

Section 5 - Species at Risk & Migratory Birds

(letter size paper except where noted)

Bird Nest Stop Work Info

Goshawk Information BMP (legal size)

Migratory Birds for LPCs 30Mar2020

Species at Risk for LPCs 30Mar2020

If you find an active bird nest during operations...



Photo: Matthew Sim (web)



- Follow the Stop Work procedures in EFP 01 General under the BCTS Environmental Management System (EMS) if a previously unidentified active nest is encountered.

Signs you have found an active nest:



- Birds flying up just in front of you or swooping at you/your machine,
- Birds dropping down in front of you without flapping their wings,
- Birds flying into tree cavities,
- Cheeping coming from tree cavities or trees /shrubs
- A nest with eggs



Photos: Wood Duck Society (web), Ian Adams

Scope

These Best Management Practices (BMP) are directed at the northern goshawk (*Accipiter gentilis atricapillus*) inhabiting British Columbia east of the Coast Mountain divide. They are not intended for the threatened coastal goshawk subspecies (*A. g. laingi*).

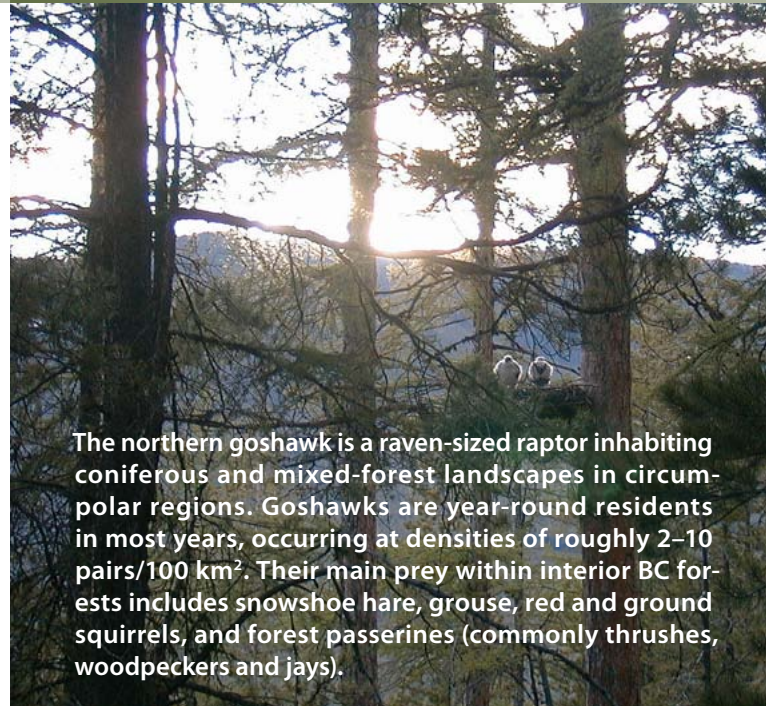
These recommendations focus on maintaining nesting and post-fledging areas (together known as the breeding area) at known goshawk nesting sites. Although foraging habitat and prey availability at larger spatial scales also influence breeding area occupancy, there is limited information to support strong science-based recommendations at these scales.

These BMPs were developed by a team of biologists with collectively over 50 years experience studying goshawks in relation to forest management. They are based on the best available science, including data from two, 10-year studies on goshawks and forest management in the East Kootenay (southeastern) and Skeena (northern) regions of British Columbia.

Goshawk Nest — Kari Stuart-Smith



Goshawk Ecology



The northern goshawk is a raven-sized raptor inhabiting coniferous and mixed-forest landscapes in circum-polar regions. Goshawks are year-round residents in most years, occurring at densities of roughly 2–10 pairs/100 km². Their main prey within interior BC forests includes snowshoe hare, grouse, red and ground squirrels, and forest passerines (commonly thrushes, woodpeckers and jays).

Nestling goshawks — Erica McClaren

Goshawks typically nest in mature and old stands with a closed canopy and open understory. They build large stick nests (ca. 100 cm diameter) in most years, often situated on the first branch whorl of the largest trees in the stand. A nest area may contain 1–6 or more nests in close proximity (< 600 m, often much closer) to each other. For successful reproduction, goshawks also need a post-fledgling area around or near their active nests. Here, young (fledgling) goshawks are protected from predators while they learn to fly and hunt, until they disperse by mid-August.

