# TURKEY VULTURE NESTS IN ABANDONED BUILDINGS IN SW MANITOBA

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### Introduction

Turkey Vultures are summer breeding residents in Manitoba <sup>6,8</sup> and found as the subspecies *Cathartes aura meridionalis* Swann 1921. <sup>18</sup> Their range within this province is from the boreal forests of Nopiming and Whiteshell parks in the east, to the mixed woods of the Spruce Woods, Turtle Mountain, Riding Mountain, and Duck Mountain parks in the west. To date, only a few records have been kept to follow their breeding population and distribution in Manitoba. <sup>1,19,21,28,30</sup>

In southwest Manitoba, the species is considered uncommon.<sup>8</sup> Early accounts from the late 1800s described the species as summer residents near Carberry, and they were also seen in the Shell River area.<sup>26</sup> While no evidence was found, they were probably breeding. The species was known to breed, however, in the nearby Qu'Appelle region of Saskatchewan.<sup>26</sup> One observer mentioned in 1971 that the species was down in numbers in the Northern Great Plains from the 1930s.<sup>14</sup>

The Turkey Vulture declined in population in North America after the 1800s, at the same time as the demise of the bison. 16,22 The species subsequently began to slowly increase its range throughout the continent, with a noticeable acceleration between 1920 and 1950 in the northeastern U.S. The most plausible reasons offered for this latter expansion were a warming



Nestling Turkey Vulture in farm attic Dean Berezanski

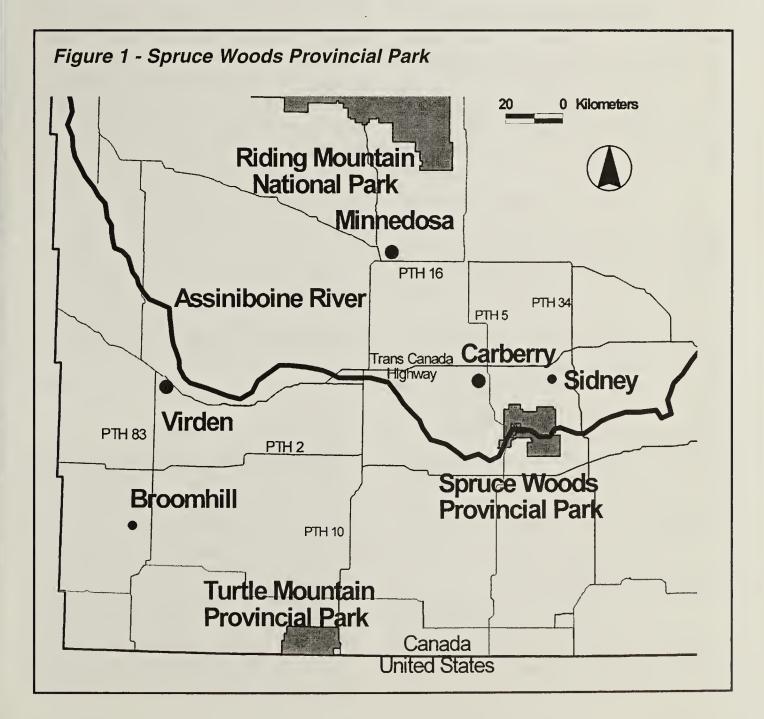
climate, greater availability of roadkills, and loss of preferred habitat in the southern U.S.<sup>29</sup> Another acceleration was seen in the 1980s.<sup>10,17,23</sup> A regional reduction in pesticide levels, more favourable climate, reduced human persecution, and increased food supply have been given as possible reasons for this latest expansion.<sup>7,18,23</sup>

Isolation from human disturbance appears to be the most important requirement for Turkey Vulture nests. 18 As for specific habitat, the birds are reportedly more numerous in lowland areas, perhaps because of an abundance of thicket and hollow tree breeding sites. 16 The preferred breeding habitat in North America east of 100°W

includes mixed farmland and forest. 15,18 Nests are usually on covered sites on the ground.<sup>2,12</sup> In Canada, specific sites are typically holes in logs, cliffs, caves, depressions ground. 1,4,12,13,24,25,26,28 A small proportion of their nest sites have been found in abandoned buildings in Canada and in the United States. 2,24,27,3,16 Extensive use of abandoned structures was, however, reported in southeast Illinois in a study between 1978 to 1983.5 Nesting sites are often used several years in a row. compiles paper several contemporary accounts of their nests, both documented and suspected, in abandoned buildings in southwest Manitoba. Reasons for use of these sites and implications on their status in this province are discussed.

