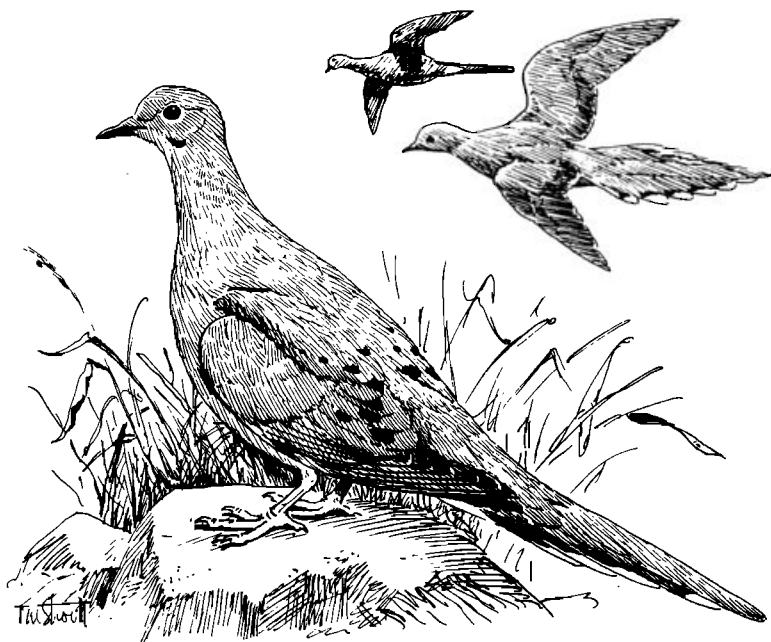


Mourning Dove numbers explode on the Canadian Prairies



This species has flourished with the increase of human settlement.

C. Stuart Houston

THERE HAS BEEN A DRAMATIC INCREASE in the numbers of Mourning Doves (*Zenaida macroura*) on the Canadian Prairies during this century.

Prior to settlement, the Mourning Dove was absent or extremely rare throughout what were then the Canadian North West Territories. After white men had established fur-trading posts, careful pre-settlement studies at Fort Carlton and Cumberland House by John Richardson and Thomas Drummond in the 1820s (listing 173 species), and at Carlton House by Thomas Blakiston in 1857-

1858 (listing 129 species), failed to record a single Mourning Dove (Swainson and Richardson 1832; Blakiston 1861-1863). John Macoun failed to observe this species in his journeys across the Canadian plains in 1872, 1879, 1880 and 1881, and it was absent from his first published list of 235 bird species (Macoun 1883).

While such failure to record a species does not prove its absence and while a few individual doves certainly were overlooked among the then-numerous Passenger Pigeons (Houston 1972), nonetheless historical evidence from Manitoba, Saskatchewan and Alberta consistently supports the hypothesis that the Mourning Dove advanced and increased as the area became settled. Like the American

Crow and Barn Swallow, whose numerical increases are somewhat less well documented (Houston 1977, Houston and Street 1959), the Mourning Dove obviously increased and flourished with human settlement.

Corroboration is available from adjacent Minnesota, also at the northern edge of its range:

The Mourning Dove is one of the few birds that have [sic] increased greatly in numbers in recent years. It was always common but it is now abundant and getting more so each year. With the clearing and settling of the northern forests it has appeared in many localities where it was formerly absent. Civilization suits it, as the food of the kind it wants becomes more plentiful. Being of a tame and adaptive nature, the settlements of mankind and associated conditions attract rather than repel it. (Roberts 1936)

Hereafter the evidence will be presented province by province in order of settlement.

Manitoba

In 1882, 1883 and 1884, Ernest E. Thompson (later known as Ernest Thompson Seton), during extensive travels throughout Manitoba, sighted a single Mourning Dove on the north slope of Turtle Mountain in May 1882, listing it as a rare summer resident; William Hine at Winnipeg also described it as rather rare. On June 7, 1885, C. W. Nash at Portage la Prairie found what is believed to be Manitoba's first recorded nest of this species with two eggs. Nash ranked it as "tolerably common . . . breeding in small wild plum trees" (Thompson 1891). When Seton returned to Manitoba in 1892, he found a striking change: on the Big Plain north of Carberry, where doves had previously been absent, "they abound . . . wherever there are trees and water. Three or four pairs seem to be semi-domesticated about each barnyard

that affords the above requisites, and they appear to be spreading farther each year, and greatly increasing in numbers" (Thompson 1893).