Together, the nest area and the associated post-fledgling areas are called the **breeding area**. Breeding areas in interior BC tend to be spaced regularly every 4–6 km across the landscape, corresponding to breeding territory sizes of approximately 2400 ha.

Goshawks display strong fidelity to breeding areas. Once established, a breeding area may be used intermittently for years or decades, including continued use after failed breeding attempts and occupation by new individuals when the previous occupants die.

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For further information see —

*The Scientific basis for Managing
Northern Goshawk Breeding Areas: Best
Management Practices*

available at
[www.forrex.org/publications/
forrexseries/series.asp](http://www.forrex.org/publications/forrexseries/series.asp)
or
[www.highcountryconsulting.ca/
bcgoshawk](http://www.highcountryconsulting.ca/bcgoshawk)
or
contact the Goshawk Science Team
member nearest you

Adult goshawk — Todd Mahon

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by Rocky Mountain Printers
Design> DesktopGraphics.ca 110315*

Best Management Practices for Northern Goshawk Breeding Areas in the Interior of British Columbia

March 2011

Breeding Area Identification and Occupancy Status

Once a goshawk nest is found, systematic surveys of the area by a qualified biologist with previous goshawk experience should be conducted to locate alternative nests and characterize the forest within the breeding area. Appropriate survey methodology is found in the *Scientific Basis* document accompanying this brochure.

‘Not breeding’ or ‘unoccupied’ status can only be inferred with a high degree of confidence after repeated surveys fail to detect breeding goshawks during the nestling and post-fledgling periods. Failure to detect goshawks during at least two surveys on different days during the nestling stage alone provides moderate support that the breeding area is not occupied. Failure to detect a goshawk during the incubation period cannot be used to infer unoccupied status because detectability rates are low during this time. Occupancy assessment during the courtship period is not recommended because detectability at this time is highly variable and presence only confirms breeding area occupancy and not whether the goshawks will actually reproduce in that year.

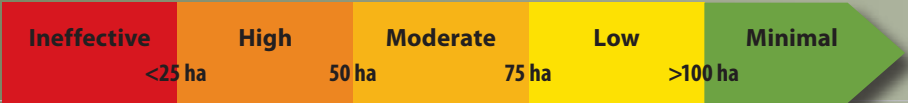


Fledgling Goshawk — William Harrower

Landscape Considerations

Eighty-five percent of the 119 goshawk territories in our studies contained more than 30% mature and old forest within a 3 km radius of the breeding area, and half of them had more than 50%. Breeding areas in territories with less than these amounts may not maintain occupancy, regardless of the size of the breeding area reserve.

Reserve Design



Reserve Size and Risk of Breeding Area Abandonment

The size of the breeding reserve is a key factor affecting its continued use by goshawks. Reserve size refers to the total, contiguous, amount of forest suitable for nesting and containing the goshawk nests. Reserves >100 ha have the highest probability of continued occupancy; reserves <25 ha will not maintain long-term occupancy.

Try to:

- **include** as many known nests within the reserve as possible
- **buffer** nests by 200 m where practicable
- **maximize** the amount of forest suitable for nesting within the reserve; focus on closed canopy mature or old forest with open understory (structural stage 5–7 with evident self-thinning and open, subcanopy flyways), adding other forest types as necessary to make a contiguous forest patch. Unsuitable breeding habitat may be included in the reserve for biodiversity objectives but should not count towards the total area of the reserve.
- **minimize** the edge: area ratio, especially the edge adjacent to stands <40 years old; avoid narrow ribbons <200 m in width
- **connect** the reserve to adjacent forest to increase its effective size and provide linkages to foraging habitat beyond the breeding area
- **when** managing multiple breeding areas, do not manage all areas at ineffective or high risk levels



Juvenile Goshawk — Sarah Rose, flickr

Goshawks can reuse breeding areas for many years. If a breeding area is adequately protected, goshawks will likely continue using that area, alleviating further management conflicts with breeding goshawks over the 2400 ha breeding territory. If the breeding area is inadequately protected the goshawks will likely establish a new breeding area that may conflict with future harvest plans, perpetuating the management conflict.

