

THE SPREAD OF THE WESTERN KINGBIRD ACROSS THE PRAIRIES

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The Western Kingbird, long known as the Arkansas Kingbird, has served as an indicator species reflecting habitat changes that followed settlement on the Prairies. Because the Western Kingbird is a conspicuous and distinctive bird that seeks out man, nesting chiefly in farm shelterbelts and along residential streets in cities and villages, we have more detailed documentation for this species than we have for most others. It is also somewhat unusual in that it rarely wanders beyond its breeding range, so that first records of the Western Kingbird for most areas have involved breeding pairs.

The Western Kingbird was not a summer resident of the plains of Saskatchewan and Manitoba before the advent of planted trees in North Dakota, it was initially confined to the river valleys in the southwest corner of the state. In 1873 J. A. Allen reported it as "exceedingly abundant wherever there is timber" along the Missouri River¹ and in 1874 G. B. Grinnell found "one or more pairs in every wooded ravine along the Little Missouri River."¹² Coues found none along the 49th parallel from the Red River west to the west loop of the Souris River in 1873, but in 1874 he found them in wooded valleys of the Missouri River tributaries throughout northern Montana, westward from the present site of Culbertson.⁹ In 1880, John Macoun found them in the wooded valleys of the Cypress

Hills in southwestern Saskatchewan, but none north or east of there.²³ In 1895, J. E. Houseman found 13 nests along the Bow River at Calgary and in 1894 Spreadborough found them along the South Saskatchewan River at Medicine Hat.^{15 24} There are no records to suggest that Western Kingbirds occupied the sparsely treed South Saskatchewan River valley within what is now Saskatchewan, either before settlement or in the first 30 years of settlement. We know with certainty that it was absent from the well-treed Qu'Appelle Valley.

Spread across North Dakota into Manitoba

As settlement progressed in North Dakota, Western Kingbirds spread northeast. In 1892 they reached Cando, which had been settled in 1884.¹⁸ Two pairs the first year used a binder and a windmill pump as nest sites. Although Cando was later to become known as the best-treed larger town in the state, its trees had still reached only 4 m in height by 1897. The Western Kingbird, nevertheless, became common at Cando by 1895 and by 1910, when the Manitoba maples and cottonwoods had matured, the Western Kingbird was as common as the Eastern Kingbird.¹⁹ The Western Kingbird soon occupied all of North Dakota.³⁹

Although Cando was only 40 miles south of Cartwright, Manitoba, it was



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not until 1907 that Hamilton Laing recorded the first Manitoba nest and then collected the first Manitoba specimen at Oak Lake on 10 August.^{13 21} In 1909, H. M. Speechly made his first sighting near Crystal City and the next year a pair of Western Kingbirds nested at Pilot Mound.³⁸ In 1910, a teacher reported Western Kingbirds at Pierson and in 1911 B. J. Hales found a nest at Pierson and found other individuals at Waskada, Hartney, Virden and Brandon.¹³ Thirty years after the Criddle family arrived, Norman Criddle made

his first sighting at Treesbank in May 1912, and the same month A. G. Lawrence saw his first Western Kingbirds near Winnipeg.⁴¹ In 1917, Criddle reported that a pair had nested near Oak Bluff, only 14 miles southwest of Winnipeg, with seven pairs resident in the town of Souris and another pair at Stockton, 7 miles east of Treesbank.¹⁰ By 1921, P. A. Taverner and Hoyes Lloyd found Western Kingbirds well settled in "small tree plantations that decorate . . . the immediate vicinity of railroad stations" throughout southern

Manitoba from Virden, Brandon and Portage la Prairie north to Oak Point and east to near Lockport.⁴¹ By 1932, they had spread north to Lake St. Martin at 51° 43' N, and by 1951 they were regular as far east as Lac du Bonnet, Whitemouth and Elma.³⁷ 11 Two nests in farm shelterbelts near Dauphin were found by W. J. Walley and Florence Fisher in 1974 and in 1975 Walley found another Western Kingbird nest in a farm shelterbelt 5 miles east of Sifton at 51° 21' N.

