

TFL 23

Caribou Assessment Report

HALFWAY RIVER (BURN)

Block(s): 37, 38, 39, 40, 41, 44, 45, 46, 47, 48, and 49

Submitted to:

Cam Leitch, RPF
Pope & Talbot
Nakusp Division
Nakusp, BC

Prepared by:

Doug Seaton
Cape Horn Consulting Inc.
Nakusp, BC
&
Dennis Hamilton, RPBio.
Nanuq Consulting Ltd
Nelson, BC

February 4, 2004

BACKGROUND

Planning Unit

Cp 597

AREA: Halfway River

MAP: see Figure 1

Description

All proposed blocks are in the ICHmw2 biogeoclimatic variant.

PEM-based seasonal habitat suitability mapping rates blocks 37 and 38 as high for early winter (WE) season and low for other seasons. Blocks 40, 41, 44 and 45 are rated as moderate early winter and low all other seasons. Blocks 46 to 49 are rated as low for all seasons (Hamilton and Wilson 2002).

Caribou telemetry point locations identified early winter caribou use uphill and to the west of block 44, and to the south of block 39. A spring location is found in block 45. Caribou telemetry locations identify seasonal migration through halfway valley from the early winter and late winter habitat to the north and south of the proposed development area.

Caribou management strategy for TFL23 (LUP Working Group 2002) identifies that blocks 39, 41, 44, 45, 46, 47, 48 and 49 are within the mapped caribou special management zone (Zone 2). A caribou connectivity management zone (Zone 1) has been mapped to the east of block 49. Blocks 37, 38, and 40 are not within the mapped caribou area. Existing category “A” blocks are adjacent to blocks 37 and 38.

A significant amount of caribou habitat on the ridges to the south of blocks 39, 47 and 48 was destroyed by fire in the summer of 2003. This may alter traditional seasonal use patterns through this area in the future (see Recommendations).

RESULTS and DISCUSSION

Reconnaissance-level Survey

Doug Seaton conducted a field reconnaissance-level survey of the proposed development area by snowmobile on December 10, 2003. All cutblocks identified for development were surveyed. No evidence of recent use was observed. 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).

During the third week of November 2003, three caribou were spotted at 22km on river road (B. Command, *pers. com.*).

During the second and third week of January 2004, several caribou were using the area part way up Deep creek to the south east of block 39. (B. Command, *pers. com.*).

Moose sign is present along river road up to 4km. Blocks 44 – 47 are heavily used by whitetail and mule deer during the early winter. (D. Seaton, *pers. obs.*).

Stand-level Surveys

Block 37

Doug Seaton and Dave Seaton conducted a stand-level survey of block 37 on January 8, 2004. Access was by snowmobile.

Evidence of Use:

No evidence of recent caribou use was observed.

Habitat Evaluation:

Field habitat suitability ratings for caribou confirm the PEM-based caribou habitat suitability ratings of high for early winter and low for all other seasons.

This is a mixed forest with abundant lichen, class 4 (85% *Alectoria spp.*). Lichen can be reached at ground level.

Other Species:

Mule deer are currently using this block and surrounding area. Snow depth was estimated at 60cm.

Block 38

Doug Seaton and Dave Seaton conducted a stand-level survey of block 38 on January 8, 2004. Access was by snowmobile.

Evidence of Use:

No evidence of recent caribou use was observed.

Habitat Evaluation:

Field habitat suitability ratings for caribou confirm the PEM-based caribou habitat suitability ratings of high for early winter and low for all other seasons.

This is a mixed forest with abundant lichen, class 3 (50% *Alectoria spp.*). Lichen can be reached at ground level throughout the block.

Other Species:

Mule deer are currently feeding throughout this block and surrounding area. Snow depth was estimated at 60cm.

Block 40

Doug Seaton and Dennis Hamilton conducted a stand level survey of block 44 on January 12, 2004. Access was by snowmobile.

Evidence of Use:

No evidence of recent caribou use was observed

Habitat Evaluation:

Field observations confirm the PEM-based caribou habitat suitability ratings of high for early winter and low for all other seasons.

This is a mixed forest with abundant lichen, class 3 (50% *Alectoria spp.*). Lichen can be reached at ground level throughout the block. Smaller trees (20cm) are well inoculated with lichen throughout the proposed block.

Other Species:

This block is used heavily by deer in the early winter. (D. Seaton, *pers. obs.*)

Block 41

Doug Seaton, Warren Flesaker and Len Stratten conducted a stand level survey of block 41 on February 19, 2004. Access was by snowmobile.

