

THE NORTHERN PARULA IN MANITOBA

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The northwestern limit of the breeding range of the Northern Parula has never been well defined. The latest check-list of the American Ornithologists' Union puts it at southeastern Manitoba (Winnipeg), but the only records for that city are of migrants (see below).¹ Early records indicating breeding at Waugh, Caddy Lake and McArthur Falls are not quite conclusive, as no nests or recently fledged young were found. These early records account for statements by Sprunt that the Northern Parula breeds in southeastern Manitoba, by Godfrey and by Salt and Salt that it breeds locally at Waugh, and by Bent that it breeds north to Shoal Lake (near Waugh) and Caddy Lake.^{62 15 56 5} The recent discovery of at least one nest in Manitoba confirms this species' breeding status in the province.

In this paper, we review the occurrence of this attractive warbler in Manitoba, with notes on surrounding states and provinces. Recent evidence of breeding in Manitoba is presented. This article is a combination of two manuscripts written independently by the two authors and combined by McNicholl. Earlier records were compiled primarily by McNicholl, and recent material mainly by Taylor.

Status in Surrounding States and Provinces

Godfrey indicated that the breeding range of the Northern Parula (Parula Warbler) includes the more southerly parts of northwestern Ontario, although he only cites breeding localities in the central and southern portions of that province.¹⁵ A recent annotated check-

list of Ontario birds refers to it as an "uncommon local resident" across Ontario north (and west) to Kenora.³⁰ The late A. E. Allin regarded it as rare at the Lakehead (Thunder Bay), but had several migration records there, notably several observed during an unusually heavy flight of warblers in May 1954.^{43 44 45 46 47} Taylor found this species to be fairly common in some mature mixed-wood stands in Sibley Provincial Park, east of Thunder Bay, in early July of 1977 and 1979 (unpublished observations).

The Parula is a regular migrant and summer resident in Minnesota, but breeding has not yet been confirmed for the northwestern part of the state, adjacent to Manitoba.¹⁹ Stewart did not include the Northern Parula in his recent book on breeding birds of North Dakota, but in an earlier checklist he classed it as a "current" species, i.e., having occurred at least three times in at least two seasons since 1920.^{64 63} Recent records in North Dakota include spring sightings at Jamestown in 1963, Fargo in 1968, La Moure in 1972, and Grand Forks in 1980, and a fall record in Fargo in 1975.^{52 21 29 60 58}

Sealy summarized Alberta and Saskatchewan records to 1970.⁵⁷ He did not include an unconfirmed record from Sovereign, Saskatchewan in 1930 and Tremaine's vague reference to seeing the species in Saskatchewan in 1965.^{53 6 65} Callin also mentioned a 1935 record at McLean, Saskatchewan.⁶ Tremaine's record was of a singing male watched for about 10 minutes at the Flotten Lake campground on 6 July

