



Management Strategies for Sites of Biological Significance not directly referenced in our Species at Risk Planning Process

Background:

BCTS TPG has implemented a Prince George Business Area Management of Red and Blue Listed Species/Ecological Communities and Species and Ecosystems of Management Concern Planning Process [BCTS TPG Species at Risk](#) and continues to manage its activities through this Planning Process. This document is intended to provide some direction around how to generally manage operational issues related to field layout and SP development of site specific conditions not directly spoken to in the above link.

Sites of Biological Significance

These sites include unusual or rare forest conditions that are not generally covered by legislation or the BCTS TPG Species at Risk Planning Process. These sites cannot be identified from current established lists, but may be unique and warrant identification and management strategies. In all instances the site/feature will require the BA staff/contractor to locate, GPS, picture, record, and report the feature/site location to the BCTS Planning Forester. The BA staff member will then file all appropriate with follow up actions taken.

In general as well, a comment should be added to any Site Plan where a feature/Site location is determined that states:

If any unidentified features are encountered during Primary Forest Activities or other block activities, work in the nearby vicinity must stop and BC Timber Sales-Prince George Business Area Office must be immediately informed. Direction will be provided as to an appropriate course of action to take regarding the management of the discovered features.

In general, these are some of the management strategies that the BCTS may choose to implement:

1. **General Vacant Stick Nests – Jurisdiction section 34 of the Wildlife Act Birds, nests and eggs**

Determine if there are any more nests or features in the area. If operationally feasible, move the road/block location a minimum of 200 metres from the nest site. If not operationally feasible, a windfirm buffer must be created around the nest site to ensure the nest is not disturbed or damaged by any activities, including windthrow caused by human actions.

WILDLIFE ACT - Birds, nests and eggs

34. *A person commits an offence if the person, except as provided by regulation, possesses, takes, injures, molests or destroys*
- (a) a bird or its egg,*
 - (b) the nest of an eagle, peregrine falcon, gyrfalcon, osprey, heron or burrowing owl, or*
 - (c) the nest of a bird not referred to in paragraph (b) when the nest is occupied by a bird or its egg.*

Under certain conditions and circumstances when the prescribing forester cannot determine a course of action, BCTS may decide to have an assessment completed by a Qualified Biologist and then implementation

of these recommendations would be followed (after discussion with planning). A nest proven to be inactive will be retained standing.

2. GOSHAWK NEST (*Accipter gentillis atricapillus*) – Non Red Listed

Determine if there are any more nests or features in the area. Determine if the nest is active or not. If the nest is inactive and if operationally feasible, move the road/block location a minimum of 150 metres from the nest site. If not operationally feasible, a windfirm buffer must be created around the nest site to ensure the nest is not disturbed or damaged by any activities, including wind throw caused by human actions. Goshawks can reuse the breeding areas for many years if the area is adequately protected. Information provided below is from the document *A Scientific Basis for Managing Northern Goshawk Breeding Area in the Interior of British Columbia: Best Management Practices/A. Kari Stuart-Smith... [et al.]*.

Timing Restrictions for occupied nests:

TABLE 6 Recommended minimum distance to keep activities away from the nearest active nest site during the goshawk breeding season

Likelihood of impact	Activity	Timing restriction distance ^a
Very High	<ul style="list-style-type: none"> • Repeated low-elevation (< 300 m) helicopter overflights • Blasting • Continuously operating drilling rig or well flaring 	More than 1 km
High	<ul style="list-style-type: none"> • Road building (without blasting) • Logging • Pipeline and well-site construction • Detonation of seismic charges • Windtower construction • Seismic line cutting (mechanical) 	More than 500 m
Low and Moderate	<ul style="list-style-type: none"> • Silviculture activities (e.g., planting and site preparation) • Hauling (logs, heavy equipment, etc.) • Road maintenance • Seismic line hand-cutting • Industrial and public traffic 	No restrictions, regardless of distance; however, individual birds may still be affected by these activities, so caution should be taken and activities kept a practicable distance away, where possible.

^aThis is the distance from the known nest site within which timing restrictions should be applied. Any activities that are farther away than this distance do not need to apply timing restrictions.



Reserve Design for occupied nests:

Figure 8. Our Best Management Practices are to:

1. Define the actual location of the breeding area by conducting an extensive search (by a qualified biologist) to locate all active and alternative nests, and to assess suitable breeding habitat around those nests.
2. Include all known nests within the breeding area reserve and maintain contiguous mature and older forests (> 80 years with closed canopy) between the nests (i.e., no forest removal between nests).
3. Establish effective reserve sizes around breeding areas. Reserve size is the most important factor in determining whether the breeding area will continue to be occupied by goshawks over the long term. The likelihood of continued occupancy increases with reserve size: reserves of less than 25 ha are highly unlikely to continue to be occupied, and are thus considered ineffective; reserves of more than 100 ha have the highest likelihood of continued occupancy. Reserve size refers to the total amount of mature and old forest (closed canopy and > 80 years) within the breeding area.
4. Connect the breeding area reserve to adjacent forest to increase the effective size of the reserve and to provide forested linkages to foraging habitat beyond the breeding area.
5. Buffer nests from edge effects by maintaining at least 100 m, and where possible more than 200 m, of forest between nests and well-defined stand edges (where mature/old forests abut non-forested, herbaceous, and shrub-dominated stands of both natural and anthropogenic origin).
6. Minimize edge effects by designing reserves to be circular rather than linear in shape. Avoid linear reserves with sections less than 200 m wide.



