

Recommended Development Setback Distances and Restricted Activity Periods for Birds by Wildlife Feature Type

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MANITOBA CONSERVATION DATA CENTRE

WILDLIFE, FISHERIES, AND ENFORCEMENT BRANCH

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Wildlife Feature Type
Manitoba Conservation Data Centre
2021 November**

Introduction

The Manitoba Conservation Data Centre (MBCDC) developed these recommendations and setback distances in order to provide industry proponents with consistent, readily available guidelines that can be applied in situations where sensitive species may be present in or near the project area. The setback distances were established by reviewing relevant literature and guidelines from other jurisdictions, and consulting local ornithologists.

General Recommendations

In most cases, disturbance or potentially deleterious activity outside of the breeding season is preferential to activity during the breeding season. The breeding season begins with territory establishment and ends when the young are fledged and the nesting territory is abandoned.

Where the activity will occur in suitable habitat for these species (eg: native grassland for the grassland birds), minimal clearing/disturbance techniques should be employed during or even outside of the breeding season. Any suitable habitat unavoidably disturbed should be reclaimed/rehabilitated as soon as possible.

If these species have been recorded in or near the project area, it is recommended that the proponent develop an environmental protection plan to submit to the MBCDC for review. At minimum the plan should:

- a) describe the project, including a timeline of activities, a description of the location and current land use, and a description of the wildlife values in the area, including any species of concern identified by the MBCDC;
- b) identify potential impacts of the project to wildlife values, especially to any species of concern identified by the MBCDC; and
- c) propose impact management and mitigation measures to avoid or manage the identified impacts, including reclamation/rehabilitation efforts.

In some cases, MBCDC may also recommend the development of a monitoring program designed to assess species of concern that may occur in the area, impacts on wildlife values and/or the effectiveness of mitigation measures.

Disturbance Categories

Low

e.g.: foot traffic; occasional/infrequent/short-term small vehicle (<1 ton) or ATV use; operating oil or gas wells without flaring; operating pipelines Foot-traffic only (FTO) is indicated for certain taxa, in which case all activities normally considered low disturbance (other than foot traffic) are considered medium disturbance.

Medium

e.g.: trucks>1 ton (gravel, oil, grain), regular/frequent/long-term small vehicle (<1 ton) or ATV use, pipeline construction (diameters <1 foot), operating compressor station or battery without flaring

High

e.g., road construction, roads, drilling rigs, mines and quarries, construction of compressor station or battery, forest harvest, large diameter pipeline construction, seismic exploration, blasting, rock crushing, asphalt batching, gravel pit, operating compressor station or battery or oil/gas well with flaring

Key Wildlife Feature Definitions

Nest Site

This refers to the exact or approximate location of the bird nest. In many cases it will be difficult to identify the exact location of a nest, and intensive efforts to do so may disturb breeding birds and/or their nests. In such cases, determining the main home range, territory and/or song perches through auditory song/call surveys and low-intensity visual observation, are recommended to determine the approximate location of nest sites. The set-back distance should then be applied to this approximate location.

Active or Traditional Nest Site

Many birds return to the same place each year to reproduce, either using the same nest site, or building a new nest site within the same territory. In these cases, the territory or nest site should be considered active unless there has been a minimum of three years of no occupancy in all species listed in Table 1 apart from Ferruginous Hawk which should be considered active up to seven years.¹ In some cases, the traditional nest site is representative of a breeding territory and the nest site itself may shift from year to year (e.g. Piping Plovers shifting nest site selection based on lake water levels). In these cases, the setback distance will need to apply to the territory within this three year period.

¹ The active nest time of approximately three years for a Piping Plover (COSEWIC 2013) is used because impact from nest disturbance would be greatest since it is most vulnerable relative to other bird species listed in Table 1. An exception is Ferruginous Hawk with an active nest time of seven years (Bird et al 2020).

Nesting Colony

A nest colony is a large concentration of nesting birds of a single, or mixed species that nest in close proximity at a particular location such as an island or in burrows in a bank. Setback distances should apply as a buffer around the colony.