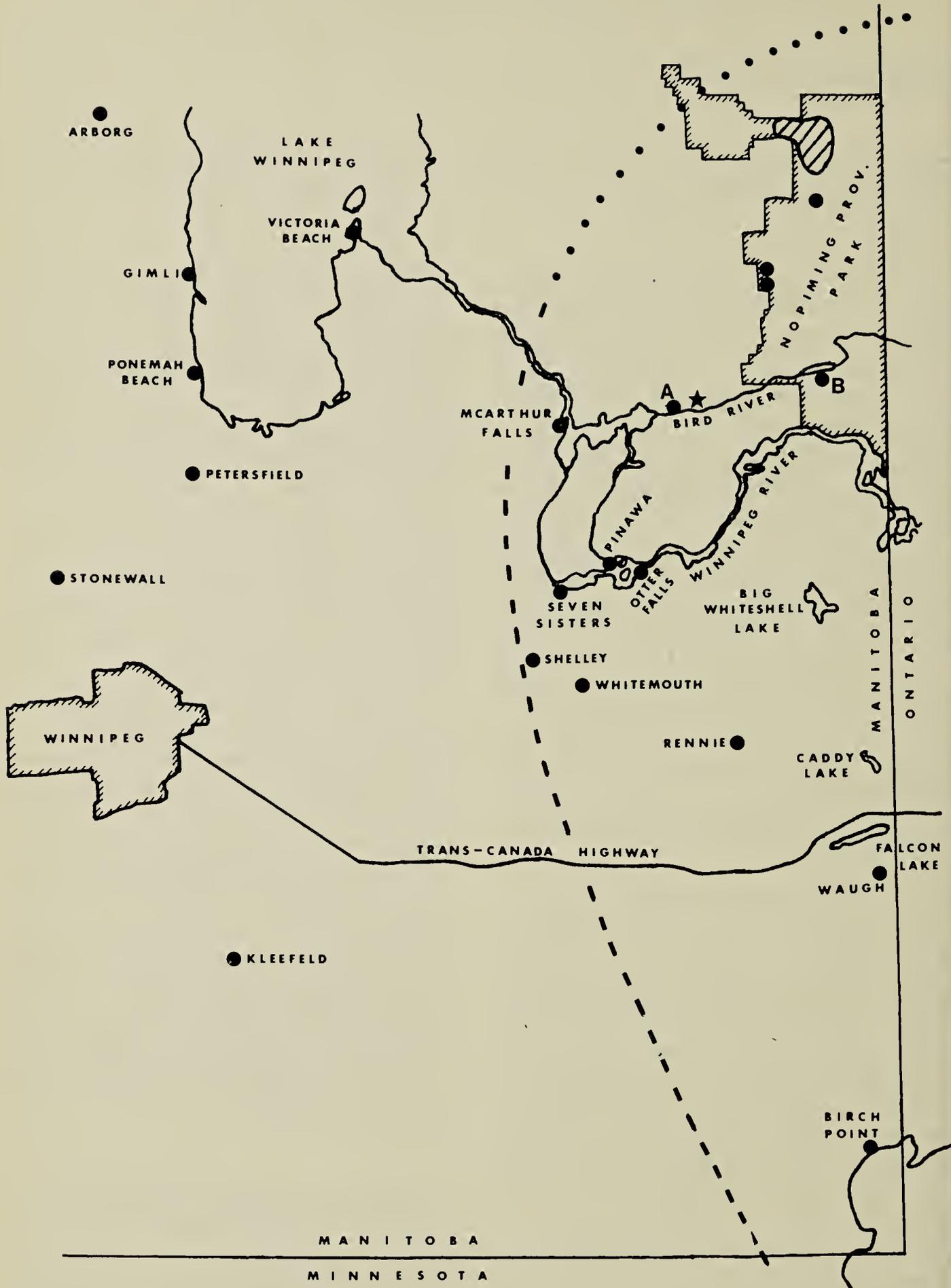


Figure 1. Map of southeastern Manitoba, showing most localities mentioned in the text (Brandon, Ninette, St. Ambrose and the International Peace Gardens are farther west). The known breeding range of the Northern Parula lies south and east of the broken line. The area north of the dotted portion is poorly known ornithologically, and the breeding range may well extend farther in this direction.

1965 (pers. comm. to McNicholl, 14 December 1968). Although unconfirmed, this record should be considered probable in view of Dr. Tremaine's previous experience with the species and the length of observation time. Saskatchewan records since 1970 include two in Saskatoon May 1972, two males in Regina May 1979, and a singing male near Ekapo Lake May 1979.^{2 29 61 16 4 6} Sealy cited only one Alberta record, and Houston referred to a Calgary record in spring 1971 as

Alberta's second.^{57 28} However, Salt mentioned unpublished records for Wayne and Rosedale in 1958, and an August record in Calgary prior to 1971 (year not stated by Salt or his source).⁵⁵ Sadler and Myres dismissed the earlier Calgary record as undocumented.⁵⁴

Manitoba Records Prior to 1975

Data on records of the Northern Parula in Manitoba prior to 1975 are summarized in Table 1 and most locations are plotted on Figure 1.

Table 1. MANITOBA RECORDS OF THE NORTHERN PARULA PRIOR TO 1975

<i>Date</i>	<i>Locality</i>	<i>No.</i>	<i>Sex</i>	<i>Observer(s)</i>	<i>Reference</i>
*Sept. 1917	Winnipeg	1	m	J. J. Golden	20, 32
*2 or 3 July 1923	Indian Bay, Shoal Lake (Waugh)	6-8	both	C. R. Broley C. G. Harrold E. Kiteley	20, 32
? 1923	Ponemah Beach	?	?	"A. & K. McL."	31
7 May 1924	Ninette	3	?	W. C. Scott	33
13 May 1926	Ninette	?	?	R. C. Scott	34
24 May 1929	Victoria Beach	?	?	E. Keighly	36
24 May 1929	Caddy Lake	2(+?)	m	B. W. Cartwright	7, 41
19 May 1930	Winnipeg	?	?	H. Hatton	37
20 May 1931	Whitemouth	?	?	V. Latta	38
17 Sept. 1933	Whitemouth	1	?	V. Latta	39
18 May 1938	Winnipeg	1	f	R. Sutton	40
16-17 June 1945	McArthur Falls	2	m	W. Johnston, G. Smith	41
21 May 1946	McArthur Falls	1	m	W. Johnston	41
24 May to end July 1947	McArthur Falls	2 1	m f	W. Johnston and father	41
? 1948	Petersfield	1	f	S. Wick	42
5 June 1951	Rennie	1	m	W. E. Godfrey	14
1 July 1959	Falcon Lake	1	m	H. Mossop	48
23 May 1961	Winnipeg	1	?	F. J. Coutts	49
9 June 1963	Arborg	1	m	M. K. McNicholl	50
9 May 1964	Winnipeg	1	?	F. J. Coutts	51

*Specimen record.