FIGURE 8 The likelihood of breeding area abandonment associated with various breeding area reserve sizes following timber harvest within or around the breeding area. Reserve sizes less than 25 ha are highly unlikely to maintain breeding area occupancy and are classified as “ineffective.”

Under certain conditions and circumstances when the prescribing forester cannot determine a course of action, BCTS may decide to have an assessment completed by a Qualified Biologist and then implementation of these recommendations would be followed (after discussion with planning). A nest proven to be inactive will be retained standing.

3. Snags

Management Strategy will be determined by the prescribing forester based on legal and safety factors. It will ensure compliance with the BCTS TPG’s FSP and the SFI SFMP.

Snags can be managed for various reasons including perching and nesting activities. Dispersed leave tree

retention (snags) can supplement stocking, provide structural diversity, perching/nesting habitat and contribute to long-term coarse woody debris (CWD)

4. Coarse Woody Debris

Management Strategy will be determined by the prescribing forester based on legal and safety factors. It will ensure compliance with the BCTS TPG's FSP and the SFI SFMP.

Management strategies for CWD should not compromise close utilization standards or fire hazard abatement. In accordance with this, the retention of mature leave trees and dispersed stubs, existing CWD, non-merchantable logs and WDPs will contribute to long-term CWD objectives.

Post –harvest CWD target levels are:

A minimum 20 m³/ha in logs will be retained. The current approved FSP sets the minimum legal requirement (FPPR Section 68 (1b) at 4 logs per hectare, where a "log" is defined as having a minimum length of 2.0 m and a diameter of 7.5cm at one end for the interior).

CWD retention should be dispersed throughout the harvest area to manage levels existent on the site prior to harvest.

5. Wildlife Debris Piles (WDPs)

Management Strategy will be determined by the prescribing forester based on legal and safety factors. It will ensure compliance with the BCTS TPG's FSP and the SFI SFMP.

[Detail the number, location, construction parameters and size of WDPs – eg. Approximately [#] WDPs need to be created post-harvest; all WDPs should be located within 30 metres of WTRAs, riparian areas or adjacent plantations/immature timber types, but no WDPs to be created within 50 metres of a road. WDPs should be constructed of loosely layered CWD to the following dimensions: < 2 metres in height, 3 to 5 metres in width and 5 to 10 metres in length. Some longer pieces of CWD should radiate out from the WDP at an approximate 45 degree angle from the top of the pile and leading out from the pile to the adjacent forest (to provide cover in the winter and linear travel routes in the summer for small furbearers).]

6. Stub Trees

Management Strategy will be determined by the prescribing forester based on legal and safety factors. It will ensure compliance with the BCTS TPG's FSP and the SFI SFMP.

Healthy immature conifer species, mature deciduous species and Douglas Fir trees should be retained where operationally feasible and safe to do so. Dispersed leave tree retention can supplement stocking, provide structural diversity, perching/nesting habitat and contribute to long-term coarse woody debris (CWD).

Additionally, dispersed stubbed conifer trees should be created during Primary Forest Activities to offset potential impacts associated with large-scale salvage operations – the following actions should be undertaken at the site level:

- *Stub dispersed conifer trees to a height possible with conventional ground-based harvesting equipment (2 to 3 metres minimum);*
- *Where operationally feasible or stem distribution allows, target an inter-stub distance of 40 to 60 metres where emphasis is placed on retaining stubs > 30 cm DBH or those containing existing cavities (dispersed mature live trees can replace stub trees); and*
- *Do not leave stub trees within 50 metres of adjacent stand types or WTRAs.*
- *Dispersed stubbed trees should be created during Primary Forest Activities around wet depressional*

areas and machine free zones (MFZs).

7. Mineral Licks

Assess intensity of lick's use. If operationally feasible, remove lick and any trails associated with it a minimum of 100 metres from the block/road location to allow undisturbed use of the sites. If not operationally feasible, a windfirm buffer must be created, a minimum of 2 ha or greater in size that connects it to the mature timber. All access trails must be protected as well. Under certain conditions and circumstances when the prescribing forester cannot determine a course of action, BCTS may decide to have an assessment completed by a Qualified Biologist and then implementation of these recommendations would be followed (after discussion with planning).

8. Denning Sites

Attempt to safely identify the den type. Determine if there are any more features in the area. If operationally feasible, move the road/block location a minimum of 100 to 500 metres from the den site. If not operationally feasible, a windfirm buffer must be created, a minimum of 2 ha or greater in size that connects it to mature timber. Under certain conditions and circumstances when the prescribing forester cannot determine a course of action, BCTS may decide to have an assessment completed by a Qualified Biologist and then implementation of these recommendations would be followed (after discussion with planning).

Links and Resources:

- BC Species and Ecosystems Explorer: <http://www.env.gov.bc.ca/atrisk/toolintro.html>
- PG BCTS Forms and Info/ Species at Risk TPG 2014 version.pptx/ May 2013 Management Guide - \\mitten.dmz\ftp\TPG\external\publish\Species at Risk (copy link and paste in browser).

Approved by TSM:



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