Norman Criddle reported that the Mourning Dove became common at Aweme, southeast of Brandon, only after about 1900 (Macoun 1909). George Atkinson of Portage la Prairie confirmed, in 1908, that the dove was "Increasing in numbers in Manitoba and the west with the increase of settlement. Very abundant along the Assiniboine River, and in 1906 noted regularly and in considerable numbers as far west as Yorkton, Saskatchewan, but not beyond that point" (Macoun 1909).

Saskatchewan

The first recorded Saskatchewan sighting of the Mourning Dove was apparently that of George F. Guernsey at Fort Qu'Appelle in 1880-1885, who listed it as "Common summer resident; breeds; arrives May 12" (Thompson 1891). William Spreadborough, collecting for Macoun at Indian Head throughout April, May and June 1892, saw only "a few stragglers, males" (Macoun 1909). By 1903, 20 years after the advent of the railroad there, George Lang's annual migration reports noted it as common and breeding (Lang and Harvey 1903). The Mourning Dove was the ninth most common species banded by George Lang between 1923 and 1939, with 168 birds banded (Houston 1945).

At Maple Creek and the north edge of the Cypress Hills in 1905 and 1906, A. C. Bent found it "Very common in the timber along the creeks where it breeds," with three nesting records in 1905 and two in 1906 (Bent 1907). On the other side of the Cypress Hills at Eastend, Potter (1930) found that it "increased very noticeably" between 1920 and 1930.

R. P. Rooke noted the Mourning Dove only on rare occasions in the 1890s south of Calder, but it showed a "considerable increase" throughout the Yorkton area between 1925 and 1944 (Houston 1949). At Sheho, the Nivens saw none in their first 10 years, until William Niven noted his first sighting May 30, 1920; there were a few at first but they steadily increased in numbers over the years (Niven 1973)

None were reported at Prince Albert by Eugene Coubeaux in 1895-1902 or at Kinistino-Basin Lake-Wakaw, by Rus-

sell T. Congdon in 1902 (Coubeaux 1900, 1902, Congdon 1903). Mourning Doves were still rare at the Quill Lakes in 1909, with only four observations in two months (Ferry 1910) and also at Davidson in 1932, when the Carnegie Museum collecting expedition had only four sightings in ten weeks (Todd 1947).

At Evesham, in west-central Saskatchewan, William G. Neave reported none in 1921-1922 (Houston 1981). Mourning Doves were still novel and considered worthy of publication in 1931 when S. Humphry saw a pair in the Manitou Forest Reserve near the hamlet of Winter, August 20, 1931 (Humphry 1932) and Paul F. Bruggeman saw one 20 miles north and four miles east of Lloydminster July 3, 1931 (Bruggeman 1933). Each was said to be a first for the local area.

On the southern edge of the mixed forest, Mourning Doves moved north as fields replaced aspen and coniferous forest. Near Meadow Lake in 1948, W. Earl Godfrey recorded three sightings of seven individuals, the most northerly of these at Dorintosh (Godfrey 1950). At Carlton in 1939, Mowat made 74 sightings (Houston and Street 1959), but at Emma Lake that year he made only a single sighting (Mowat 1947). At Nipawin, Maurice G. Street reported that Mourning Doves were rare until about 1935. Then, as the mixed forest was cleared for farming and as peat bogs were burned, their numbers showed a greater increase than any other bird except the Barn Swallow (*Hirundo rustica*) (Priestly 1944). At High Hill, north of Kelvington, a letter from Steve Waycheshen to *Blue Jay* editor Cliff Shaw June 29, 1946, remarked that Mourning Doves "seem to have shown more of an increase than any other species."

