

TFL 23

Caribou Assessment Report

CAPE HORN

Block(s): 22, 23, 24 and 25

Submitted to:

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BACKGROUND

Planning Unit

CP 478

AREA:

MAP: see Figure 1

Description

The proposed development area is in the ICHmw2 biogeoclimatic variant.

PEM-based seasonal habitat suitability mapping rates the area of the proposed cutblocks as high for early winter (WE), and low for the late winter (LW), spring (P) and summer/fall (S/F) seasons.



Caribou telemetry point locations identified early winter caribou use above the proposed cutblocks on the ridge to the northeast, as well as to the south across Cape Horn Creek

Caribou management strategy for TFL23 (LUP Working Group 2002) identifies that blocks 22, 23 and 25 are within the mapped caribou special management zone (Zone 2). Block 24 is mostly outside the mapped caribou management area.

RESULTS and DISCUSSION

Reconnaissance-level Survey

Doug Seaton and Andrew Alstad conducted a field reconnaissance-level survey of the ridgeline above and to the northeast of the development area on September 26, 2003. Access was by helicopter and foot. A trail runs along the length of this ridgeline. Evidence (scat and tracks) of caribou, deer and moose was found along this trail. Adult and juvenile caribou sign (scat) was observed along the top of this ridge. Evidence of seasonal use (tracks and scrapes) is found along this trail. Field comments are summarized in Appendix I, a satellite image field map is illustrated in Appendix II, caribou habitat assessments were conducted using Wildlife Habitat Assessment field forms (FS882 (5) HRE 98/5; Appendix III), and PEM-based habitat mapping results are illustrated in Appendix IV. Arboreal lichen abundance was estimated according to Armleder et al (1992).

No additional reconnaissance-level surveys have been completed in this planning unit.

Stand-level Surveys

Block 22

Doug Seaton conducted a stand-level survey of block 22 on August 14, 2003. Access was by foot.

Evidence of Use:

No evidence of use by caribou was observed in the area surveyed in block 22.

Habitat Evaluation:

This is a two-storied stand with average lichen load class 3 (90% *Alectoria spp.*) in the upper canopy. Low lichen attributes are found in the lower canopy. Field habitat suitability ratings for early winter are moderate, rather than high as suggested by PEM based caribou habitat ratings. Very low late winter and low spring and summer/fall are consistent with PEM based ratings.

Other Species:

A small amount of deer scat was found in the west half of the block and bear scat was found along the creek bottom to the south. A game trail intersects the proposed road on the west boundary of block 22.

Block 23

Doug Seaton conducted a stand level survey of block 23 on August 14, 2003. Access was by foot.

Evidence of Use:

No evidence of use by caribou was observed in the area surveyed in block 23.

Habitat Evaluation:

This two-storied stand has an average lichen load class 2 (95% *Bryoria spp.*) in the upper canopy. Low lichen attributes are found in the lower canopy. Field caribou habitat suitability ratings for early winter are low, rather than high as suggested by PEM based habitat mapping. Very low late winter and low spring and summer/fall are consistent with PEM based ratings.

Other Species:

A well used game trail runs roughly north south, intersecting the proposed road along the east boundary of block 23.

Block 24

Doug Seaton conducted a stand level survey of block 24 on August 15, 2003. Access was by foot.

Evidence of Use:

A small amount of caribou scat was observed in block 24.

Habitat Evaluation:

The lower part of this block is a two-storied stand with an average lichen rating of class 4 (75% *Bryoria spp.*) in the upper canopy. The lower canopy is well

inoculated with lichen. Dead snags provide good litterfall and blowdown feeding opportunities. Caribou scat was found in the middle of this block.

Field habitat suitability ratings are consistent with PEM based habitat mapping. High for early winter, low late winter, spring and summer/fall. The upper east portion of block 24 has higher early winter values. The timber changes to PI with lichen class 3 (75% *Bryoria spp.*). This lichen can be reached from ground level.

Other Species:

The upper west portion of block 24 has evidence of use by deer (scat and tracks).

Block 25

Doug Seaton conducted a stand level survey of block 25 on August 15, 2003. Access was by foot. Andrew Alstad and Doug Seaton conducted a stand level survey on September 26, 2003.

