



NOTICE – INDICATORS OF THE AMOUNT, DISTRIBUTION AND ATTRIBUTES OF WILDLIFE HABITAT REQUIRED FOR THE WINTER SURVIVAL OF UNGULATE SPECIES IN THE FRASER TIMBER SUPPLY AREA

This notice is given under the authority of section 7(2) of the *Forest Planning and Practices Regulation* (B.C. Reg. 14/04) and 9 (3) of the *Woodlot License Planning and Practices Regulation* (B.C. Reg. 21/04).

The following notice includes indicators of the amount, distribution and attributes of wildlife habitat required for the winter survival of the ungulate species outlined in Schedule 1.

This notice applies as specified within the Fraser Timber Supply Area.

WLAP staff will provide assistance to all licensees in the Fraser TSA when these licensees develop results and strategies for FSP. WLAP will help to spatially locate habitat suitable for the winter survival of ungulate species to ensure that results or strategies are biologically appropriate and wherever possible, overlap with existing and proposed Old Growth Management Areas, riparian reserves and other areas that have been removed from timber harvesting, and areas subject to other operational constraints (example: terrain challenges, SPOW areas, scenic areas with VQO).

Schedule 1

Fraser Timber Supply Area

I) Ungulate Species:

Mountain Goat (*Oreamnos americanus*)

Amount:

1500 ha of timber harvesting landbase.

Distribution:

The amount of habitat referenced above must be distributed to provide:

1. Individual winter range areas for Mountain Goats in the Fraser TSA which exhibit Coastal, Interior and/or Transitional behavioural ecotypes. Individual winter range areas must be > 50 ha in size.
2. Areas exhibiting current use by mountain goats during critical winter conditions (generally December through February).

Attributes:

1. Escape terrain: aspects ranging from east, through south, to west consisting of rock outcrops, cliffs or bluff complexes; slopes $>26.5^\circ$ (50%) and $<51.3^\circ$ (125%); and elevations ranging from 200m to 2500m.
2. Accessible and abundant forage in close proximity to escape terrain: areas of low snow-loading that allow goats to access available forage: forest canopies with high snow interception characteristics, and/or warm, southerly aspects with high melt and snow-shedding characteristics; areas that provide high quality forage (i.e., rooted forage and arboreal litterfall, including lichens).
3. Critical stand structure features: mature and old growth (ideally old growth [>250 years] but can include stands >100 years of age) stands, typically Douglas-fir (*Pseudotsuga menziesii*) dominated, with large, well-developed crowns. Stands can be distributed as: larger forested patches surrounding escape terrain; smaller scattered patches within and adjacent escape terrain; and as small groups of trees located on bluff complexes and along cliffs within the escape terrain.
4. Snow interception and thermal cover: Douglas-fir (*Pseudotsuga menziesii*) dominated coniferous stands at least 12 m in height with large, well-developed crowns and a canopy closure exceeding 70%.

II) Ungulate Species:

Black-tailed & Mule Deer (*Odocoileus hemionus sp.*)

Amount:

3500 ha of timber harvesting landbase.

Distribution:

The amount of habitat referenced above must be distributed to provide:

1. Individual winter range areas for Black-tailed & Mule Deer with a minimum size of 50 ha, distributed across the Timber Supply Area. In drainages where, due to past forest harvest, no stands larger than 50 ha which contain the attributes listed below currently exist, selection of winter range areas greater than 20ha can be considered as adequate; and
2. Areas exhibiting use by deer during critical winter conditions (generally December through February).

Attributes:

1. Critical stand structure features (including snow interception and thermal cover): mature and old growth (ideally old growth [>250 years] but can include stands >100 years of age) Douglas-fir (*Pseudotsuga menziesii*) dominated stands with large, well-developed crowns that provide canopy closures ranging from 65-90%, and preferably greater than 12 m in height.
2. Topographic features: south east, through south, to west aspects; moderate to steep slopes (40-100%); lower to moderate elevations (>200 m and $< 1,000$ m); minimal shading from adjacent mountains; and presence of open rock bluffs with southerly

aspects. Locate winter ranges in the moderate and deep snow zones. Thermal cover requirements in the low and the very deep snow zones.

3. Important winter forage species include: Douglas-fir (*Pseudotsuga menziesii*) (primarily from litterfall); Salal (*Gaultheria shallon*); saskatoon (*Amelanchier alnifolia*); Douglas maple (*Acer glabrum*); willow (*Salix* spp.); falsebox (*Pachistima myrsinites*); rose (*Rosa* spp.); snowbush (*Ceanothus velutinus*); red-stemmed ceanothus (*Ceanothus sanguineus*); red-osier dogwood (*Cornus sericea*); high-bush cranberry (*Viburnum edule*); huckleberry (*Vaccinium* spp.); beaked hazelnut (*Corylus cornuta*); thimbleberry (*Rubus parviflorus*); Oregon-grape (*Mahonia aquifolium* spp.); raspberry (*Rubus* spp.); and Arboreal lichens, specifically *Alectoria* spp., *Bryoria* spp., and *Usnea* spp..