

The Black-billed Magpie in Ontario

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The Black-billed Magpie (*Pica hudsonia*) is a spectacular, long-tailed, black and white corvid (Figure 1) that is found in western North America from Alaska south to New Mexico and Arizona (Sibley 2000). Its Canadian range extends from extreme western Ontario through Manitoba, Saskatchewan, Alberta, British Columbia and the Yukon (Godfrey 1986). The original range of the species likely coincided with the great central North American prairies populated by huge herds of

American Bison (*Bison bison*) that through death by predation, disease, accident and old age provided a constant food source.

In Ontario, it is a fairly recent colonizer in the northwestern part of the province and breeds mainly in two separate areas, one west of Fort Frances and one west of Dryden (Figure 2). Both are extensive agricultural areas that have been developed since the late 1800s and early 1900s; farmland carved out of the forested wilderness.



Figure 1: The Black-billed Magpie is a recent colonist to Ontario. Photo by *George K. Peck*.

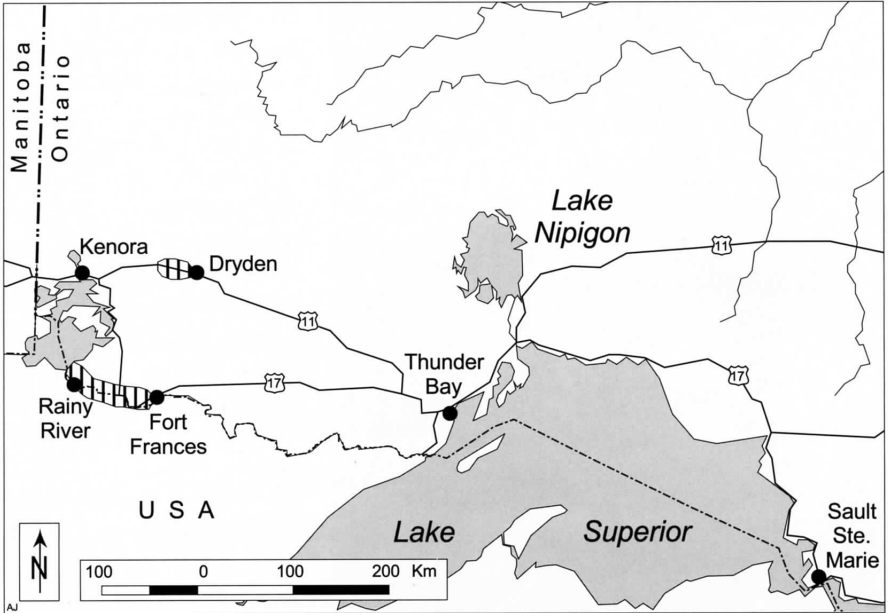


Figure 2: Northwestern Ontario, showing the two main breeding areas of the Black-billed Magpie in the province, near Dryden and Fort Frances/Rainy River (hatched areas). Map by Andrew Jano.

Nesting

The first documented Black-billed Magpie nests (four) in Ontario were found by John Lamey, A. Gray, B. Duncan and W. Wilson in a small patch of aspen woodland about 10 km northeast of Rainy River on 6 July 1980 (Lamey 1981).

Magpies build large, conspicuous nests. The nest consists of a large oval mass of sticks in which a grass-lined mud bowl is placed. Access to the interior of the stick mass is through a hole in the side. The nests are very bulky and resemble a small barrel in size and shape. In the Rainy River area, nests (Figure 3) are typically placed rather low in clumps of willow

(*Salix* spp.) growing under Trembling Aspen (*Populus tremuloides*). Occasionally, they are placed in a tall tree, well above ground, a location that is favoured in the more western part of the species' range (Figure 4). Magpies very often place their nests close to human dwellings or farm buildings. Nest construction is usually completed from mid-April to mid-May (Peck and James 1987), and nests are frequently used for several years.