Evidence of Use:

A dead caribou was found along the upper north block boundary in the spring of 2003. Well defined trails run east-west in the north part of block 25. Caribou scat was observed in the southeast portion of block 25.

Habitat Evaluation:

Doug Seaton conducted a stand level survey of block 25 on August 15, 2003. Access was by foot. Andrew Alstad and Doug Seaton conducted a stand level survey on September 26, 2003.

The south quadrant of this block is field rated as having high suitability for early winter and low suitability for all other seasons. This is consistent with PEM based habitat mapping. The north portion of block 25 has a closed canopy with low lichen loading (<class1) and lacks herbaceous vegetation. Field ratings for the north half of block 25 are low for all seasons.

Other Species:

Well-defined trails run east - west, up and down the ridgelines through the north portion of block 25.

Recommendations

Block 22

This two-storied stand has medium lichen loading in the top story with little lichen in the lower story, with a moderate early winter rating. The lack of herbaceous forest floor cover gives it a low rating for all other seasons.

Recommendation:

Retain groups of trees within the block to facilitate lichen inoculation. Spacing between groups should be 40 – 80 meters with retention of 25-40 trees per group.

Block 23

The east half of block 23 has poor suitability for caribou in all seasons. A well-defined trail runs along the east boundary of this block.

Recommendation:

Move block boundary to 75 meters west of the trail along the east border.

Retain groups of trees within the block to facilitate lichen inoculation. Spacing between groups should be 40 – 80 meters with retention of 25-40 trees in each group.

Block 24

Block 24 has a variety of habitat, some with heavy lichen loading. There is evidence of recent caribou use. This block has high early winter and low all other season suitability for caribou. There is evidence of a high amount of deer use along the upper east portion of the block.

Recommendation:

Harvest small groups (app. 0.5 ha.) with a retention of 66% of the existing basal area.

Harvest narrow strips with a retention of 66% of the existing basal area through steep ground. Leave strips should be three times as wide as harvest corridors.

Remove the top east corner (PI type) from the cutblock

Block 25

The majority of block 25 has low suitability for caribou in all seasons. The timber above and to the west of this block has high suitability for early winter. This PI type extends down through the top of the south end of block 25, as well as block 24.

Recommendation:

Target existing trails as leave strips. Retain timber for 75 meters on each side of the identified trails. Harvest the remainder of the block with internal retention of groups of trees to facilitate lichen inoculation. Spacing between groups should be 50 – 80 meters with retention of 10-20+ trees in each group.

References Cited

- Armleder, H.M., S. Stevenson, and S.D. Walker. 1992. Estimating the Abundance of Arboreal Forage Lichens. Land Management Handbook Field Guide Insert 7. Ministry of Forests, Research Program, Victoria, BC.
- Hamilton, D., and S.F. Wilson. 2002. Central Selkirk Mountain Caribou Habitat Use and Species-habitat Model for TFL23. Prepared for Pope & Talbot, Nakusp, BC.
- LUP (Landscape Unit Planning) Working Group. 2002. Caribou Management in TFL#23: Agreement for District-Level Implementation Issues. Prepared for Arrow Forest District, Castlegar, BC.

List of Contacts

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List of Appendices

- Appendix I: Field Comments
- Appendix II: Map
- Appendix III: WHA field cards
- Appendix IV: PEM Based Caribou Habitat Ratings

Appendix I: Field Comments

<u>COMMENTS</u> Supplemental Field Form for TFL#23 Caribou Assessment			
To be used in conjunction with the WHA and GIF field forms and PU field map			
COMMENTS (Reference No. to also be located on Field Map)			
Reference No.			COMMENTS
1			Bear, deer trail. Bear scat. Very low lichen loading. Pw is all dead, and no longer bearing lichen.
2			WHA plot
3			Fresh deer sign feeding along slide chute, WHA plot
4			Moose bed. Heavy browsing (winter) on elder berry and Douglas maple
5			Moose scat
6			Deer scat, and tracks, WHA plot
7			Low lichen loading, WHA plot
8			Bear den
9			
10			
11			
12			

Appendix II: Map

Appendix III: WHA field card

Appendix IV: PEM Based Caribou Habitat Ratings