# **Documented Nesting Sites**

Spruce Woods Provincial Park (SWPP) has at least two documented cases of Turkey Vultures nesting within the attics of abandoned houses (Figure 1). The Park (270 sq. km. in size) contains numerous farm buildings which were abandoned when the lands were purchased for Park establishment in the late 1960s. The first site became known to the author in mid-August 1988, when park staff observed a pair of immature Turkey Vultures roosting upon the roof of an abandoned farm house in the Assiniboine River valley during midmorning (T. Blair pers. comm). Return trips in mornings over the next few weeks found these two juveniles roosting on the roof. Within the main



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floor of the house, no apparent signs of nesting were observed and no access to the attic was seen. In June 1989, a return to the same building led to the discovery of a second chimney opening in the roof to the attic. In the attic, amid debris and a putrid smell, was a single, nestling Turkey Vulture. When the attic was entered, the nestling gave a deep, warning hiss and a threat display by spreading its wings. No nesting material was obvious. The site was not inspected in subsequent years.

On 19 August, 1994, another abandoned house was inspected along the Assiniboine River within SWPP. A 'nest" (unlined scrape among debris on the floor) was found in the walking attic space of the house, with two young Turkey Vultures near fledgling age. They had only a few vestiges of down feathers remaining on their backs. One crawled out of an open window and onto the roof but did not fly. The site was not inspected in subsequent years (K. De Smet pers. comm.)

Documentation of another Turkey Vulture nest was located on 21 June, 1991 on Crown land in the Assiniboine River valley near Virden. This nest, as with the first two, was in an abandoned house in a back room on the second story. It contained two nestlings and, besides the presence of feces, no other material was present to suggest a nest structure. Entry by the adults was through an open window. Hissing and threat displays were also elicited from the vultures. The site was not inspected in subsequent years<sup>11</sup> (P. Ewashko pers. comm.).

# **Suspected Nesting sites**

Turkey Vultures were seen repeatedly roosting on the roofs of least two other abandoned farm houses in the SWPP area. The locations were probably also

used for nesting although Turkey Vultures do use old buildings solely as roosting sites. <sup>18</sup> One site was also reported in 1995 in the Assiniboine River valley within SWPP (D. Morton pers. comm.), but is no longer standing. Vultures had been seen at this location for as many as ten years prior to the report (B. Gillespie pers. comm.). Another location identified in midsummer 1989 was south of Sidney (R. Hildebrand pers. comm.) on private land, but was not inspected in subsequent years.

Elsewhere in southwest Manitoba, an individual Turkey Vulture was seen soaring quite low near an abandoned house along the Assiniboine River on 2 May, 1990 near Virden (K. De Smet pers. comm.). A scrape was found among debris on the floor of an upstairs bedroom, but no eggs were in the scrape. This site was not checked again later. On 18 May, 1995, a pair of vultures was seen entering and leaving an old house near Broomhill. They were suspected to be inspecting it for nesting, but no nest or adults were present when the house was checked two weeks later (K. De Smet pers. comm.). Similarly, vultures have been seen exiting secondfloor windows of three abandoned buildings west and southwest of Minnedosa in mid-summer (C. Cuthbert pers. comm.).

#### Discussion

Based on these preceding accounts, expansion of the breeding population of Turkey Vultures has almost certainly occurred in southwest Manitoba since the turn of the century. In addition, the relatively recent accounts from Saskatchewan of nesting in old buildings and the Manitoba nests suggest that Turkey Vultures may be expanding their range into prairie habitat by using abandoned buildings for nesting

habitats.<sup>2,27</sup> Alternatively, the use of old buildings may be the result of a cumulative loss of traditional habitat, including undisturbed river valleys.

