LOGGERHEAD SHRIKE FAMILY NEAR MORDEN, MANITOBA

J. Paul Goosen
2-18 Fairway Drive
Morden, MB R6M 0B2
pgoossen@mymts.net

Curtis Wall
3 Bonneville Crescent
Winkler, MB R6W 1M5
billysoy@yahoo.ca

Ben Ginter
Box 456
Winkler, MB R6W 4A6
flyingsquirrel67@gmail.com

In Manitoba, the Loggerhead Shrike (*Lanius ludovicianus*) nests primarily in the southwest corner of the province.[1,2] Although the shrike's range and population in Manitoba has decreased, there is evidence that Loggerhead Shrikes occasionally nest in other areas in southern Manitoba where few have been documented in recent years.[1,2,3] In 2015, a recently fledged Loggerhead Shrike family group was observed near Snowflake in the Pembina Valley, about 185 km east of the species core provincial breeding range.[3] In this note, we provide additional evidence of Loggerhead Shrikes nesting in the Pembina Valley Region of south-central Manitoba outside of their core Manitoba breeding range.

On May 15, 2016, C. Wall observed an adult shrike on a fence post, 5.4 km south of Morden. The shrike was quite active, flying to the tops of evergreens, a utility wire and deciduous trees on and adjacent to a ~5 ha acreage that had shelterbelts, an idle pasture, a tree-lined driveway and lawn areas. Wall's observation of a shrike in the same vicinity twice during the first week in June suggested it was on territory. On June 11 and 23, J.P. Goossen visited the site and observed an adult shrike chasing a Black-billed Magpie (*Pica hudsonia*) and hunting in the vicinity of a shelterbelt on the north side of the acreage, providing further evidence of the shrike's territoriality.

On June 26, both observers confirmed for the first time that there were two adult shrikes in the vicinity of the shelterbelt. When Goossen returned the following day, a shrike carrying food into the evergreens precipitated a search that turned up a magpie nest and two other nests, none of which were checked for contents. On June 29, Goossen returned to find both adults perched near a cup nest. One of the adults had food in its beak and young were heard begging from the nest. The nest, located about 3.2 m up in a spruce tree (*Picea sp.*), was examined more closely three days later and found to be empty except for a couple of small eggshells. Feathers, some of them unsheathed and outside of the nest and on the ground, suggested that at least one of the young had been predated. Based on an approximate 39-day egg laying, incubation and nestling period for the Loggerhead Shrike, and assuming the young had fledged since the last visit, we estimated that egg laying (minimal estimate of four eggs in this case) had probably been initiated about May 25.[4,5] In Manitoba, the clutch size of Loggerhead Shrikes averages six, so egg laying could have begun about two days earlier.[5]

The empty nest, signs of depredation and the absence of adults or young in the area suggested the shrikes' breeding attempt had failed. However, on July 4, B. Ginter saw a family of shrikes about 100 m south-southeast of the nest. Both adults were seen hunting and capturing insects for at least three fledged young (Fig. 1) that were seen in ash (*Fraxinus sp.*) trees along the driveway. Visits to the nesting area on July 9 and 21 by Wall and Goossen, respectively, revealed at least one adult and a single fledgling. On August 1, Wall observed a single young hunting along a grassy coulee nearly 600 m south-southeast of the nest. Since it is not unexpected for family groups to be split up at that age, with a portion of the young accompanying each adult, (K. De Smet, pers. comm.), these later sightings are not necessarily representative of the number of young that may have survived.

The habitat observed to be used by this nesting pair of shrikes included a mixed shelterbelt for nesting and a small idle pasture, mowed lawns, a grassy roadside allowance and a riparian coulee for hunting. Adjacent to these habitats were hayland and cropland. The shelterbelt where the nest was located consisted of two rows of spruce trees and one row of ash trees. The nest was located in the interior row of spruce about 70 m from a public road.

Although shrike pairs in southwestern Manitoba occasionally nest in open conifers in shelterbelts or around farmsteads, hedgerows consisting of caraganas (*Caragana sp.*), Siberian elm (*Ulmus pumila*) and green ash (*Fraxinus pennsylvanica*) have been preferred (K. De Smet, pers. comm.). In other portions of their provincial nesting range, outside of the extreme southwest, nesting records in scattered spruce and mixed shelterbelts appear to be much more common (K. De Smet, pers. comm.). In this regard the habitat used by the 2016 nesting pair is not atypical of that used elsewhere in southern Manitoba outside of the shrike's core breeding range.