Several of these are migration reports, lacking additional data and thus without corroboration. Records with additional published or unpublished information are discussed below.

Harrold stated that the first Manitoba record was of an immature bird "taken in Winnipeg" and in September 1917 by J. J. Golden.²⁰ Golden did not collect the bird in the usual sense, but it was brought to him for identification after being found fluttering against a store window.³²

The next evidence of the species in Manitoba is a vague message by Lawrence in 1923 to "A. and K. McL." of Ponemah Beach, stating that the Parula Warbler is only accidental in Manitoba; this was probably in response to a report which he doubted.³¹ In July of the same year, C. R. Broley, C. G. Harrold and E. Kitley penetrated a dense tamarack swamp, festooned with *Usnea* lichen, near the shores of Indian Bay on Shoal Lake near Waugh, and found what appeared to be a breeding group.^{20 32} Although Lawrence later credited Harrold with discovering the first nest of the species in the province, both Harrold and Lawrence himself stated that no nest was actually found; Lawrence evidently based his former statement on the presence of six to eight individuals during the breeding season.^{35 20 41 32} Harrold recorded the date of the visit as 3 July, Lawrence as 2 July.^{20 32} Specimens of two male Parulas in the Manitoba Museum of Man and Nature, Winnipeg, were taken at Waugh by Harrold, presumably on this occasion (Specimen Nos. 758, 759).

There were three migration records in the 1920's, at Ninette and Victoria Beach (Table 1). On 25 May 1929 B. W. Cartwright found a "small colony" of Northern Parulas at Cross Lake, on the portage between Caddy and West Hawk lakes, barely on the Manitoba side of the Ontario - Manitoba border.⁷ According to Lawrence, Cartwright's observations

consisted of two males "fighting and singing in lively fashion", behaviour which suggests that they were contesting territories.⁴¹

No additional evidence of nesting was obtained in the 1930's, but Vic Latta, the veteran nest-finder from Shelley, saw the species twice in migration near Whitemouth, and there were two migration records from Winnipeg (Table 1).

In the 1940's, two of Manitoba's most active birders obtained evidence that Parulas probably nested near McArthur Falls. Gordon Smith and Warren Johnston found two singing males there in 1945. Johnston observed males again 21 May 1946 and 24 May 1947, and heard one or two males singing nearly every weekend in June and July in the latter year. He observed that they seemed partial to areas of tall spruce. On 8 June 1947, Johnston and his father observed a female carrying nesting material (Ref. 41 and unpublished field notes). The only migration report in the 1940's was a female in spring of Petersfield (Table 1).

In the 1950's and 1960's, the Northern Parula was seldom reported in Manitoba, but singing males were noted near Rennie in 1951, Falcon Lake in 1959, and Arborg in 1963. Winnipeg's cautious expert, Fred J. Coutts, observed spring migrants there in 1961 and 1964 (see Table 1 for sources). Mossop's observations were more significant than indicated by his passing reference to one singing in the background while he was watching a Winter Wren.⁴⁸ When McNicholl reported his observation at Arborg in 1963 to Mossop, the latter indicated that he saw them regularly at Falcon Lake, near the Ontario - Manitoba border. Mossop subsequently indicated in several conversations with McNicholl that Parulas nest at Falcon Lake.

Manitoba Records, 1975-1981

No records of Northern Parulas in Manitoba appear to have been published between 1965 and 1974 inclusive. Hatch noted that one seen in Winnipeg by Mr. and Mrs. Angus H. Shortt 11 October 1975 was "the first record in this decade and probably much longer."^{22 23} Since 1975 three areas have been identified in which substantial summer populations occur. Some of these observations have been mentioned briefly in Gardner's and Hatch's newspaper columns and in seasonal regional bird reports, but most of the details are reported for the first time here. In addition, a number of records of migrants, and possibly isolated instances of breeding, have been made and are summarized in Table 2.

