



Guidelines to reduce risk to migratory birds

Information on the risk your activities might pose to migratory birds, and guidelines to avoid and reduce such risk.

On this page

- [Disclaimer](#)
- [Your role](#)
- [Determining the risk to migratory birds](#)
- [Determining the presence of nests](#)
- [Detection of a migratory bird's nest](#)
- [Establishing buffer zones and setback distances](#)
- [Removing a migratory bird's nest from last year](#)
- [Managing exposed soil banks](#)
- [Regulating water levels](#)
- [Evaluate the risk you might pose to migratory birds](#)

Disclaimer

This information provides an overview of your obligations and does not replace relevant laws and regulations. You must adhere to all federal, provincial and/or territorial laws, regulations and conditions

of permits.

This information does not authorize you to harm or kill migratory birds or to disturb, destroy or take nests or eggs under the Migratory Birds Regulations.

We do not have the authority to prescribe or recognize specific avoidance or mitigation measures for specific circumstances or activities. It is your responsibility to evaluate risks and determine the most appropriate avoidance or mitigation measures required.

Please contact us for further information.

Migratory birds, their nests or eggs can be harmed as a result of many activities. Activities that do not primarily target a bird, but which may cause harm, include:

- clearing trees or other vegetation
- draining or flooding land
- using fishing gear

Harm includes killing, disturbing or destroying migratory birds, nests or eggs and can have long-term negative effects on bird populations. This is especially true if there are many incidents that harm birds.

We work with the public, governments and industries to help:

- reduce the risk of harm to migratory birds
- ensure the laws and regulations are followed
- maintain healthy populations of birds

Your role and responsibilities

To prevent harming migratory birds, nests and eggs, you should:

- understand how migratory birds are legally protected
- consult the nesting calendars when planning your activities
- determine the risk to encounter nests or eggs of migratory birds on a case-by-case basis
- develop and implement preventive and mitigation measures, such as beneficial management practices

Remember that we cannot provide authorizations or permits for activities that do not primarily target migratory birds but which may cause harm.

Determining the risk to migratory birds

When planning your activities, you should assess the risk you might pose to migratory birds.

Factors associated with higher risk to birds include:

- seasonal factors, such as:
 - breeding season and migration periods
 - post-breeding moult period and wintering stages for some species
- location factors, such as:
 - migratory bird breeding colonies
 - feeding areas around colonies
 - migration staging sites
- type of potentially disruptive activities

In the case of bird collisions with structures, higher risk factors include:

- site sensitivity, such as:
 - areas of bird concentration and migratory pathways
 - surrounding landscaping and habitat type
 - meteorological conditions like fog
- structure design and size, such as:

- reflectivity of glass panels
- lighting
- use of guy wires
- height

Related links

- [Wind turbines and birds: a guidance document for environmental assessment](#)
- [General nesting periods of migratory birds in Canada](#)

Determining the presence of nests

When determining if migratory birds, their nests or eggs are likely to be present, you must consider:

- the available bird habitats
- the migratory bird species likely to be encountered in such habitats
- the time periods when they would likely be present

For example, “point counts” (a technique to locate singing territorial males) may provide a good indication of the possible presence of songbirds nesting in an area.

In most cases, active nest search techniques are not recommended, because:

- the ability to detect nests is very low while the risk of disturbing or damaging active nests is high
- flushing nesting birds increases the risk of predation of the eggs or young, or may cause the adults to abandon the nest or the eggs
- disturbing or damaging nests is still likely to occur during disruptive activities even when active nest searches are conducted prior to these

activities

Nest surveys may be appropriate when all these conditions are met:

- conducted by skilled and experienced observers
- using appropriate methodology
- only a few nesting spots or a small community of migratory birds is expected
- the activities will take place in simple habitats, such as:
 - an urban park consisting mostly of lawns with a few isolated trees
 - a vacant lot with few possible nest sites
 - a previously cleared area which might attract ground nesters
 - a structure such as a bridge, a beacon, a tower or a building

Nest surveys can also be considered when looking for:

- conspicuous nest structures (such as nests of Great Blue Herons, Bank Swallows, Chimney Swifts)
- cavity nesters in snags (such as woodpeckers, goldeneyes, nuthatches)
- colonial-breeding species that can often be located from a distance (such as a colony of terns or gulls)

Please [contact us](#) for further technical information about investigation methods for non-song bird species (notably, waterfowl, waterbirds and shorebirds).

Detection of a migratory bird's nest

If you discover or realize that you have disturbed a nest containing eggs or young of migratory birds, you should:

- halt all disruptive activities in the nesting area
- move away as quickly and quietly as possible

- avoid disturbing the surrounding vegetation, and avoid making a trail to and from the nest
- protect the nest with a buffer zone
- avoid the immediate area until the young have naturally left the vicinity of the nest

If there are migratory bird nests where you plan to work, activities that could disturb or destroy nests should be avoided, adapted, rescheduled or relocated.

