



Parks Canada National Best Management Practices (Proposed)

Migratory Birds

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ʔapsc̓ik-t'as̓ii (Upscheek Tashee)
Pacific Rim National Park Reserve

Version adapted for tender: December 2018

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Field Unit Adaptation for use in Pacific Rim National Park Reserve

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Note: Reference and appendix sections available in version issued at contract award.

List of Definitions

Buffer Zone: means a designated protective and avoidance area around a migratory bird nest that minimizes disturbance to nesting birds and their offspring from construction and work site activities. Buffer zones are determined by recommended setback distances and take into consideration the species, the intensity of disturbance and the surrounding habitat.

Built Asset: includes contemporary and cultural heritage buildings, fortifications and infrastructure. Infrastructure includes highways, roads, bridges, marine structures, utilities and grounds (Parks Canada Project Management Standard, 2016). Some Parks Canada built assets are used by migratory birds as nesting habitat (e.g., buildings [ledges, eaves, gutters], bridges, canals, tunnels, picnic shelters, outdoor washrooms, kiosks, utility poles).

Construction Limit: an area with established boundaries where construction and project activities (including staging/laydown areas) are permitted.

Critical Habitat: means the habitat that is identified as necessary for the survival and/or recovery of a listed wildlife species and that is identified as the species' critical habitat in the recovery strategy or in an action plan for the species and as posted on the Species at Risk Public Registry (*Species at Risk Act*, S.C. 2002, c.29).

Designated Parks Canada Contact: refers to the person within the field unit with the expertise, authority and mandate to make decisions on migratory birds. The Designated Parks Canada Contact is identified at the field unit level and is not necessarily always the IAO.

Incidental Take: inadvertent harming, killing, disturbance or destruction of migratory birds, nests and or eggs.

Listed Species: species appearing on the List of Wildlife Species at Risk set out in Schedule 1 of the *Species at Risk Act* (S.C. 2002, c.29).

Migratory Bird: means a migratory species of bird referred to in the *Migratory Birds Convention Act*, 1994, and includes the sperm, eggs, embryos, tissue cultures and parts of the bird. The list of migratory bird species can be found [here](#).

Nest: means the nest of a migratory bird and includes parts of the nest (*Migratory Birds Convention Act, 1994*). From the Merriam-Webster Dictionary, a nest is 'a bed or receptacle prepared by an animal and especially a bird for its eggs and young.' Note that nests of species not included under the *Migratory Birds Convention Act* may still be protected by the *Canada National Parks Act* or the *Species at Risk Act* and could be considered nests for the purposes of this BMP.

Qualified Environmental Professional: someone who is familiar with the ecoregion and has knowledge of the nesting and other life history behaviours of bird species potentially found at that location, including species at risk and secretive species.

Residence: means a dwelling-place, such as a den, nest or other similar area or place that is occupied or habitually occupied by one or more individuals during all or part of their life cycles, including breeding, rearing, staging, wintering, feeding or hibernating (*Species at Risk Act, S.C. 2002, c.29*).

Setback Distance: means the distance at which nesting birds react to human disturbance. The setback distance is determined based on the species, the level of the disturbance and the landscape context.

List of Acronyms

BMP: Best Management Practice
CEAA 2012: *Canadian Environmental Assessment Act, 2012*
COSEWIC: Committee on the Status of Endangered Wildlife in Canada
ECCC: Environment and Climate Change Canada
ESO: Environmental Surveillance Officer
EIA: Environmental Impact Assessment
IA: Impact Assessment
IAO: Impact Assessment Officer
MBCA: *Migratory Birds Convention Act, 1994*
SARA: *Species at Risk Act*
SCM: Species Conservation and Management

Scope of Application

This Best Management Practice (BMP) is intended to be used as a *last resort* when project planning cannot avoid the migratory bird nesting period for the area, and work must be conducted within that period. It is part of a guidance package to help Parks Canada staff comply with the *Migratory Birds Convention Act, 1994 (MBCA)*, which includes guidance on defining regional nesting periods, assessing risk to migratory birds, and conducting breeding activity surveys. Specifically, this BMP supports Step 3 of the process map within the *DRAFT Parks Canada Guidance on Managing Migratory Birds*. **It should be used when project activities occur within and on the fringes¹ of the migratory bird nesting period, which may start as early as mid-March and extend until late August, with regional variation across Canada.**