Spread across Saskatchewan

The first record for what is now eastern Saskatchewan was an adult and a juvenile collected 20 August 1891 by D. Losh Thorpe at the Souris coalfields, near the later site of Estevan, and reported to Ernest Thompson [Seton], who knew of no Manitoba records to that time.³⁶ Walter Raine reported none from Rush Lake and Crane Lake, just north of the Cypress Hills, in 1891 and 1893,³⁰ 31 but Macoun found them nesting at Crane Lake in 1894.²⁴ In 1895, Macoun found Western Kingbirds no farther east than the northwest corner of Old Wives Lake. A. C. Bent's party in 1905 and 1906 recorded Western Kingbirds in the timber along Skull Creek and Maple Creek, "nesting principally in the larger trees."⁶

After residing near Indian Head since 1887, George Lang first recorded the Western Kingbird in his eighth annual list of migration dates in 1910, when two were seen on 2 June; they were "moderately common" by 10 June. That year there were two nests on crossarms of telephone poles, and in 1913 when two arrived on 25 May there is again a note "nesting on crossarms of telephone poles in the town." The railroad had reached Indian Head in 1882. Trees planted at the Ex-

perimental Farm on the eastern edge of Indian Head in 1889 had with careful attention and watering reached 2 to 3 m in an 1893 photo, though no trees were yet visible in the town itself. By 1899, cottonwoods on the farm had reached 8 m and pine trees 5 m in height. By 1910, when telephone poles still offered better nesting sites than trees, Ken Skinner recollects that the trees along the residential streets of the town were about 7 m high, and several of his contemporaries have given a similar estimate.

On 22 July 1916, Hedley Mitchell collected an adult and three fledglings at Regina Beach (museum accession list, fide Gary Anweiler). In July 1919, Mitchell found Western Kingbirds fairly common at Carievale in extreme southeastern Saskatchewan, where he found another nest.⁷ In 1920, Mitchell found "quite a few" at Kedleston at the southwest corner of Last Mountain Lake, the northernmost record to that date.⁸ In 1921, a single pair nested on a telephone pole behind the home of L. T. McKim in Melville, and this site was used for four successive years.²⁵ This was the only pair observed near Melville during those years and, although none were seen in 1925, they gradually became common thereafter.¹⁶

Although a few early settlers had brought tree seedlings with them, it was not until founding of the Dominion Forest Nursery Station south of Indian Head in 1904 that large scale planting of shelter belts on farmsteads became widespread. The best information as to the time relationship between the planting of such trees, and their achieving sufficient size to attract Western Kingbirds, comes from Tyvan. At the Harley Ranson farm northeast of Tyvan, trees were planted in 1903,

and the first Western Kingbirds appeared in 1924.³ At the Stewart Houston farm 5 miles west of Ranson's, trees were planted in 1917, the tallest trees reached 7 m in height about 1934, and this distinctive kingbird first took up residence in 1937.²⁹ At the Ledingham farm 6 miles west of Moose Jaw, where trees had been planted in the 1890's, the Western Kingbird did not appear until 1923 or 1924.²⁰ At Mortlach, Grose saw his first four birds on 9 June 1923, and then found a nest with eggs in a maple on 19 June.²⁰

Western Kingbirds appeared in Regina in the early 1920's and became more common between 1933 and 1936,² about the time that trees on residential streets reached maturity. At Simpson, Western Kingbirds first nested in 1929, using the platform behind the transformer on a power pole.¹⁴ The village began in 1910, the year before the advent of the railroad, and the sparse trees in the early thirties were not more than 7 m high, according to Thomas Harper.

At Percival, Western Kingbirds first appeared in 1927, but E. M. Callin did not see them regularly until 1936. At Wauchope a few scattered pairs appeared on farms in 1935,^{27 29} and the first nest in the village was photographed by H. H. Pittman in 1937.²² Todd's extensive 1932 survey of the Davidson area, from Elbow to the north end of Last Mountain Lake, located only a single nest in the town of Davidson.⁴² Western Kingbirds became regular at Lucky Lake about 1935.³³ Well documented first sightings in areas of previous absence are available from Bredenbury in 1937 and for both Saltcoats and Yorkton in 1940.¹⁶ At Sheho the first sighting was in 1942, with others seen in 1946 and 1950 and most years since.^{16 28} Bob Gillard had his

first sighting at Wynyard in 1976, a pair which raised two young in tall European poplars in his yard.