Discussion

When the great herds of bison were killed off during the latter half of the 19th century, the Black-billed



Figure 3: A nest of the Black-billed Magpie near Rainy River in a small willow, showing the “barrel” shape and central entrance hole. Photo by David H. Elder.

Magpie all but disappeared from Manitoba, Saskatchewan and Alberta (Buitron and Taylor 2003). A return began in the early 20th century, encouraged by agricultural industries and practices. In addition, land clearing to the north of the area covered by the original prairies created new habitat. Today, the Black-billed Magpie is closely associated with farmland or ranchland throughout most of its range.

The magpie has also become somewhat urbanized and is common in many western Canadian cities, such as Calgary.

Nearly all known Black-billed Magpie breeding in Ontario has occurred in two areas. The main breeding area is found west of Fort Frances in farmland extending to the Lake of the Woods and north to the boreal forest. Settlement and land clearing began as the fur trade slowly declined and logging of the forests began. The first farms along the Rainy River were established on the heels of the loggers in the 1870s. By 1893, about 600 farms fronted the river between the towns of Fort Frances and Rainy River (Nute 1950). Land clearing advanced slowly north of the Rainy River until

the rock and thin soil of the Precambrian Shield was reached. Peatlands were also cleared and drained by a system of ditches. Land clearing for agriculture continues today (Figure 5) and covers about 36,100 hectares (OMNR, pers. comm.).

The second Ontario breeding area is also farmland and is located west of the town of Dryden, centred on the small communities of



Figure 4: A Black-billed Magpie nest near Rainy River located high in a Balsam Poplar (*P. balsamifera*), an unusual site for magpies in Ontario. Photo by David H. Elder.

Minnitaki and Oxdrift. Agricultural settlement of this area began in the late 1890s at Dryden, once the Canadian Pacific Railway provided access, and slowly moved westward (Wice 1967). Settlement was encouraged by a huge forest fire that burned from Vermillion Bay to Ignace. It removed a vast area of forest and exposed the claybelt soils of the area. Today, about 9,100

hectares of cleared agricultural land exist (OMNR, pers. comm.).

Black-billed Magpies appear to be recent arrivals to both areas. A biological survey carried out in the Emo-Rainy River area in 1929 failed to record the species (Snyder 1938), and it had not been recorded as a breeding species in Ontario by 1937 (Baillie and Harrington 1937). Magpies were not recorded by Royal Ontario Museum staff working on ornithological surveys along the Canadian National and Canadian Pacific Railway lines between the Manitoba boundary and western Thunder Bay District in 1937, 1947 and 1949 (Snyder 1953). However, an apparently wandering individual was observed by J. R. Dymond in the Kenora area during June

1947 (Snyder 1953).

Birders started to visit the Rainy River area in the early 1970s. There were few if any local residents seriously interested in birds at that time. The first birder to mention Black-billed Magpies was the late Gerry Bennett who saw one at the Emo landfill site on 23 June 1975. In his notes, Bennett stated: "I'd been told to watch for magpies



Figure 5: Typical Black-billed Magpie breeding habitat near Rainy River: farmlands with scattered stands of aspen with a willow understorey. Photo by *David H. Elder*.

in this country and, at a dump about 4 miles north of Rainy River, I found one in with ravens” (Alan Wormington, pers. comm.). It would appear from this statement that local residents were aware of and familiar with the species. Importantly, Bennett did not see any magpies during previous visits to the area in 1966 and 1974.

In the Dryden area, Christmas Bird Counts have been carried out since 1961. Magpies were first recorded in 1972, when two were found. Numbers gradually increased (although it was not found on every count) until 2002, when 52 were observed. Numbers dropped to 26 in 2003 (Darlene Salter, pers. comm.).

The Black-billed Magpie has a propensity to wander. It has been found at one time or another as a vagrant throughout most of Ontario from the far north to the extreme south (Speirs 1985). A major eastward flight occurred in the fall of 1972, when 40 reports were made in northwestern Ontario, from Sioux Lookout, Atikokan, Terrace Bay and Nakina (Speirs 1985). Was this the invasion that established the species in the Rainy River and Dryden areas? The above noted numbers and subsequent observations would appear to support this suggestion.