These documented cases of nests in abandoned buildings all have been within river valleys, with considerable relief in the landscape. The surrounding locales had a combination of agricultural fields in secondary succession and riparian and upland mixed wood stands. In addition, all three sites were on, or encircled by, designated Crown lands. Likewise, all of the suspected nest sites, except for the Broomhill one, were in locations with the same characteristics. One reason for an increase in finding these locations is probably due to the fact that Manitoba Natural Resources staff visit such sites frequently, as many are on designated lands.

Vultures may be using these lowland sites as one basis of range expansion, if natural sites were not available. Little data exists to correlate Turkey Vulture population declines with loss of habitat in southwaest Manitoba over the last century. The historic loss of river bottom habitats in southwest Manitoba to agriculture is, however, well-known.<sup>20</sup> The Manitoba-documented nest sites were found near rivers and on designated Crown lands, which often have the only intact habitats and buildings remaining.

The Turkey Vulture is already at the northern limits of its range in Manitoba. The Manitoba Conservation Data Centre lists the species as "S4B" - apparently secure and breeding, but of long-term concern in the province, as no definitive population monitoring or studies have been done on vultures in Manitoba. If range extension, natural habitat loss, or both have occurred, then abandoned buildings may need to be considered as critical habitat in Manitoba for the species.

Additional information on the vulture population and distribution is required to determine the status of the species in Manitoba. Such information is best collected through nest record cards submitted by amateur and professional vulture-watchers to the Prairie Nest Record Scheme at the Manitoba Museum in Winnipeg.

## **Acknowledgements**

My thanks to: K. De Smet (DNR, Melita) for sharing observations, thoughts, and reviewing this article; R. Nero and M. Mossman for their help in identifying references; DNR staff (Carberry, Brandon, and Winnipeg) and D. Morton for their help in reporting sites; the Manitoba Museum for access to their Prairie Nest Record Scheme.

## **References Cited**

- 1. ANDRUSIAK, E.W., D.C. HARBOTTLE, AND K.R. WHALEY. 1971. First recorded Turkey Vulture nest in Riding Mountain National Park, Manitoba. Blue Jay 29:201-202.
- 2. BEAULIEU, R. 1985. Abandoned house nest site for Turkey Vulture. Blue Jay 43:46-48.
- 3. BENT, A.C. 1961. The life histories of North American birds of prey. Pt. 1. Dover, New York, N.Y. 409pp.
- 4. BJORKLUND, C.F. 1989. Turkey Vultures in the Big Muddy. Blue Jay 48:103.
- 5. BUHNERKEMPE, J.E. AND R.L. WESTEMEIER. 1984. Nest-sites of Turkey Vultures in buildings in southeastern Illinois. Wilson Bull. 96:495-496.

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- 6. CLEVELAND, N.J., S. EDIE, G.D. GRIEEF, G.E. HOLLAND, R.F. KOES, J.W. MAYNARD, W.P. NEILY, P. TAYLOR, AND R. TKACHUK. 1988. Birder's guide to southeastern Manitoba. EcoSeries No. 1. Man. Naturalists Soc., Winnipeg. 91 pp.
- 7. COLEMAN, J.S. AND J.D FRASER. 1989. *In* Sauer, J.R., J.E. Hines, G. Gough, I. Thomas, and B.G. Peterjohn. 1997. The North American breeding bird survey results and analysis. Ver. 96.3. Rev. 18 April 1997. Patuxent Wildlife Research Centre, Laurel, MD. <a href="http://www.mbr-pwrc.usgs.gov/bbs/">http://www.mbr-pwrc.usgs.gov/bbs/</a> June 10, 1998 ver.
- 8. CUTHBERT, C.W., J.I. HORTON, M.W. MCCOWAN, B.G. ROBINSON, AND N.G. SHORT. 1990. Birder's guide to southwestern Manitoba. Published by the authors in cooperation with the Brandon Natural History Soc. 100pp.
- 9. DUNCAN, J. R. 1996. Conservation status ranks of the birds of Manitoba. Man. Conservation Data Centre MS Rep. 96-06. 26pp.
- 10. ENVIRONMENT CANADA 1996. Canadian bird trends data base. Turkey Vulture. Can. Wildlife Serv. Jan. 13, 1997 Update. http://www1.ec.ca.cgibin/foliocgi.exe/canbird.nfo/query+/doc/ {t826} June 10, 1998 ver.
- 11. EWASHKO, P. Man. Natural Resources Tech. Memo to D. Chranowski, Man. Natural Resources, Brandon. August 6, 1991.
- 12. GODFREY, W.E. 1986. The birds of Canada, revised edition. National Museums of Can., Ottawa. 595pp.
- 13. HOUSTON, C.S. 1969. Turkey Vulture breeding records in Saskatchewan. Blue Jay 27:37-39.