Depending on the species, migratory bird nests may be found in various types of vegetation (e.g., trees, tree cavities, shrubs, forbs, cattails), on the ground, in burrows, on stockpiles of overburden and exposed soil banks in quarries or pits, on cliffs and on or in built assets. This BMP covers general mitigations that apply to any area supporting nesting migratory birds as well as additional information for projects affecting the following specific nesting habitats: Built Assets, Forest, Wetland, Agriculture, and Maintained Landscapes.

NOTE: *This version of the National BMP has been adapted specifically for the Upscheek Tashee for all work occurring throughout the clearing and construction phases of the project. The BMP should be applied in accordance with the guidance provided in the DIA and EMP documents for this project. This National BMP is currently in draft form and thus, subject to change during the course of the project.*

Examples of activities included in this BMP are:

- maintenance and modification of built assets (e.g., repairs to building envelope, bridge work, utility line repair, and building expansions)
- **vegetation management** (e.g. clearing and grubbing for construction, routine roadside vegetation management, brush cutting, mowing, disposal of vegetation debris, hazard/danger tree removal)

NOTE: *Should breeding activity (i.e., nests, behavioural cues) be discovered before or after the project has started, project managers must expect project delays if the risk of incidental take cannot be mitigated.*

Exceptions

This BMP is not suitable for the following project activities as they would likely require additional analysis via another impact assessment pathway or there are additional legislative or permitting issues to consider.

NOTE: **this BMP is not suitable for the following situations regardless of whether project activities occur inside or outside of the migratory bird nesting period.**

- activities that threaten the continued persistence of a migratory bird species population, either directly or through alteration of habitat
- any activity which would involve removal or destruction of a migratory bird nest
- activities with residual adverse effects on an individual or a residence of a listed species at risk (endangered, threatened, or extirpated status)
- activities with potential adverse effects on the critical habitat of a listed species at risk
- activities impacting designated habitat for migratory birds (e.g., Important Bird Areas, Ramsar sites)

Consult the [Species Conservation and Management Team](#) and the [Impact Assessment Team](#) to address any uncertainty regarding potential adverse effects to migratory birds, their nests and eggs.

¹ Nest building activities can take place a few days up to around 2 weeks prior to Environment and Climate Change Canada's estimated regional nesting periods and some birds may build nests and lay eggs towards the end of the nesting window if the previous nest(s) were unsuccessful.

Note: All other natural resource and cultural resource impacts must be addressed in combination with other BMPs or through another impact assessment pathway. Some or all of the mitigation measures in this BMP may be used to prepare a Basic Impact Analysis or a Detailed Impact Analysis.

Approved geographic area of application

This BMP is intended for use in all Parks Canada administered protected heritage places.

Components of the environment that may be affected

- Harming, killing, disturbance or destruction of migratory birds, their nests, and eggs.

Mitigation Measures

The Impact Assessment Officer (IAO) must review this document to determine which mitigations apply to the project and which EIA pathway to use. *This BMP should be used to develop a mitigation strategy specific to the project, species and habitat; the BMP should never be handed over to the proponent as is without addressing project-specific circumstances.*

To use this document efficiently, and reduce the overall size and scope of the mitigations to present to contractors and project managers, follow these steps:

Step 1) Go to the Microsoft Word toolbar and select the View tab, then check the Navigation Pane box. This allows you to see all the headings and will allow for efficient editing. For example, if a whole section does not apply, simply right click on it in the Navigation Pane and choose delete.

Step 2) Add any supplementary mitigation measures to Section 6. Supplementary Mitigations.

Step 3) Save the document as a pdf or print a paper copy and include with the Environmental Impact Assessment (EIA) determination record.