The breeding record near Morden is about 35 km east-northeast from where a fledged family of shrikes was seen in the Pembina Valley in 2015 and 220 km east of the shrike's primary breeding range in southwest Manitoba.[2,3] There have been no Loggerhead Shrike breeding records for the Windygates to Emerson region of south-central Manitoba

Figure 1: Fledged Loggerhead Shrikes near Morden, Manitoba (July 4, 2016). Photo credit: Ben Ginter

for at least three decades, although the occasional shrike has been seen or reported in that area during the summer (K. De Smet, pers. comm.). More recently, the shrike's rarity in this part of the province was verified by the fact that no Loggerhead Shrikes were recorded despite hundreds of hours of bird surveys in this area during the Manitoba Breeding Atlas project (2010-2014).[2] The closest observation of a shrike during the atlas project was near Cartwright, about 100 km west-southwest of the Morden site and the nearest breeding record about 100 km northwest near Glenboro.[2]

In nearby North Dakota, Loggerhead Shrikes were reported breeding in Ramsey County before 1950, about 120 km southwest of the Morden site.[6] In Grand Forks County, about 145 km south-southeast of the Morden site, Loggerhead Shrikes breed fairly regularly but in small numbers (D. Lambeth, pers. comm.). Observations are usually limited to an occasional pair, family group or fledged young, especially near Kelly's Slough National Wildlife Refuge.

The two Pembina Valley regional records are significant because they provide evidence that Loggerhead Shrikes occasionally still nest beyond their core breeding area in the province. The records also show that breeding occurs at least sporadically in portions of their former nesting range in south-central Manitoba.[1]

Given that Loggerhead Shrikes were reputed to return to former nesting sites, we wonder what the 2015 and 2016 successful nesting efforts might mean for shrikes returning to the Pembina Valley Region.[7] Philopatry in adult Loggerhead Shrikes tends to be lower than nest site re-occupancy rates.[7] The return rate for shrikes banded as adults the year following banding or relocation to a study area in southwestern Manitoba was only 16 per cent (22 of 140 adults), yet the re-occupancy of territories was high (47 per cent) mostly by different individuals than those of the previous year.[8] Return rates of young to the study area in which they were raised were even lower. Of the 3,176 young banded as nestlings in southwestern Manitoba from 1987-1993, only 74 (2.3 per cent) returned to the study area in subsequent years and even less (0.85 per cent) for those returning the year following banding.[8] Although the above return rates suggest that we may be fortunate to have any of the 2015 or 2016 adults or young returning, the fact that both pairs were successful, and that adult Loggerhead Shrikes return to former breeding sites in greater numbers than those that failed, lends hope that one or more may return and perhaps expand their nesting efforts in south-central Manitoba.[8]

Acknowledgements

We thank the Pauls family for permission to access the acreage where the shrikes nested. R. Ginter provided transportation for B. Ginter. We also thank V. Goossen, an anonymous reviewer and particularly K. De Smet for reviewing the manuscript and providing helpful edits.

1. De Smet KD (2003) Loggerhead Shrike. In: The Birds of Manitoba. Manitoba Naturalists Society, Winnipeg, Manitoba. p. 263.

2. Manitoba Breeding Bird Atlas (2016) Breeding evidence map for Loggerhead Shrike. Retrieved from www.birdatlas.mb.ca.

3. Goossen P, Wiebe R (2016) A breeding record for the Loggerhead Shrike in Manitoba's Pembina Valley. *Blue Jay* 74:36-39.

4. Yosef R (1996) Loggerhead Shrike (*Lanius ludovicianus*). In: Rodewald PG (ed) The Birds of North America. Ithaca: Cornell Lab of Ornithology, Ithaca, NY; Retrieved from the Birds of North America:https://birdsna.org/Species-Account/bna/species/logshr.

5. De Smet KD, Conrad MP (1991) Status and habitat needs of the Loggerhead Shrike in Manitoba. In: Holroyd GL, Burns G, Smith HC (eds) Proceedings of the Second Endangered Species and Prairie Conservation Workshop. Natural History Occasional Paper No. 15, Provincial Museum of Alberta, Edmonton, Alberta. p. 243-245.

6. Stewart RE (1975) Breeding Birds of North Dakota. Tri-College Center for Environmental Studies, Fargo, ND.

7. Pruitt L (2000) Loggerhead Shrike status assessment. United States Fish and Wildlife Service. Retrieved from https://www.fws.gov/midwest/es/soc/birds/losh/LOSHSA_entire.pdf.

8. Collister DM, De Smet K (1997) Breeding and natal dispersal in the Loggerhead Shrike. *Journal of Field Ornithology* 68:273-282.