Numerous summer observations have been made in mature mixed-wood forest adjoining Manitoba Provincial

Road (PR) 315 near the Bird River, between Bird River campground and Bird Lake (Points A and B in Figure 1). The major canopy trees within Parula territories are Trembling Aspen, Balsam Poplar, White Birch, White Spruce and Balsam Fir. *Usnea* lichen occurs, sometimes in profusion, on dead or damaged conifers. Beaked Hazelnut and Mountain Maple are prominent understory shrubs. Typical habitat, including a nest tree, is shown in Figure 2. Between late May and early July each year from 1976 to 1981, Parulas have been observed here by Taylor and other experienced observers (C. W. Cuthbert, D. Fast, D. R. M. Hatch, G. Holland, R. W. Knapton, R. F. Koes, W. Neily, A. H. Shortt and I. Ward), as described earlier by Hatch.²³ The majority of these observations were of singing males, but females have also been seen regularly, and comprise about 15% of all records. A brief mention by Gardner of a Winnipeg sighting by Neily 2 June 1979 is referable to this area.

Table 2. RECORDS OF THE NORTHERN PARULA IN MANITOBA OUTSIDE THE THREE MAJOR KNOWN BREEDING LOCALITIES, 1975 - 1981

Date	Locality	No.	Sex	Observer(s)	Reference
11 Oct. 1975	St. Vital, Winnipeg	1	m	A. H. Shortt B. Shortt	22, 23
23 May 1976	2 km W of Pinawa	1	m	P. Taylor	59
24 May 1976	St. Ambroise	1	m	G. Grief G. Holland	3, 9, 59 and pers. comm.
23 June 1976	2 km W of Pinawa	1	m	P. Taylor	Unpubl. obs.
15 May 1977	Gimli	1	m	R. W. Knapton R. F. Koes	10, 24 and pers. comm.
15 May 1977	1 km N of Pinawa	1	m	P. Taylor	Unpubl. obs.
23 May 1977	1 km N of Pinawa	1	m	R. W. Knapton P. Taylor	Unpubl. obs.
26 June 1977	2 and 4 km NE of Pinawa	2	m	P. Taylor	Unpubl. obs.
10-13 Sept. 1977	Stonewall	1	m	K. Gardner	11

Table 2 (continued)

<i>Date</i>	<i>Locality</i>	<i>No.</i>	<i>Sex</i>	<i>Observer(s)</i>	<i>Reference</i>
20 Sept. 1977	Assiniboine Park, Winnipeg	1	m	G. Panting	11, 24
18 and 20 May 1978	Near Seine River, Winnipeg	1	m	J. Loch	26 and pers. comm.
30 Aug. 1978	Big Whiteshell Lake	1	m	R. W. Knapton	Pers. comm.
26 May 1979	2 km W. of Pinawa	1	m	P. Taylor	Unpubl. obs.
2 June 1979	3 km NW of Pinawa	1	m	G. Grief P. Horch I. Ward	Pers. comm.
25 Aug. 1979	14 km W of Pinawa	1	f or imm m	P. Taylor	Unpubl. obs.
9 Sept. 1979	2 km NW of Seven Sisters	1	f or imm m	P. Taylor	Unpubl. obs.
12 May 1980	Wellington Cres. Winnipeg	1	m	R. F. Koes	12, 13, 18 and pers. comm. (cited in ref. 27 as 14 May)
13 May 1980	Brandon	1	f	B. Robinson	25
8 June 1980	16 km W of Big Whiteshell Lake	1	m	G. Grief	Pers. comm.
24 Aug. 1980	Otter Falls	1	f or imm m	P. Taylor	Unpubl. obs.
16 May 1981	Kleefeld	1	m	D. Fast	Pers. comm.
16 May - 21 June 1981	Otter Falls	up to 3	m	P. Taylor et al	See text
13 June 1981	Big Whiteshell Lake	1	m	G. Grief	Pers. comm.
26 June 1981	International Peace Gardens	3?	m	D. Dupre et al	Neily, pers. comm.
27 June 1981	International Peace Gardens	1	m	W. Neily J. Zoch	Neily, pers. comm.
1 July 1981	22 km NE of Pinawa, beside PR 313	1	m	P. Taylor L. Summers J. Sunder	Unpubl. obs.
16 Aug. - 16 Sept. 1981	Assiniboine Park, Winnipeg	1+ (several sightings)	m	G. Grief D. R. M. Hatch G. Holland R. F. Koes A. H. Shortt	Grief, Hatch, Holland, Koes, pers. comm.

The Bird River Breeding Bird Survey consists of 50 three-minute observation stops at 0.5 mile (0.8 km) intervals, east along PR 315 from the Bird River campground. Survey totals of Parulas between 1977 and 1981 range from five (8 June 1977, Cuthbert) to fourteen (17 June 1978, Taylor), with an average of 9 singing males.