General

Pre-Construction Phase:

1. During the nesting period, a breeding activity survey must be conducted a maximum of 7 days² prior to work commencing. Surveys must be completed by a qualified environmental professional. (See Supplementary Considerations and Mitigation Measures section for details.) **Results must be documented and provided to the designated Parks Canada contact prior to work commencing.**
2. Should any breeding activity be identified during the survey, the area will be left undisturbed with a suitable buffer zone established and maintained until the young have permanently left the vicinity of the nest. The size of the buffer will be species dependent and determined by the OEM and appropriate Parks Canada staff in consultation with regulatory guidance (Appendix 1). Consideration must be given to the context of the nest site, to allow the fledglings an 'exit' path, which may extend beyond the buffer zone.
 - If there is any uncertainty in determining the buffer zone, contact regional Environment and Climate Change Canada (ECCC) staff.
 - The limits of the buffer zone must be flagged to clearly identify the area especially in the direction of approaching construction activities; never mark individual nests using flagging tape or other similar material as this increases the risk of nest predation.
3. The Owner's Environmental Monitor must review the mitigation measures and any special requirements with all on-site personnel before work begins.

² This time period was selected based on balancing the risk of nest building in between survey checks, allowing time to implement mitigations, and accessing the site for work. **See Supplementary Mitigation Measures for further details.**

During-Construction Phase:

4. If bird breeding activity is identified during the construction phase, work must stop immediately, the designated Parks Canada contact notified and an appropriate buffer zone established.
5. The Prime Contractor or person with primary responsibility for the site, is responsible to ensure all personnel, including any sub-contractors are aware of the buffer zone, conduct activities as directed to minimise disturbance, and remain outside of its boundaries.
6. The Owner's Environmental Monitor (OEM) will monitor the area during construction to ensure the established buffer zone is effective.
7. If there is evidence that a buffer zone is ineffective (e.g., continued agitation/guarding behaviour, frequently leaving the nest) work must stop immediately and the buffer zone adjusted by the OEM.
8. Any likely or confirmed incidental take³ must be reported immediately to the OEM and Parks Canada and mitigations adjusted as necessary.
9. The buffer zone can only be removed upon confirmation from the OEM that young have left the nest.
10. To prevent disturbance to potential nesting habitat within and adjacent to the project site:
 - o Clearly delineate and enforce construction limits (e.g., snow fence, flagging tape) taking species and habitat into account.
 - o Stay within the construction limit, including staging areas.
 - o Use existing disturbed areas and right-of-ways whenever possible.
 - o Keep people, equipment and vehicle traffic to a minimum.
11. Minimise construction noise above ambient levels by installing temporary structural noise barriers such as sand bags, baffle boxes, or sound walls.
12. Limit construction activities to the time between dawn and dusk to avoid the illumination of adjacent habitat. If construction timing restrictions are not possible:
 - o Use down shielding or directional lighting to avoid light trespass into bird habitat.
 - o To the extent practicable, use low intensity energy saving lighting and consider the use of motion or heat sensors to minimize illumination.
 - o Avoid the use of bright white light, such as metal halide, halogen, fluorescent, mercury vapour and incandescent lamps.
13. Install anti-perch devices on facilities/equipment that may cause a hazard to birds.
14. For sites requiring restoration, avoid planting "desirable" fruited or preferred nesting vegetation in locations that may result in harm to birds (e.g., medians, rights-of-way).
15. Avoid chemical contamination of nesting habitat (e.g., manage hazardous waste appropriately, refuel vehicles on impermeable disturbed surfaces, maintain spill kits on site at all times).
16. Minimise fire potential from project activities (e.g., use spark arrestors on power equipment).
17. Ensure that erosion control measures do not disturb migratory birds nesting on stockpiles of overburden or on exposed soil banks in sand pits or quarries.

Forest

18. Apply General mitigations #1-17.
19. As a general starting point, ECCO suggests setback distances of 1-5m up to 10-50m or more for most nests of songbirds and other small birds; much larger setbacks may be required for sensitive species or species at risk (further guidance in Appendix 1).

