds of Indiana. Indiana University Press, Bloomington, Illinois.

- Parkes, K.C. 1953. The Yellow-throated Warbler in New York. Kingbird 3: 4-6.
- Peterjohn, B.G. 1989. The Birds of Ohio. Indiana University Press, Bloomington, Illinois.
- Robbins, C.S., D. Bystrak and P.H. Geissler. 1986. The Breeding Bird Survey: Its First Fifteen Years, 1965-1979. Resource Publication 157, United States Fish and Wildlife Service, Washington, D.C.
- Sheppard, R.W. 1944. Sycamore Warbler in Ontario. Auk 61: 469.

- Smith, J.L. 1978. Northward expansion of the Yellow-throated Warbler. Redstart 45: 84-85.
- Wormington, A. 1985. Ontario Bird Records Committee report for 1984. Ontario Birds 3: 2-17.
- Wormington, A. 1986. Ontario Bird Records Committee report for 1985. Ontario Birds 4: 3-18.
- Wormington, A. 1987. Ontario Bird Records Committee report for 1986. Ontario Birds 5: 42-63.
- Wormington, A. and R.H. Curry. 1990. Ontario Bird Records Committee report for 1989. Ontario Birds 8: 4-33.

Brendon Larson, Department of Botany, University of Toronto, 25 Willcocks Street, Toronto, Ontario M5S 3B2