Establishing buffer zones and setback distances

Any nest found during the nesting period should be protected with a buffer zone until the young have permanently left the vicinity of the nest.

It is **not** recommended to mark nests using flagging tape or similar material. This may increase the risk of predators finding the nest. If necessary, flagging tape can be placed at the limits of the buffer zone.

A **buffer zone** is determined by a setback distance which varies greatly according to:

- degree of tolerance of the species
- previous exposure of birds to disturbance
- level of disturbance
- landscape context

Appropriate **setback distances** are determined on a case-by-case basis based on:

- distance at which nesting birds react to human disturbance
- expert opinion, which is often used to supplement scientific data

There are two benchmark measurements to determine an effective setback distance.

1. **Alert distance** is the distance at which the bird adopts an alert posture or emits alarm calls. Birds usually perceive humans as potential predators. They may leave their nests in response to being approached, or abort nesting because of stressful situations.
2. **Flush distance** is the distance at which a bird:
 - takes flight or moves away from a threat
 - performs distraction displays (such as feigning a broken wing or sitting down on a non-nesting site to draw attention away from the nest)
 - actively defends the nest

Setback distances should be adjusted to the activities causing the greater amounts of disturbance. Significant sources of disturbance include:

- removal of vegetation and/or soil operations
- drilling, loud noise, vibration (for example, seismic blasting from operations)
- regular approach by humans or vehicles
- noise exceeding 10 decibels (dB) above ambient noise levels in the natural environment
- noise greater than about 50 dB

A higher minimum setback distance is required in some circumstances:

- rural or natural habitats compared to urban backyards
- most waterfowl nests compared to nests of songbirds and other small birds
- presence of sensitive species or species at risk

For guidance regarding seabird and waterbird colonies, please refer to [Guidelines to avoid disturbance to seabird and waterbird colonies in Canada.](#)

Removing a migratory bird's nest from last year

Nests of migratory birds are protected all year. It is prohibited to damage, destroy or remove a non-active nest without a permit or an authorization.

It is your responsibility to assess your legal obligations and evaluate the risks of harming migratory birds or their nests. You must determine the most appropriate avoidance or mitigation measures required by considering the following:

1. For most migratory bird species, removing the nest after the breeding season will have no effect on the ability of birds to nest again. The great majority build or occupy new nests each year. However, some species may reuse the same nest structure year after year, and the loss of these nests could have a negative effect on future nesting success.
2. When identifying an appropriate approach when you encounter a migratory bird nest, you must consider:
 - the relevant scientific information or practice for the species
 - the species' reliance on its old nest
 - the potential effect on nesting success of having to build a new nest
3. **Remember** that some provincial, territorial or other federal legislation may protect nests of some migratory bird species at all times. The nest of a migratory bird is included in the definition of "residence" for migratory bird species which are endangered, threatened or extirpated.

Related links

- [List of Species at Risk](#)
- [Residence descriptions and rationales](#)

Managing exposed soil banks

During the breeding season, it is important that you do not disturb nests of migratory birds. You should take particular care when:

- selecting erosion prevention and control measures.
- managing stockpiles of overburden.
- managing exposed soil banks in sand pits or quarries.

Regulating water levels

The management and maintenance of dams and project construction may require modifications to water levels in reservoirs, ponds or other wetlands.

When planning activities, you should:

- determine if birds are or will likely be nesting in or near the wetland
- avoid regulating water levels that could result in flooding or drying out nests until birds have raised their young

Water level modifications may, for example, be scheduled prior to or after the breeding season.

Evaluate the risk you might pose to migratory birds

Determine the risk you might pose to migratory birds by reviewing the situations that might apply to you.

Table 1. Examples of lower and higher risk levels for the factor associated with planning of activities harmful to migratory birds in Canada.

Factor associated with planning of activities	Example of lower risk level	Example of higher risk level
Knowledge of legal obligations	Awareness of and understanding the relevant provisions of laws and regulations pertaining to the protection of birds, nests and eggs. Notably: the <u>Migratory Birds Convention Act, 1994</u> , the <u>Migratory Birds Regulations</u> and, where applicable, the <u>Species at Risk Act</u> .	Unaware of legal responsibilities towards the protection of birds, nests and eggs.
Risk assessment and planning	Completed a thorough risk assessment in a timeframe suitable to balance project needs with risk of harm to migratory birds.	Little to no pre-planning or risk assessment around conservation issues related to migratory birds.