Alberta

William Spreadborough, collecting for John Macoun, took Alberta's first Mourning Dove specimens in the South Saskatchewan River valley at Medicine Hat in May 1894 (Macoun 1909). In 1914, the Mourning Dove was "very rare" at Alix and Buffalo Lake, with a single specimen taken at Buffalo Lake November 9, 1914 (Horsbrugh 1915). Horsbrugh saw none at Red Deer in 1916 (Horsbrugh 1918), although in 1917, P. A. Taverner recorded five during his trip down the Red Deer River (Taverner 1919).

By 1932, the Mourning Dove was still

uncommon at Camrose, although "more plentiful now than in former years. Two pairs are known to have nested on the south side of Dried Meat Lake during the past few summers" (Farley 1932). Taverner, in his traverse of the prairies in 1920, saw only three near Many Island Lake, whereas in the same area in 1945, Austin L. Rand and Howard Clemens found them fairly common (Rand 1948)

Discussion

All available evidence points to a major increase in the population of Mourning Doves with settlement in southern Manitoba, Saskatchewan, and Alberta. In Manitoba, they first became common in the Assiniboine and Red River valleys, and on Turtle Mountain. In Saskatchewan, the first sightings were from the Qu'Appelle River valley and from the Cypress Hills. The wooded oases were the chosen strips of woodland in the valleys and the wooded higher elevations.

One can speculate that the almost annual grassland fires and the trampling herds of thundering bison may have been a great discouragement to ground nesting doves on the open plains before settlement. A more attractive and safer environment for nesting quickly followed the planting of treed shelterbelts, which sometimes included the evergreens preferred by doves. Eventually natural aspen "bluffs" grew to maturity after graded roads served as fireguards and allowed elimination of the prairie fires that previously had spread for hundreds of miles almost annually. It is of interest that Western Kingbirds (*Tyrannus verticalis*), spread across the prairies as the aspen reached a height of 20 feet (Houston 1979), while the Red-tailed Hawk (*Buteo jamaicensis*), largely supplanted the Ferruginous and Swainson's hawks about two decades later (Houston and Bechard 1983).

Finally, chiefly in the 1930s, a second wave of settlers located in aspen and mixed aspen and coniferous woodlands north of the open plains. The clearings they made in the forest became attractive to Mourning Doves just as grassland with trees and shrubs had earlier been more attractive than open prairie. In either habitat change, the advent of agriculture with plentiful grain and many weed seeds offered a stable food supply for the doves, as explained 50 years ago by T. S. Roberts (1936). Presumably other man-made changes such as creation of small

water supplies for livestock, spillage of grain from farm vehicles and erection of telephone and later of power lines for perching, have also been beneficial to the dove.

Whatever the reasons for the increase, the Mourning Dove is now one of the 25 most common species on what were previously open plains of the southern prairie provinces. In 1980 the weighted mean number of Mourning Doves on 25 Breeding Bird Survey routes on the southern prairies was 18.96, making it the 15th most common species that year (Siliuff and Finney 1981). Although regular and common in the aspen parkland farther north, the Mourning Dove still does not rank within the top 40 species there.

A final word of caution: the conclusion so consistently evident in Canada does not hold true for North Dakota. Maximilian, Prince of Wied, found Mourning Doves at Fort Union on the Missouri River (southwest of the present site of Williston) in 1833. Joel Asaph Allen found Mourning Doves "abundant" everywhere along the Missouri and Yellowstone rivers in 1873 (Allen 1874). George Bird Grinnell found them abundant about Fort Lincoln (near present Mandan) "and on the plains, and their nests were frequently found . . . always on the ground" (Grinnell 1875). The surveys of Elliott Coues just south of the Canadian boundary found the Mourning Dove common at Pembina (on the Red River south of Winnipeg) in June 1873, and in 1874 he again observed it on the Upper Missouri (Coues 1878). With those sorts of evidence, it would be reasonable to infer that the Mourning Dove probably bred in small numbers in at least some of the valleys north of the 49th parallel even before the first settlers arrived.

ACKNOWLEDGMENTS

I wish to thank Henry M. Reeves, Marc J. Bechard and J. Bernard Gollop for critical comments.

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