A more intensive survey 19 June 1977 revealed 14 singing males between points 1 km west and 5 km east of the Bird River campground. If all singing males within 250 m of the road were located, and each of these represented a breeding pair, this indicates a local breeding density of about five pairs per square kilometre, corresponding to the status "common" (locally), as used by Belcher.⁴ The Parula was the second most numerous of ten warbler species recorded in this area on that day.

During the summer of 1977, Cuthbert (pers. comm.) carried out a preliminary survey of breeding bird populations within Nopiming Provincial Park. He found Northern Parulas at 14 locations within an area of about 30 square kilometres near the north end of the park (shaded area in Figure 1). Pairs of birds were noted at three of these sites, and Cuthbert also found single birds at three additional localities within the park (unlabelled points in Figure 1), as well as near the Bird River. These records occurred over the period 12 May to 29 July 1977, principally in mature mixed-wood forest.

On 9 July 1977 Knapton, Koes and Taylor recorded at least 4 male and 2 female Parulas in a White Cedar - Tamarack swamp and adjoining mixed-wood forest and willows, at Birch Point, Lake of the Woods, in the southeastern extremity of Manitoba. Knapton and Koes briefly observed an immature bird begging for food in the willows, giving strong evidence that breeding had occurred in the vicinity. Koes and Taylor estimated 7 singing males to be present at the same location 24 June 1978, and

P. Horch and W. Neily reported single birds 28 June 1979 and 13 June 1981, respectively (pers. comm.). R. S. Ferguson carried out an ornithological survey in extreme southeastern Manitoba from 25 May to 7 July 1978, on behalf of the National Museum of Natural Sciences.⁸ He found Parulas to be "locally distributed in dense coniferous and mixed forests with a high proportion of Black Spruce, Tamarack, Eastern White Cedar or Balsam Fir." He noted singing birds on five dates between 26 May and 28 June at Birch Point and the nearby localities of Sprague Lake, Mud Lake and Angle Inlet.

Taylor has found singing male Parulas in the Pinawa - Otter Falls area on several occasions in late May and June (Table 2). In particular, up to 3 birds were observed within 1 km of PR 307, south of Otter Falls between 16 May and 21 June 1981. These were again in mature mixed-wood stands with ample *Usnea* on some conifers. These sightings were confirmed by several other experienced observers: A. Blewett, N. J. Cleveland, Fast, Hatch and Lane.

An especially interesting record of the Northern Parula occurred recently at the International Peace Gardens, on the North Dakota - Manitoba border in southwestern Manitoba. Here, Delos Dupre and several other visitors to the province, who were participating in a field trip organized by the North American Bluebird Conference in Brandon, reported 3 singing birds 26 June 1981. Two Manitoba birders, Neily and J. Zoch, confirmed this report in part when they found a single singing male the following day.

Evidence of Breeding

Irregular early reports and regular recent observations of singing male Parulas in appropriate breeding habitat from late May to July, together with a

smaller number of sightings of the less conspicuous females, provide strong evidence in support of Lawrence's suggestion that this bird is a locally common breeding species in southeastern Manitoba.⁴¹

The Parula is noted for its strong affinity for arboreal mosses and lichens.^{5 62} Lichens of the genus *Usnea* are used for nesting in the northern part of the breeding range, and are commonly reported at sites of suspected breeding in Manitoba, as noted above. This lichen was common in the vicinity of the singing male seen at Arborg by McNicholl.

The best early evidence of breeding is Johnston's observation of a female carrying nesting material near McArthur Falls in 1947. On 22 May 1978 Holland, Ward and Taylor visited the Bird River area. Ward saw a female Parula enter a clump of *Usnea* about 10 m up in a white spruce. All three observers saw the bird emerge about a minute later; she was evidently at least prospecting for nest sites, and may well have been

building a nest. However, no activity was observed at this site during two subsequent visits in June, so breeding could not be confirmed. The same observers and P. Press made similar observations at a location about 25 km farther east, at the junction of PR 315 and Bird Lake Block Road number 10 on 8 June 1980.

An active nest was finally located by Taylor 7 July 1979 in a clump of *Usnea* about 8 m up in a storm-damaged white spruce, very close to the suspected nest-site of 1978 (Figures 2 and 3). During about 45 minutes of observation in the early morning, the female visited the nest with food five times, indicating that young were present. She also settled on the nest to brood briefly during this period. On one occasion she foraged in the understory nearby after feeding the young, but she usually departed into the canopy following visits to the nest. This is the nest cited as "northeast of Lac du Bonnet" by Gollop.¹⁷

Although there is only this one definitive nest record for Manitoba, the many observations detailed above all



Figure 2. Location of the 1979 Parula nest alongside PR 315. This mature mixed-wood stand is typical of Parula breeding habitat in this area.