Factor associated with planning of activities	Example of lower risk level	Example of higher risk level
Preventive and mitigation measures	<p>Measures are decided upon, implemented and monitored to avoid engaging in potentially destructive or disruptive activities at key locations or during key periods.</p> <p>Records of decision and actions taken.</p> <p>Measures such as policies, procedures, plans, directive or compensatory plan are incorporated into beneficial management practices.</p> <p>Proponent and field operations staff are aware of the identified avoidance measures.</p>	<p>No specific measures planned and implemented to minimize the risk of detrimental effects and to help maintain sustainable populations of migratory birds.</p> <p>No records of decisions and actions taken.</p> <p>No beneficial management practices.</p> <p>Ignorance or lack of training of field operation staff on avoidance measures.</p>

Table 2. Examples of lower and higher risk levels for the factor associated with protection of nests.

Factor associated with protection of nests	Example of lower risk level	Example of higher risk level
<p>Likelihood of the presence of nests</p>	<p>When planning your project, you have identified:</p> <ul style="list-style-type: none"> • available bird habitats • migratory bird species likely to be found in these habitats • time periods when migratory bird species are likely to be found <p>Methods used to prevent disturbance of nests are non-intrusive.</p>	<p>No understanding of local bird presence in space or time.</p> <p>Active nest searches, except when the nests searched are known to be easy to locate without disturbing them.</p>

Factor associated with protection of nests	Example of lower risk level	Example of higher risk level
Habitat	<p>Habitat where your activities will occur is small and simple, such as:</p> <ul style="list-style-type: none"> • human-made structure (bridge, beacon, tower, and building) • man-made setting or those with few potential nesting spots or few species of migratory birds • urban park made mostly of lawns with few and isolated trees • vacant lot with sparse vegetation 	<p>Habitat is large and/or complex with many potential nesting areas, such as woodland and scrubland.</p>

Factor associated with protection of nests	Example of lower risk level	Example of higher risk level
Nest type	<p>Presence of nests that are:</p> <ul style="list-style-type: none"> • easy to find and avoid, such as nests of: <ul style="list-style-type: none"> ◦ Great Blue Heron ◦ Bank Swallow ◦ Chimney Swift • easy-to-find cavity nests in snags, such as nests of: <ul style="list-style-type: none"> ◦ woodpeckers ◦ goldeneyes ◦ nuthatches • nests of colonial-breeding species, such as terns or gull, that can be located from a distance 	<p>Presence of nest difficult to locate (in other words cryptic or small nests), such as nest of songbirds. (This applies to nests of most species)</p>

Factor associated with protection of nests	Example of lower risk level	Example of higher risk level
Timing	Project occurs outside the general nesting period and won't affect nests that are reused the next year.	Operations occur: <ul style="list-style-type: none"> • during the general nesting period • throughout the year and could affect nest to be reused the next year (such as nests of Great Blue Heron).

Table 3. Examples of lower and higher risk levels for the factor associated with disturbance of nests and nesting birds.

Factor associated with disturbance of nests and nesting birds	Example of lower risk level	Example of higher risk level

Factor associated with disturbance of nests and nesting birds	Example of lower risk level	Example of higher risk level
Intensity of operation	<p>Sources of low intensity disturbance are infrequent and quick</p> <p>One or few sources of disturbance.</p> <p>Low or below ambient noise in natural areas.</p>	<p>Sources of disturbance are either:</p> <ul style="list-style-type: none"> • frequent • lasting • large <p>Several sources of disturbance.</p> <p>Loud noise emissions, especially when:</p> <ul style="list-style-type: none"> • exceeding 10 decibels (dB) above ambient in natural areas • greater than about 50 decibels (dB)

Factor associated with disturbance of nests and nesting birds	Example of lower risk level	Example of higher risk level
Landscape context	Birds used to disturbance or already breeding successfully are present in the disturbed areas.	Presence of birds intolerant to disturbance, such as: <ul style="list-style-type: none"> • birds moving away from their nest • agitated birds • birds performing distraction displays • birds actively defending the nest
Preventive and mitigation measures	Disruptive activities around nest are halted. Nest protected with effective/efficient buffer zone and/or setback distances. Avoidance measures are put in place until the young have naturally and permanently left the vicinity of the nest.	No protection measures to reduce the effect of disturbance sources. Ineffective/inefficient buffer or setback distance.

Table 4. Examples of lower and higher risk levels for the factor associated with bird at sea and fishing.

Factor associated with birds at sea and fishing	Example of lower risk level	Example of higher risk level
Risk assessment	<p>Awareness of potential risks of fishing methods to seabirds.</p> <p>Knowledge of where and when the birds are concentrated.</p>	No understanding of how fishing practices create risks for birds.
Preventive and mitigation measures	<p>Avoidance measures are implemented and monitored.</p> <p>Avoidance measures are included into beneficial management practices.</p>	No record or best management practices implemented.

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