J. Dewey Soper found Western Kingbirds at Kyle, Elrose and Lanigan in 1939 and at Outlook in 1946, but they probably reached the first two towns some years earlier. The first record for the Saskatoon area was one collected by F. M. Mowat from three pairs present near Dundurn, on 28 May 1946. A. McPherson reported several pairs nesting along streets in Saskatoon in 1949, noting that they were "on the increase."²⁶ In 1956, Western Kingbirds were sighted between Waldheim and Laird and Spencer Sealy noted them nesting in Battleford in 1959.^{17 4} Bryan Rothenburger found a nest with four eggs in Radisson on 15 June 1969 (PNRS). Wayne Harris noted one pair present about 7 miles west of Naicam in 1972, and others were sighted at Naicam in 1975.⁵ Brian Irving had his only Kelvington sighting of a pair nesting 6 miles west and 3 miles south of Kelvington on 6 July 1974.

Sightings by O. C. Furniss at Hoey and Domremy in 1939 were for many years the most northerly sightings in Saskatchewan. Maurice Mareschal found Western Kingbirds nesting behind a transformer on a power pole on the main street of Domremy in 1952, even though mature trees were present, and two pairs nested in the village of Birch Hills, just south of latitude 53°, in 1972 and 1973, an oddity not noted by the townspeople previously. The only record for the Nipawin area is of a single bird seen by Gary Anweiler near Codette on 30 June 1976. The most northerly nest record to date is that found by Wayne Renaud at Aquadeo Beach at the north end of Jackfish Lake, about 25 miles north of North Battleford, at 53° 08' N, on 3 July 1970.⁴

Perhaps the most northerly location where Western Kingbirds are as common as Eastern Kingbirds is in the town of Biggar, where G. J. Waple counted 30 in an hour in the summer of 1974 as they sat on television aerials on residential streets.³² Alan R. Smith sampled 98 deserted shelter belts in the Rural Municipality of Vanscoy between Saskatoon and Biggar, and found that 18 had one resident pair and two had two pairs of Western Kingbirds, the ninth most numerous species recorded in these abandoned farmsteads. Sixteen of the 20 pairs of Western Kingbirds used shelter belts which contained tall domestic poplars, usually European poplars more than 10 m high. In contrast, shelter belts with caragana and lower trees such as Manitoba maples, were used more often by the Eastern Kingbird, with one pair in each of 98 shelterbelts.

Alberta

The Western Kingbird was, to the best of our knowledge, already a resident of the wooded valleys of the Milk, Bow and South Saskatchewan River valleys within Alberta before settlement. Certainly these areas were occupied in the 1890's. We do not know whether it might also have been a resident of the lower Red Deer River valley, where Taverner's party encountered it northeast of Brooks in 1917.⁴⁰ W. R. Salt found it further up the Red Deer and Rosebud valleys in 1928, at Rosebud, Drumheller, Rosedale and East Coulee, and "received no intimations that it had only recently arrived." A modest spread to its northernmost Alberta nesting sites at Big Valley and Bodo, both near 52°, may well have followed the growth of farm shelterbelts in the 1930's and 1940's, although arrival dates are not on record.^{34 35} D. A. Boag sighted

two Western Kingbirds during a breeding bird survey at Czar, 52° 26' N, in June 1969, but none were seen during six subsequent counts on the same route. Although stragglers have been encountered at Wembley, Jasper, Lac Ste. Anne, and Pigeon Lake,^{34 35} any range extension within Alberta has been minimal compared to that encountered in Saskatchewan and Manitoba.

Discussion

The open plains of grassland across the southern portions of the present Prairie Provinces had been kept virtually treeless by repeated prairie fires. Apart from the ranching areas in the Cypress Hills region, settlement wrought a transformation as land was broken and seeded to crops. As a generality, it then took 20 to 30 years to grow substantial trees in farm shelterbelts and along village and city streets.