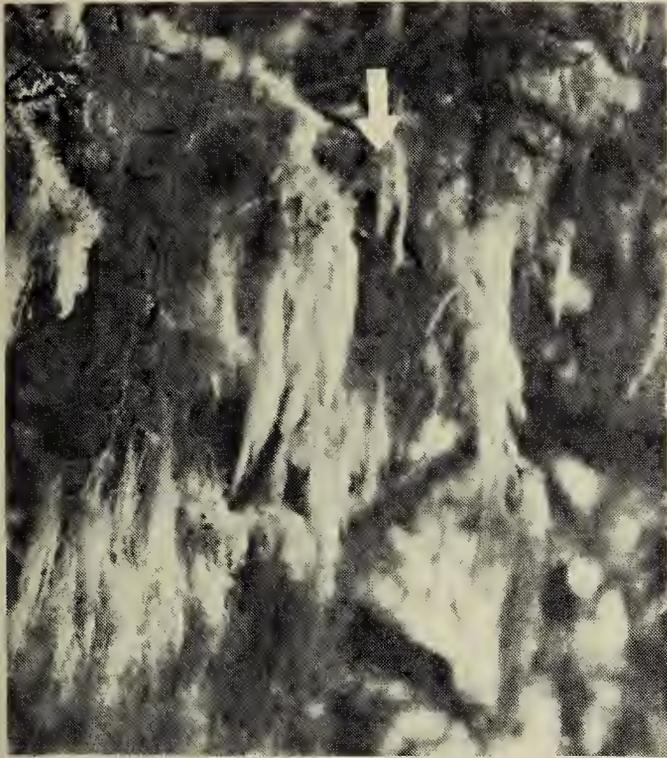


Figure 3. *Usnea lichen festoons a battered white spruce. The right-hand clump has been fashioned into a nest; the tail of the female Parula (arrowed) is just visible as she feeds young.*

strongly indicate that this warbler is a regular and locally common breeding bird within the range delineated in Figure 1. The singing males at Arborg and the International Peace Gardens, and those in Saskatchewan, may have been away from breeding grounds, but the breeding range may well be more extensive than we show. In particular, the southern portion of the Canadian Shield in the Interlake region of Manitoba is poorly known ornithologically and deserves further investigation. A Natural History Society of Manitoba (now Manitoba Naturalists Society) outing to Beaver Creek and Calder's Dock on the western shore of Lake Winnipeg 15 June 1969 was said to have been stimulated partly by rumours of Parulas (H. V. Hosford, pers. comm. to McNicholl during the field trip), and large amounts of *Usnea* were seen at several sites.

Observations on Song

The buzzy songs of the male Parula are distinctive, and are a valuable aid in locating the species during the breeding

season.^{5 15} A buzzy ascending trill and an ascending series of buzzy notes are the two song forms most commonly heard. A third song, consisting of a rather flat, soft series of one long and two or three short buzzes, has been heard less frequently. On 2 June 1979 Koes, Neily and Taylor heard an unfamiliar song uttered by a male Northern Parula near Bird Lake. This was a rather high-pitched, *descending* trill, less buzzy in quality than any of the three typical songs. This was repeated several times per minute during about five minutes of observation, and no other songs were uttered during this time; it was unlike any song described by Bent.⁵

Song perches are usually at or near the top of either deciduous or coniferous trees, and are sometimes quite open. The top of the nest tree was one song perch used by the male associated with the nest described above.

Acknowledgements

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¹ AMERICAN ORNITHOLOGISTS UNION. 1957. Check-list of North American birds. Amer. Ornithol. Union, Baltimore.

² ANONYMOUS. 1972. Local news: Saskatoon. Sask. Nat. Hist. Soc. Newsletter 31: 6-8.