Timing Restrictions

Direct disturbance may disrupt goshawk breeding behaviour, causing nest failure or breeding area abandonment. Ideally, restrict industrial activities near an active nest from Feb 15–Aug 15. If this is not practicable, conduct them outside the most sensitive period of Mar 15–July 1, or plan activities closest to active nests outside this period. Unoccupied Breeding Areas do not require timing restrictions.

Very High Disturbance keep >1 km away from Feb 15–Aug 15

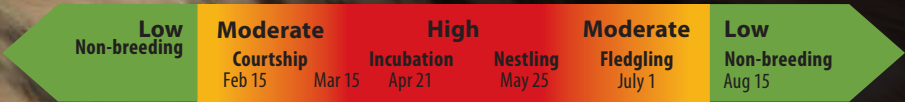
- repeated low elevation (<1000 ft) helicopter over-flights
- continuously operating drilling rig or well flaring
- blasting

High Disturbance keep >500 m away from Feb 15–Aug 15

- road building
- logging
- pipeline and wellsite construction
- denotation of seismic charges
- seismic line cutting
- windtower construction

Low and Moderate Disturbance no timing restrictions

- silvicultural activities (planting, site prep)
- hauling
- road maintenance
- seismic line hand-cutting
- public and industrial traffic



Risk of Disturbance Impacting Breeding Activities

Canada's diverse landscapes support a great abundance and variety of birds. More than 450 native bird species regularly make use of Canada's natural and human-modified landscapes for at least part of their annual cycle. Most of these species are protected under the [Migratory Birds Convention Act, 1994](#) (MBCA) and so are collectively referred to as "migratory birds". Birds are an integral part of our Canadian heritage. Through bird-watching, and recreational and subsistence hunting, birds make a significant contribution to our quality of life and our economy. They also play important ecological and biological roles in our environment by eating insects, dispersing seeds, and pollinating plants, to name a few. Bird populations are important environmental indicators - the health of our birds tells us much about the health of our planet. BCTS is working to manage and protect Migratory Birds, their habitat, nests and eggs as a part of our planning and project layout.



Redpoll
Photo Credit - Nathan Voth, FLNRO

WHAT TYPE OF BIRDS ARE PROTECTED?

People often think of Migratory Birds as Ducks, Swans and other waterfowl, and although this is true, the list of Migratory Birds in Canada is much larger.

The Migratory Bird Convention Act also includes protection of Geese, Cranes, Rails, Shorebirds, Pigeons, Doves, Chickadees, Flickers, Flycatchers, Hummingbirds, Martins, Meadowlarks, Woodpeckers, Wrens, Grebes, Herons, Loons and Terns... And this is by no means a complete list.



Trumpeter Swan
Photo Credit - Nathan Voth, FLNRO

HOW DOES THE MIGRATORY BIRDS CONVENTION ACT, 1994 PROTECT MIGRATORY BIRDS?

Most native bird species in Canada are protected under the [Migratory Birds Convention Act, 1994](#) (MBCA), and are collectively referred to as "[migratory birds](#)". It is the responsibility of Environment and Climate Change Canada to develop and implement policies and regulations to ensure the protection and conservation of migratory birds. General prohibitions under the Act and its regulations protect migratory birds, their nests and eggs anywhere they are found in Canada, regardless of land ownership, and including surrounding ocean waters; and prohibit the dumping of substances harmful to birds in waters or areas frequented by them.

Additional protection may be provided through other federal Acts and Regulations, in particular the [Species at Risk Act](#), for migratory bird species that have been found to be extirpated, endangered, threatened or of special concern and listed under that Act.

The BC Wildlife Act (Sec. 34) also makes it an offence to molest or destroy a nest occupied by a bird or its eggs.



Blue Heron
Photo Credit - Nathan Voth, FLNRO

WHEN SHOULD I BE MOST OBSERVANT?

The MBCA applies to birds and nests all year but due to their migratory nature you are more likely to see them in the spring and summer. In our region the critical nesting period has been determined as April 18th to August 24th annually. During this period you are more likely to see migratory birds and their young nesting.

BCTS uses a process of analysing ecosystems and forest cover to determine the likelihood and concentration of migratory birds that may use an area for nesting. This process may have resulted in area's being excluded from your project or having timing restrictions on when operations can be active.

HOW DO I KNOW A NEST IS NEAR ME?