It would thus appear that Black-billed Magpies gained a breeding foothold in the Rainy River and Dryden areas at about the same time, in 1972. This particu-

lar movement put them into areas of suitable habitat with a sufficient “critical mass” of birds to facilitate breeding. To reach both areas, it is likely the birds “island hopped” across the Lake of the Woods or skirted the lake to the north or to the south. It is possible that movements of a similar nature occurred in the past but did not include enough birds to establish breeding.

Since then, Black-billed Magpies have flourished in the farmlands west of Fort Frances to Rainy River, and it is not unusual to see post-breeding flocks of 25 or more individuals feeding in the hayfields during August. The species has done well in the Minnitaki-Oxdrift farmlands west of Dryden also, although the smaller area of suitable habitat may be a limiting factor on the population.

Will the Black-billed Magpie continue to move east in Ontario as a breeding bird? Despite the magpie’s inclination to wander, it may be unlikely. The nearest areas of suitable habitat (farmland) are at Thunder Bay (360 km eastward), at Sault Ste Marie (800 km away) and at the Hearst-Cochrane areas (900 km to the east), distances that are covered by more or less continuous forest. Perhaps even more importantly, there is evidence that the Black-billed Magpie is heat-intolerant and not physiologically adapted to the hot and humid summers of eastern North America (Bock and Lepthien 1975, Hayworth and Weathers 1984, Pittaway 1997, Trost 1999).

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Literature Cited

- Baillie, J.L. and P. Harrington.** 1937. The distribution of breeding birds in Ontario. Part II. Transactions of the Royal Canadian Institute 21: 199–283.
- Bock, C.E. and L.W. Lephien.** 1975. Distribution and abundance of the Black-billed Magpie (*Pica pica*) in North America. Great Basin Naturalist 35: 269–272.
- Buitron, D. and P. Taylor.** 2003. Black-billed Magpie (*Pica pica*). Pages 272–273 in The Birds of Manitoba (Manitoba Avian Research Committee, editors). Manitoba Naturalists Society, Winnipeg, Manitoba.
- Godfrey, W.E.** 1986. The Birds of Canada. National Museums of Canada, Ottawa.
- Hayworth, A.M. and W.W. Weathers.** 1984. Temperature regulation and climatic adaptation in Black-billed and Yellow-billed Magpies. Condor 86: 19–26.
- Lamey, J.** 1981. Unusual records of birds for Ontario's Rainy River District. Ontario Bird Banding 14(1): 38–42.
- Nute, G.L.** 1950. Rainy River Country. The Minnesota Historical Society, St. Paul, Minnesota.
- Peck, G.K. and R.D. James.** 1987. Breeding Birds of Ontario: Nidology and Distribution. Volume 2: Passerines. Life Sciences Miscellaneous Publication, Royal Ontario Museum, Toronto.
- Pittaway, R.** 1997. Magpie mystery. OFO News 15(3): 1.
- Sibley, D.A.** 2000. The Sibley Guide to Birds. Alfred A. Knopf, New York.
- Snyder, L.L.** 1938. A faunal investigation of western Rainy River District, Ontario. Transactions of the Royal Canadian Institute 22: 157–213.
- Snyder, L.L.** 1953. Summer birds of western Ontario. Transactions of the Royal Canadian Institute 30: 47–95.
- Speirs, J.M.** 1985. Birds of Ontario. Volume II. Natural Heritage/Natural History Inc., Toronto.
- Trost, C.H.** 1999. Black-billed Magpie (*Pica pica*). In The Birds of North America, No. 389 (A. Poole and F. Gill, editors). The Birds of North America, Inc., Philadelphia, Pennsylvania.
- Wice, G.H.** 1967. Carved From the Wilderness: The Intriguing Story of Dryden 1867–1967. A. Wilson Publications, Dryden, Ontario.

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