Nest or Roost Site

Chimney Swifts habitat can be used to nest and/or to roost. Roosting habitat is used throughout the season and retains the same legal protections as nesting sites. Roosting in Chimney Swifts is often communal, although birds are occasionally known to roost alone, where multiple birds, over a hundred in some cases, roost in a single structure for the night. Setback distances should be applied around the nest or roost chimney or structure.

Migratory Stopover Site

Migratory stopovers sites are key for the survival of birds, especially those undertaking long-distance migrations from northern Canada to South America. These sites provide opportunities for birds to rest, feed and build up their muscle mass and fat reserves before they depart. Setbacks should be applied to the entire stopover area where the birds are feeding and roosting for consecutive days during the appropriate migration seasons.

Restricted Activity Period

The restricted activity period is defined using the best available data from Manitoba. The main source of information on breeding birds has been taken from dates as defined during the Manitoba Breeding Bird Atlas (<https://www.birdatlas.mb.ca/download/safedates.pdf>). The precautionary approach has been taken where appropriate to ensure that birds are protected from disturbance during these vulnerable periods in their life-cycles. Migratory stopover dates have been defined using the bar charts generated by citizen scientists on eBird (<http://ebird.ca>) and were selected at the period in migration where the number of encounters clearly increases.

References

Bird, J., R. Martin, H.R. Akçakaya, J. Gilroy, I.J. Burfield, S. Garnett, A. Symes, J. Taylor, C. Şekercioğlu, and S.H.M. Butchart. 2020. Generation lengths of the world's birds and their implications for extinction risk. *Conservation Biology* 34:1252-1261.

COSEWIC. 2013. COSEWIC assessment and status report on the Piping Plover *circumcinctus* subspecies (*Charadrius melodus circumcinctus*) and the *melodus* subspecies (*Charadrius melodus melodus*) in Canada. Committee on the Status of Endangered Wildlife in Canada. Ottawa. xiv + 39 pp. (Species at Risk Public Registry website)

Table 1. Set-back distance and restricted activity period by bird species and their feature