Different species of migratory birds will nest in trees, in shrubs, on the ground or even in burrows.

- 1) Look on the ground for concentrations of white coloured droppings, and then check the vegetation above for nests.
- 2) As you walk or operate in an area look for birds flying out of vegetation and flying close to you or scolding you, some birds will even feign an injury in an effort to draw you away. These activities may indicate a nest is nearby.
- 3) Watch for birds bringing nest materials or food repeatedly to one place. Birds tend to build their nests on the underside of the tree canopy where branches join together. Some birds nest in tree cavities, under a flap of bark, in shrubs or on the ground.



Black-capped Chickadee
Photo Credit - Nathan Voith, FLNRO

WHAT IF I SEE AN ACTIVE NEST?

Stop if your work could disturb or destroy the nest. Keep 30 metres away from the nest and consider a greater distance if the bird continues to scold you or seems agitated.

Larger birds such as Heron's and Cranes require a greater distance of minimal disturbance; however their usual nesting patterns are close to marshes or wetlands which normally allows for a greater distance from forestry operations.

Report the nest location to your supervisor. Your supervisor will report it to BCTS staff who will advise of next steps prior to resuming operations near the nest again.

Do not attempt to move or relocate the nest. Ideally nests should be left undisturbed until the young have left on their own. The Parent birds choose a nest location for specific

reasons such as proximity to food and water, and protection from predators and the elements. If the nest is disturbed parents may abandon it along with their eggs or young.

The Migratory Bird Convention Act does not differentiate between an occupied or unoccupied nest, nor does it consider the condition of the nest, only that it (and its potential occupants) need to be protected. If you see an empty nest with no sign of feathers, down, fresh droppings or eggs then make every effort to not molest or damage the feature.



Loon
Photo Credit - Nathan Voith, FLNRO

HOW ELSE CAN I HELP CONSERVE MIGRATORY BIRDS?

All Canadians have a role to play in protecting migratory birds, their nests and young. As a business, you can:

- 1) Operate according to your plan;
- 2) Be observant and stop work in the immediate area if you see a nest;
- 3) Participate and encourage colleagues to participate in public consultations.

FURTHER INFORMATION:

Migratory Birds Convention Act, 1994:
<http://laws-lois.justice.gc.ca/eng/acts/M-7.01/>

Environment and Climate Change Canada – Migratory Birds:

[Environment Canada - Migratory Birds](#)

List of Migratory Birds protected in Canada under the MBCA:

[Searchable list of birds protected in Canada](#)

BC wildlife Act:

http://www.bclaws.ca/civix/document/id/complete/statreg/96488_01

British Columbia is home to thousands of species and ecosystems – some of these are at risk of disappearing from B.C. Working together at a federal, provincial and local level is essential to protect them.

BCTS works to manage and protect Species at Risk (SAR) and their critical habitat through the Species at Risk Act, the Wildlife Act and the Forest and Range Practices Act.

HOW DOES THE SPECIES AT RISK ACT (SARA) PROTECT SPECIES AT RISK?

To ensure the protection of species at risk, SARA contains general prohibitions that make it an offence to:

- kill, harm, harass, capture, or take an individual of a species listed in Schedule 1 of SARA as endangered, threatened or extirpated;
- possess, collect, buy, sell or trade an individual of a species listed in Schedule 1 of SARA as endangered, threatened or extirpated;
- damage or destroy the residence (e.g. nest or den) of one or more individuals of a species listed in Schedule 1 of SARA as an endangered or threatened species or as an extirpated species if a recovery strategy has recommended the reintroduction of the extirpated species into the wild in Canada.

SARA also protects migratory birds listed in the *Migratory Birds Convention Act, 1994* that are also listed as endangered, threatened or extirpated in Schedule 1 of SARA.

Visit the searchable SAR registry at the site below:

[Species at Risk](#)



Caribou – special concern
Pixabay.com-Free source photo



Grizzly Bear – Special Concern
Pixabay.com-free source photo

AT RISK SPECIES CLASSES:

Endangered species:

Species facing imminent extirpation or extinction.