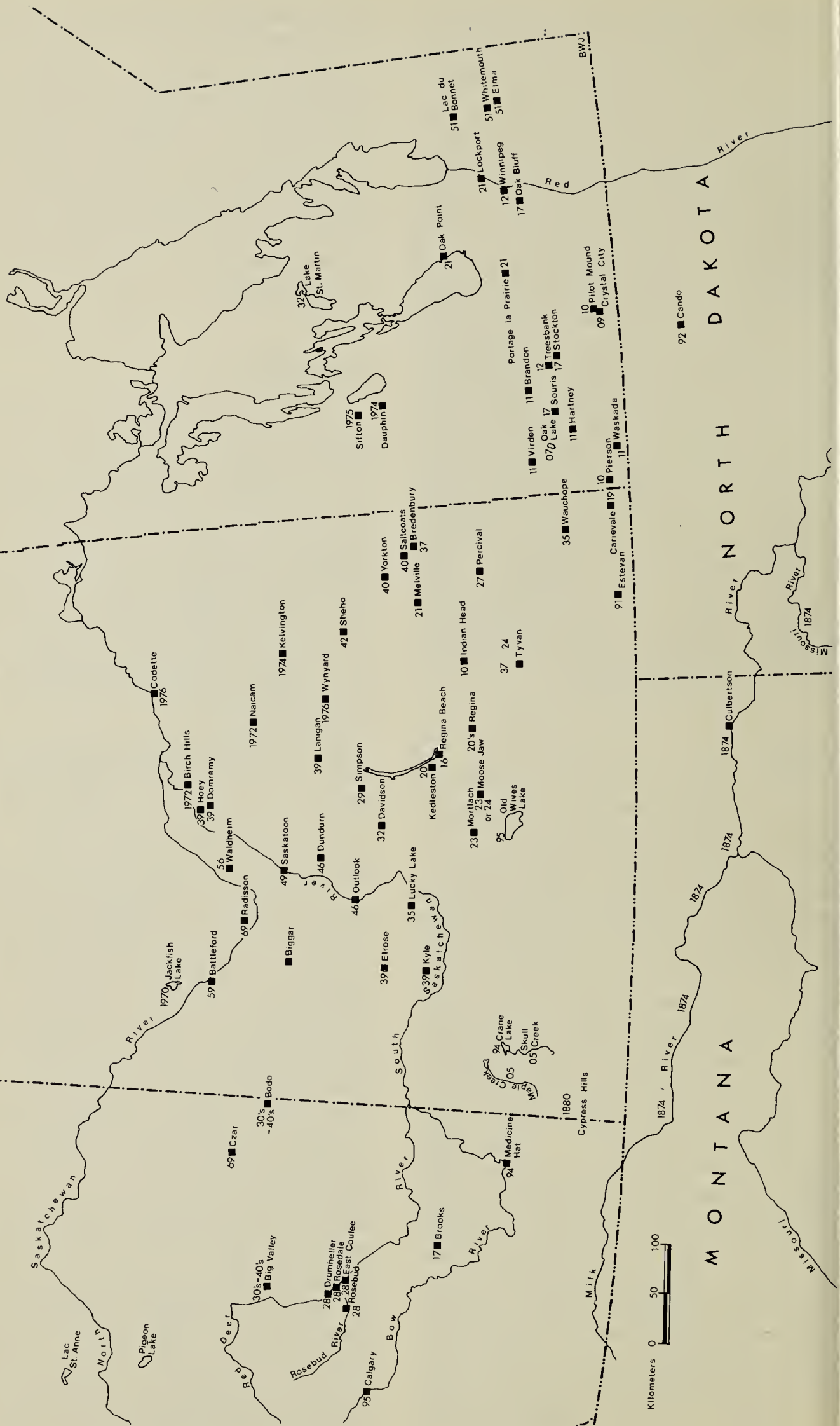
The Western Kingbird is, unlike its relative the Eastern Kingbird, more likely to occupy a shelterbelt or street-lined shade trees if these trees are 7 to 10 m high. Except for Cando, North Dakota, there are no records of the appearance of breeding pairs of Western Kingbirds before trees reached this height. Such trees were probably a requisite more for perching than nesting, since I have found Western Kingbird nests less than 2 m from the ground, and some early nests were on artificial poles.

Indian Head was a center of early tree plantations, and the Western Kingbird arrived there 21 years after the trees were planted and about 10 years earlier than at other Saskatchewan towns. A similar period of 20 or 21 years elapsed between tree planting and Western Kingbird arrival on two farms at Tyvan. At Simpson the interval was 19 years, but at Melville they appeared only 14

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years after arrival of the railroad. Elsewhere, as at Moose Jaw, Regina and Wauchope, Western Kingbirds were often not recorded for 30 years or more after trees were planted. By about 1940, when the Western Kingbird reached the treed "parkland belt," the species continued to nest in planted trees near homes and generally avoided the aspen "bluffs" scattered in fields and pastures.

All evidence suggests that the somewhat haphazard spread of the

Western Kingbird from its original habitat in treed valleys, across the plains up to 300 miles to the east and north, was inextricably related to its ready affinity for human habitations and the increasing availability of planted trees.

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