| Species | Key Wildlife Feature | Restricted Activity Period | Recommended Set-back Distance by Disturbance Category (metres) | | |
|----------------------------------|---------------------------------|--|--|--------|------|
| | | | Low | Medium | High |
| American White Pelican | Nesting Colony | April 1 - August 31 | 500 | 750 | 1000 |
| Baird's Sparrow | Nest Site | May 15 - August 15 | 100 | 250 | 500 |
| Bald Eagle | Active or Traditional Nest Site | March 15 - July 15 | 250 | 500 | 1000 |
| Bank Swallow | Nesting Colony | May 15 - July 31 | 50 | 150 | 300 |
| Barn Swallow | Nest Site | May 15 - September 30 | 50 | 100 | 100 |
| Barred Owl | Active or Traditional Nest Site | March 15 - July 15 | 250 | 500 | 1000 |
| Bobolink | Nest Site | May 15 - August 15 | 100 | 250 | 400 |
| Boreal Owl | Nest Site | March 1 - July 15 | 250 | 500 | 1000 |
| Buff-breasted Sandpiper | Migratory Stop-over Site | May 20 - June 5; July 20 - Oct 10 | 100 | 200 | 400 |
| Burrowing Owl | Active or Traditional Nest Site | April 1 - August 15 | 200 | 300 | 500 |
| | | August 16 - March 31 | 50 | 250 | 500 |
| Canada Warbler | Nest Site | May 1 - July 31 | 200 | 300 | 450 |
| Chestnut-collared Longspur | Nest Site | May 1 - August 15 | 100 | 250 | 650 |
| Chimney Swift | Nest or Roost Site | May 1 - July 31 | 50 | 150 | 300 |
| Common Nighthawk | Nest Site | May 1 - August 31 | 100 | 200 | 300 |
| Double-crested Cormorant | Nesting Colony | April 1 - August 31 | 400 | 500 | 750 |
| Eastern Screech Owl | Nest Site | March 15 - July 15 | 200 | 300 | 500 |
| Eastern Whip-poor-will | Nest Site | May 15 - July 16 | 100 | 200 | 300 |
| Eastern Wood-Pewee | Nest Site | May 15 - Aug 15 | 50 | 150 | 300 |
| Evening Grosbeak | Nest Site | May 1 - August 15 | 200 | 300 | 450 |
| Ferruginous Hawk | Active or Traditional Nest Site | March 15 - July 31 | 500 | 750 | 1000 |
| Golden-winged Warbler | Nest Site | May 15 - August 6 | 200 | 300 | 450 |
| Golden Eagle | Active or Traditional Nest Site | March 15 - July 15 | 500 | 750 | 1000 |
| Grasshopper Sparrow | Nest Site | May 16 - August 21 | 100 | 250 | 650 |
| Great Gray Owl | Active or Traditional Nest Site | Feb 15 - July 15 | 250 | 500 | 1000 |
| Colonial Nesting grebes | Nesting Colony | May 15 - July 15 | 100 | 200 | 400 |
| Colonial Nesting gulls/terns | Nesting Colony | May 1 - July 15 | 400 | 500 | 750 |
| Harris's Sparrow | Nest Site | May 15 - August 15 | 50 | 150 | 300 |
| Hérons | Nesting Colony | April 1 - August 31 | 400 | 500 | 750 |
| Horned Grebe | Nest Site | May 1 - Sep 15 | 100 | 200 | 400 |
| | | May 1 - Sep 15 | 100 | 200 | 400 |
| Hudsonian Godwit | Migratory Stop-over Site | May 1 - June 7; July 21 - September 7 | 100 | 200 | 400 |
| | Nest Site | May 15 - August 15 | 200 | 400 | 600 |
| Least Bittern | Nest Site | May 1 - July 31 | 100 | 200 | 400 |
| Lesser Yellowlegs | Migratory Stop-over Site | April 15 - June 7; July 7 - October 31 | 100 | 200 | 400 |
| | Nest Site | May 1 - August 15 | 200 | 400 | 600 |
| Loggerhead Shrike | Nest Site | May 1 - August 15 | 100 | 250 | 500 |
| Northern Hawk Owl | Nest Site | Feb 15 - July 15 | 250 | 500 | 1000 |
| Olive-sided Flycatcher | Nest Site | May 1 - August 31 | 50 | 150 | 300 |
| Peregrine Falcon ¹ | Nest Site | April 1 - August 15 | 250 | 500 | 1000 |
| Piping Plover | Active or Traditional Nest Site | April 15 - August 15 | 200 | 400 | 600 |
| Red-headed Woodpecker | Nest Site | April 15 - August 15 | 50 | 100 | 200 |
| Red-necked Phalarope | Migratory Stop-over Site | May 15 - June 7; July 7 - September 30 | 100 | 200 | 400 |
| | Nest Site | June 1 - August 15 | 200 | 400 | 600 |
| Red Knot | Migratory Stop-over Site | May 20 - June 5; July 20 - Oct 10 | 100 | 200 | 400 |
| Ross's Gull | Nest Site | May 15 - August 15 | 500 | 1000 | 1500 |
| Rusty Blackbird | Nest Site | May 1 - July 31 | 50 | 150 | 300 |
| Sharp-tailed Grouse ² | Lek | Mar 15 - May 15 | 200 | 500 | 1000 |
| Short-eared Owl | Nest Site | April 15 - September 15 | 200 | 300 | 500 |
| Sprague's Pipit | Nest Site | May 1 - August 15 | 100 | 250 | 650 |
| Trumpeter Swan | Nest Site | April 1 - July 31 | 500 | 750 | 1000 |
| Western Grebe | Nest Site | May 15 - July 15 | 100 | 200 | 400 |
| Whooping Crane | Migratory Stop-over Site | May 1 - November 1 | 500 | 750 | 1000 |
| Yellow Rail | Nest Site | May 1 - July 15 | 100 | 150 | 350 |

¹Non-urban occurrences only

²Low disturbance is foot traffic only.