Threatened species:

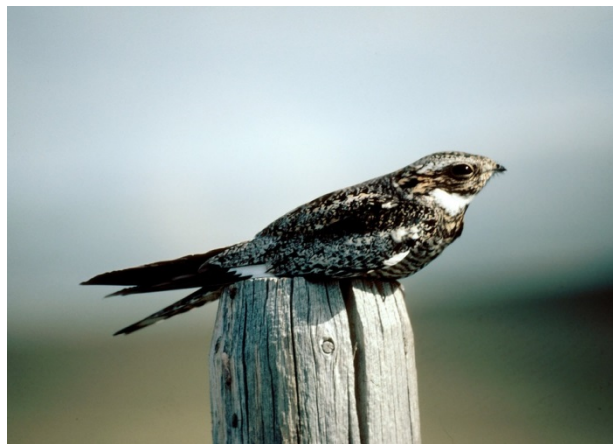
Species which are likely to become endangered if nothing is done to reverse the factors leading to their extirpation or extinction.

Special concern species:

Species which may become threatened or endangered because of a combination of biological characteristics and identified threats.

Extirpated species:

Species which no longer exist in the wild in Canada but exist elsewhere in the wild.



Common nighthawk – Some Concern
Pixabay.com-Free source photo

WHAT IS CRITICAL HABITAT?

Critical habitat is the living environment necessary for the survival or recovery of a listed endangered, threatened or extirpated species. If known Critical habitat occurs in or near your project area it will be incorporated into the project plan. SARA contains a prohibition against destroying any part of critical habitat of endangered, threatened or extirpated species (if a recovery strategy has recommended the reintroduction of that extirpated species into the wild in Canada), but also provides other options for protection. SARA recognizes that protecting the critical habitat of species at risk is key to their conservation. The intent of SARA is to protect critical habitat as much as possible through voluntary actions and stewardship measures. If these measures are unable to protect the critical habitat, the SARA's critical habitat prohibition may come into play.



Wolverine – Special Concern
Photo Credit: Zefram, free-source photo

HOW CAN I FIND OUT IF THERE COULD BE SPECIES AT RISK IN THE AREAS I AM OPERATING IN?

There are a number of resources that may be able to assist you in finding out whether species at risk, their residences or critical habitat may be present in the areas in which you are operating:

- ☐ Know sites or habitat identified by BCTS staff during the planning stage of your project will have management strategies incorporated into your project plan.
- ☐ Gather information on SAR that **may** occur or be seen in your project area may be provided by BCTS staff.
- ☐ The SARA Public Registry has an "Advanced Search" tool that allows you to search for species listed under SARA based on their distribution, taxonomic group and risk category;
- ☐ Environment Canada's species at risk website (www.speciesatrisk.gc.ca) offers general biological information about species at risk in Canada, including their distribution and habitat requirements;
- ☐ Environment Canada's Canadian Wildlife Service (CWS) regional offices can access databanks on species at risk found on federal lands. If your business is located near federal land, CWS may be able to assist you;

Keep in mind that while a species may be found within a certain geographical range, the species may not be present in the particular area you operate because the habitat may not be suitable.



Sharptailed Grouse – Imperiled
Photo Credit: Nathan Voth, FLNRO

WHAT DO I DO IF I SEE A SPECIES AT RISK?

- ☐ **Stop!** Are you going to harm, disturb or harass the species by continuing operations? If so, cease activity in the immediate area!
- ☐ Attempt to photograph the species
- ☐ Take notes on specific location, number observed, were there young, any nests or dens etc.
- ☐ Report the sighting to your supervisor
- ☐ Supervisor reports to BCTS

HOW ELSE CAN I HELP CONSERVE SPECIES AT RISK?

All Canadians have a role to play in protecting and recovering species at risk. As a business, you can:

- ☐ operate according to your plan;
- ☐ be observant and report sightings of known species at risk to your supervisor;
- ☐ direct activities toward less sensitive areas and time projects to avoid or minimize impacts to species at risk; and
- ☐ participate and encourage colleagues to participate in public consultations.

FURTHER INFORMATION:

BC government species at risk:

<http://www2.gov.bc.ca/gov/content/environment/plants-animals-ecosystems/species-ecosystems-at-risk>

BC Conservation data centre:

<http://www2.gov.bc.ca/gov/content/environment/plants-animals-ecosystems/conservation-data-centre>

Reporting sightings of SAR:

<http://www2.gov.bc.ca/gov/content/environment/plants-animals-ecosystems/conservation-data-centre/submit-data>