³ harming, killing, disturbance or destruction of migratory birds, nests and eggs

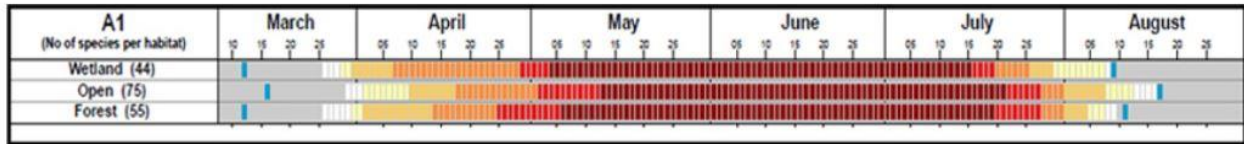
- 20. To the extent possible, leave brush piles, dead logs and fallen woody material on the forest floor during the nesting period as it provides important habitat for birds.
- 21. To the extent possible, leave snags and cavity trees in place during forest clearing activities as they provide nesting habitat.

Wetlands

- 22. Apply General mitigations #1-17.
- 23. As a general starting point, ECCC suggests setback distances of 10-30m and up 50m or more for most waterfowl nests; much larger setbacks may be required for other wetland nesting species, sensitive species or species at risk (further guidance in Appendix 1).
- 24. In late summer, wetlands will not be drained or cleared until broods are able to fly.

Supplementary Considerations and Mitigation Measures:

Nesting Calendar information for this region:



HABITAT TYPE	SPECIES ACTIVELY NESTING	DATES
Forest	Extreme Markers (most conservative period)	March 12 - August 11
	<5%	March 26 – 30 and August 8 - 9
	6-10%	March 31 - April 1 and August 5 - 7
	11-20%	April 2 – 13 and August 1 - 4
	21-40%	April 14 – 24 and July 28 - 31
	41-60%	April 25 - May 5 and July 20 - 27
	61-100%	May 6 - July 19

- Each site where clearing is proposed will require an initial assessment (including site descriptions, photos and be linked to chainage and maps/drawings) and survey by a bird specialist/QEP and reporting to Parks Canada staff for confirmation that these areas would be appropriate for clearing within the window.
- **Timing:** Given the percentages of likely bird breeding activity for this region and high impact nature of the activity, as a guideline, the earliest date to begin clearing work would be mid-July in over-stocked second growth conifer sections and August 1st in any mature forest areas.
- In case work is scheduled during the bird nesting period and meets the preceding criteria, the following protocol is to guide the mitigation of surveying for breeding bird activity (e.g. behavioural cues, nests etc.) in and around the footprint area:
 1. QEPs with extensive experience (minimum of 5 years) in surveying for breeding bird activity and bird identification will conduct the field surveys or approve of and give direction to surveyors. Surveyors will require proven expertise and recent experience in the area where surveys are to be conducted.
 2. The area to be surveyed for breeding activity should be determined on the basis of the footprint area plus a buffer as per Appendix 1 values.
 3. During the “critical” nesting period (April 14 to July 31st), conduct 3 surveys within a 5 day period prior to construction. Given no breeding activity is detected, the “free-to-work” period is 3 days. On the 4th

day after the start of the “free-to-work” period, conduct an additional survey to extend the “free-to-work” period as needed.

4. During the “caution” nesting period (August 1 to 11, and between March 12 to April 13), conduct 2 surveys within a 5 day period prior to construction. Given no breeding activity is detected, the “free-to-work” period is 3 days. On the 4th day after the start of the “free-to-work” period, conduct an additional survey to extend the “free-to-work” period as needed.
 5. Prepare a “free-to-work” report upon completion of the surveys. The report will include a map of the areas that are free-to-work, detailed descriptions of nest locations/buffers, and recommend mitigation measures as required.
 6. On an ongoing basis, monitor work areas for bird nesting activity, renewing or modifying the “free-to-work” status and associated dates.
 7. For active nests or breeding activity observed prior to work, establish buffers and meet other Parks Canada requirements as per Appendix 1.
- Riparian areas are sensitive areas with high habitat value for birds and fish. Use of heavy machinery will require careful environmental considerations and planning. Work plans will require sign off by the OEM prior to mobilizing to sites.
 - Habitat suitable for SARA-listed species (e.g. Marbled Murrelet), i.e. old-growth forest, will require complete avoidance during the nesting period for MAMU.