- ³ ANONYMOUS. 1976. Bird report for month of May. Man. Nat. Soc. Bull. July-Aug. 1976: 7-8.
- ⁴ BELCHER, M. 1980. Birds of Regina. Revised ed. Sask. Nat. Hist. Soc. Spec. Publ. No. 12.
- ⁵ BENT, A. C. 1953. Life histories of North American wood warblers. U.S. Natl. Mus. Bull. 203 (Dover ed. 1963).
- ⁶ CALLIN, E. M. 1980. Birds of the Qu'Appelle, 1857-1979. Sask. Nat. Hist. Soc. Spec. Publ. No. 13.
- ⁷ CARTWRIGHT, B. W. 1931. Notes and observations on some Manitoban birds. Can. Field-Nat. 45: 181-187.
- ⁸ FERGUSON, R. S. 1981. Summer birds of the Northwest Angle Provincial Forest and adjacent Southeastern Manitoba. Syllogeus No. 31. Natl. Mus. Can.
- ⁹ GARDNER, K. 1976. (Untitled). Wild Wings. Winnipeg Tribune. 12 June 1976.
- ¹⁰ GARDNER, K. 1977a. Wild Wings. Winnipeg Tribune. 18 June 1977.
- ¹¹ GARDNER, K. 1977b. Varied Thrush now seen regularly. Wild Wings. Winnipeg Tribune. 15 October 1977.
- ¹² GARDNER, K. 1980a. Rare birds sightings increase. Wild Wings. Winnipeg Tribune. 24 May 1980.
- ¹³ GARDNER, K. 1980b. Migration reports. Wild Wings. Winnipeg Tribune. 31 May 1980.
- ¹⁴ GODFREY, W. E. 1953. Notes on birds of the area of intergradation between eastern prairie and forest in Canada. Natl. Mus. Canada Bull. No. 128: 189-240.
- ¹⁵ GODFREY, W. E. 1966. The birds of Canada. Natl. Mus. Canada Bull. No. 203.
- ¹⁶ GOLLOP, J. B. 1979a. The spring migration. March 1 - May 31, 1979. Prairie provinces region. Amer. Birds 33: 781-782.
- ¹⁷ GOLLOP, J. B. 1979b. The nesting season. June 1 - July 31, 1979. Prairie provinces region. Amer. Birds 33: 872-873.
- ¹⁸ GOLLOP, J. B. 1980. The spring migration. March 1 - May 31, 1980. Prairie provinces region. Amer. Birds 34: 787-789.
- ¹⁹ GREEN, J. C. and R. B. JANSSEN. 1975. Minnesota birds: where, when and how many. Univ. Minnesota Press, Minneapolis.
- ²⁰ HARROLD, C. G. 1923. Notes on some interesting species. Can. Field-Nat. 37: 169.
- ²¹ HATCH, D. R. M. 1968. Spring migration. April 1 - May 31, 1968. Northern Great Plains region. Audubon Field Notes 22: 544-547.
- ²² HATCH, D. 1975. Chickadee Notes No.98. Winnipeg Free Press 29 November 1975.
- ²³ HATCH, D. 1976. (Untitled). Chickadee Notes No. 132. Winnipeg Free Press. 24 July 1976.
- ²⁴ HATCH, D. 1977. Chickadee Notes. Winnipeg Free Press 1 October 1977.
- ²⁵ HATCH, D. 1980. Keep cards coming. Chickadee Notes. Winnipeg Free Press 20 June 1980.
- ²⁶ HORCH, P. 1978. Bird news. Man. Nat. Soc. Bull. 1(11): 11.
- ²⁷ HORCH, P. 1980. Bird news. Man. Nat. Soc. Bull. 3(10): 12-13.
- ²⁸ HOUSTON, C. S. 1971. The nesting season. June 1, 1971 to August 15, 1971. Northern Great Plains region. Amer. Birds 25: 869-872.
- ²⁹ HOUSTON, C. S. 1972. The spring migration. April 1 to May 31, 1972. Northern Great Plains. Amer. Birds 26: 774-777.
- ³⁰ JAMES, R.D., P. L. McLAREN, and J. C. BARLOW. 1976. Annotated checklist of the birds of Ontario. Royal Ont. Mus. Misc. Publ., Toronto.
- ³¹ LAWRENCE, A. G. 1923a. Breeding notes. Chickadee Notes No. 113. Winnipeg Free Press 24 May 1923.
- ³² LAWRENCE, A. G. 1923b. The Northern Parula Warbler. Chickadee Notes No. 119. Winnipeg Free Press 5 July 1923.
- ³³ LAWRENCE, A. G. 1924. Northern Parula Warbler. Chickadee Notes No. 166. Winnipeg Free Press 29 May 1924.
- ³⁴ LAWRENCE, A. G. 1926. Migration records. Chickadee Notes No. 268. Winnipeg Free Press 13 May 1926.
- ³⁵ LAWRENCE, A. G. 1929a. Cyril Guy

Harrold. Chickadee Notes No. 415.
Winnipeg Free Press 19 March 1929.

Chickadee Notes No. 439. Winnipeg
Free Press 15 June 1963.

³⁶ LAWRENCE, A. G. 1929b. Migration
records. Chickadee Notes No. 428.
Winnipeg Free Press 6 June 1929.