- 14. HOUSTON, C.S. 1971. Northern Great Plains Region. Am. Birds 25:869-872.
- 15. JACKSON, J.A. 1983. Nesting phenology, nest site selection, and reproductive success of Black and Turkey Vultures. *In* Wilbur, J.R. and J.A. Jackson (eds.) Vulture biology and management. U. Calif. Press, Berkeley. pp. 245-270.
- 16. JACKSON, J.A. 1988. Turkey Vulture *Cathartes aura In*: Palmer, R.S. Handbook of North American Birds. Vol. 4. Yale U. Press, New Haven. pp 25-42.
- 17. KIRK, D.A. AND C. HYSLOP. 1998. Population trends in Canadian raptors: a review. Biol. Cons. 83:91-118.
- 18. KIRK, D.A. AND M.J. MOSSMAN. 1998. Turkey Vulture (*Cathartes aura*). In The birds of North America, No. 339 (A. Poole and F. Gill, eds.). The Birds of North America, Inc., Philadelphia, PA.
- 19. LLOYD, H. 1922. Some northern records of the Turkey Vulture. Can. Field-Nat. 36:178-179.
- 20. MARR CONSULTING & COMMUNICATIONS LTD. AND SYNTHEN RESOURCE SERVICES. 1995. Riverbottom forest assessment: forest ecosystem classification and management recommendations. Final rep. to Can. Forestry Serv. and Man. Forestry Branch. 20pp. + app.
- 21. PRAIRIE NEST RECORDS SCHEME. Higher Vertebrates Section, Man. Museum, Winnipeg. June 1998.
- 22. RAINE, W. 1892. Bird-nesting in North-west Canada. Hunter, Rose, Toronto

23. SAUER, J.R., J.E. HINES, G. GOUGH, I. THOMAS, AND B.G. PETERJOHN. 1997. The North American breeding bird survey results and analysis. Ver. 96.3. Rev.18 April 1997. Patuxent Wildlife Research Centre, Laurel, MD. <a href="http://www.mbr-pwrc.usgs.gov/bbs/">http://www.mbr-pwrc.usgs.gov/bbs/</a> June 10, 1998 ver.

24. SMITH, A.R. 1996. Atlas of Saskatchewan birds. Spec. Publ. No. 22. Sask. Natural History Soc., Regina.

25. TAVERNER, P.A. 1974. Birds of eastern Canada. Coles Publ. Co. Ltd., Toronto. 290pp.

26. THOMPSON, E.E. 1891. The birds of Manitoba. Proc. U.S. National Museum 13:475-643. 2<sup>nd</sup> ed. reprinted by Premium Ventures Ltd., Winnipeg.

27. WAPPLE, G.J. 1985. Nesting Turkey Vulture near Biggar, Saskatchewan. Blue Jay 43:44-46.

28. WHALEY, K.R. 1973. Vultures of Riding Mountain. Man. Nature 14:4-9.

29. WILBUR, S.R. 1983. The status of vultures in the Western Hemisphere. *In* Wilbur, J.R. and J.A. Jackson (eds.) Vulture biology and management. U. Calif. Press, Berkeley. pp. 113-123.

30. WRIGHT, J.F. 1924. Breeding of the Turkey Vulture in eastern Manitoba. Can. Field-Nat. 38:76.



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