⁵¹ MOSSOP, H. 1964. Migration reports.
Chickadee Notes No. 487. Winnipeg
Free Press 16 May 1964.

³⁷ LAWRENCE, A. G. 1930. Migration
records. Chickadee Notes No. 479.
Winnipeg Free Press 30 May 1930.

⁵² NERO, R. W. 1963. Spring migration. April
1 to May 31, 1963. Northern Great
Plains region. Audubon Field Notes 17:
412-414.

³⁸ LAWRENCE, A. G. 1931. Migration notes.
Chickadee Notes No. 531. Winnipeg
Free Press 29 May 1931.

⁵³ ROY, J. F. 1964. Birds of the Elbow. Sask.
Nat. Hist. Soc., Regina.

³⁹ LAWRENCE, A. G. 1933. Rarities at
Whitemouth. Chickadee Notes No. 655.
Winnipeg Free Press 13 December
1933.

⁵⁴ SADLER, T. S., and M. T. MYRES. 1976.
Alberta birds 1961-1970. Prov. Mus.
Alberta, Nat. Hist. Sec. Occas. Pap. No.
1.

⁴⁰ LAWRENCE, A. G. 1938. Migration notes.
Chickadee Notes No. 895. Winnipeg
Free Press 20 May 1938.

⁵⁵ SALT, W. R. 1973. Alberta vireos and
wood warblers. Prov. Mus. and
Archives of Alberta Publ. No. 3.

⁴¹ LAWRENCE, A. G. 1947. A gorgeous
summer resident of the muskeg.
Chickadee Notes No. 1377. Winnipeg
Free Press 10 October 1947.

⁵⁶ SALT, W. R., and J. R. SALT. 1976. The
birds of Alberta with their ranges in
Saskatchewan and Manitoba. Hurtig.
Edmonton.

⁴² LAWRENCE, A. G. 1948. Migration
reports. Chickadee Notes No. 1409.
Winnipeg Free Press 21 May 1948.

⁵⁷ SEALY, S. G. 1970. Records of the Parula
Warbler in Alberta and Saskatchewan.
Blue Jay 28: 164-166.

⁴³ LAWRENCE, A. G. 1951a. Wave of
migrants hits Lakehead. Chickadee
Notes No. 1566. Winnipeg Free Press
25 May 1951.

⁵⁸ SERR, E. M. 1976a. The fall migration.
August 1 - November 30, 1975.
Northern Great Plains. Amer. Birds 30:
87-90.

⁴⁴ LAWRENCE, A. G. 1951b. Migration
reports. Chickadee Notes No. 1567.
Winnipeg Free Press 1 June 1951.

⁵⁹ SERR, E. M. 1976b. The spring migration.
April 1 - May 31, 1976. Northern Great
Plains. Amer. Birds 30: 855-858.

⁴⁵ LAWRENCE, A. G. 1954a. Great wave of
migrants. Chickadee Notes No. 1724.
Winnipeg Free Press 4 June 1954.

⁶⁰ SERR, E. M. 1980. The spring migration.
March 1 - May 31, 1980. Northern
Great Plains. Amer. Birds 34: 789-791.

⁴⁶ LAWRENCE, A. G. 1954b. Unusual
numbers of rarities. Chickadee Notes
No. 1726. Winnipeg Free Press 18 June
1954.

⁶¹ SHADICK, S. 1975. Highlights of
Saskatoon bird observations 1970-
1974. Blue Jay 33: 165-168.

⁴⁷ LAWRENCE, A. G. 1954c. A review of the
unusual. Chickadee Notes No. 1729.
Winnipeg Free Press 9 July 1954.

⁶² SPRUNT, A., Jr. 1979. Parula Warbler. pp.
68-69 in L. Griscom and A. Sprunt, Jr.
(Editors). The warblers of America.
Revised and updated by E. M. Reilly, Jr.
Doubleday, New York.

⁴⁸ MOSSOP, H. 1959. The Winter Wren
sings. Chickadee Notes No. 237. Win-
nipeg Free Press 31 July 1959.

⁶³ STEWART, R. E. 1971. Check list of birds
in North Dakota. Prairie Nat. 3: 3-12.

⁴⁹ MOSSOP, H. 1961. Migration reports.
Chickadee Notes No. 331. Winnipeg
Free Press 20 May 1961.

⁶⁴ STEWART, R. E. 1975. Breeding birds of
North Dakota. Tri-College Center for
Environ. Studies, Fargo.

⁵⁰ MOSSOP, H. 1963. Migration reports.

⁶⁵ TREMAINE, M. M. 1966. Saskatchewan
revisited. Blue Jay 24: 182-183.