Evidence of Use:

No evidence of recent caribou use was observed

Habitat Evaluation:

Field observations confirm the PEM-based caribou habitat suitability ratings of high for early winter and low for all other seasons.

This is a mixed forest with abundant lichen, class 3 (95% *Alectoria spp.*). Lichen can be reached at ground level throughout the block. Smaller trees (20cm) are well inoculated with lichen throughout the proposed block.

Other Species:

This block is used heavily by deer in the early winter (D. Seaton, *pers. obs.*).

Block 44

Doug Seaton, Warren Flesaker and Len Stratten conducted a stand level survey of block 41 on February 19, 2004. Access was by snowmobile.

Evidence of Use:

No evidence of recent caribou use was observed

Habitat Evaluation:

Field observations confirm the PEM-based caribou habitat suitability ratings of high for early winter and low for all other seasons.

This is a mixed forest with abundant lichen, class 3 (85% *Alectoria spp.*) Lichen can be reached at ground level throughout the block. Smaller trees (20cm) are well inoculated with lichen throughout the proposed block.

Other Species:

This block is used heavily by deer in the early winter. (D. Seaton, *pers. obs.*)

Block 45

Doug Seaton and Dennis Hamilton conducted a stand level survey of block 45 on January 12, 2004. Access was by snowmobile.

Evidence of Use:

No evidence of recent caribou use was observed

Habitat Evaluation:

Field observations indicate caribou habitat suitability rating for this block is high for early winter rather than low as PEM based habitat suitability suggests.

This is a mixed forest with abundant lichen, class 4 (95% *Alectoria spp.*). Lichen can be reached at ground level throughout the block. Smaller trees (20cm) are well inoculated with lichen throughout the proposed block.

Other Species:

This block is used by deer in the early winter. (D. Seaton, *pers. obs.*)

Block 46

Doug Seaton and Dennis Hamilton conducted a stand level survey of block 46 on January 12, 2004. Access was by snowmobile.

Evidence of Use:

No evidence of recent caribou use was observed

Habitat Evaluation:

Field observations indicate caribou habitat suitability rating for this block is high for early winter rather than low as PEM based habitat suitability suggests.

This is a well-spaced mixed forest with abundant lichen, class 3 (95% *Alectoria spp.*). Lichen can be reached at ground level throughout the block. Smaller trees (20cm) are well inoculated with lichen throughout the proposed block.

The trees in the lower 1/8 of this block are tightly spaced, with less lichen.

Other Species:

Evidence of deer browsing was found throughout the proposed block.

An active bear den is in a large cedar tree in the lower part of this block.

Block 47

Doug Seaton and Dennis Hamilton conducted a stand level survey of block 47 on January 12, 2004. Access was by snowmobile.

Evidence of Use:

No evidence of recent caribou use was observed

Habitat Evaluation:

Field observations indicate caribou habitat suitability rating for this block is high for early winter rather than low as PEM based habitat suitability suggests.

This is a mixed forest with abundant lichen, class 3 (95% *Alectoria spp.*). Lichen can be reached at ground level throughout the block. Smaller trees (20cm) are well inoculated with lichen throughout the proposed block.

Other Species:

Evidence of deer browsing was found throughout the proposed block.

Block 48

Doug Seaton and Dennis Hamilton conducted a stand level survey of block 48 on January 12, 2004. Access was by snowmobile.

Evidence of Use:

No evidence of recent caribou use was observed

Habitat Evaluation:

Field observations indicate caribou habitat suitability rating for this block is high for early winter rather than low as PEM based habitat suitability suggests.

This is a mixed forest with abundant lichen, class 3 (95% *Alectoria spp.*). Lichen can be reached at ground level throughout the block. Smaller trees (20cm) are well inoculated with lichen throughout the proposed block.

Other Species:

No evidence of use was observed

Block 49

Doug Seaton and David Seaton conducted a stand level survey of block 49 on January 10, 2004. Access was by snowmobile and snowshoe.

Evidence of Use:

No evidence of recent caribou use was observed

Habitat Evaluation:

Field observations indicate caribou habitat suitability rating for this block is high for early winter rather than low as PEM based habitat suitability suggests.

This is an old transitional forest with heavy lichen loading class 5 (95% *Alectoria spp.*). Lichen can be reached from ground level throughout the block. A recent clearcut borders this block on its top (north east) side. A small slide chute borders the north side.

Recommendations

A follow-up snow-free summer/fall site visit will be required to further assess caribou use in these proposed blocks (i.e., pellets, tracks, location of any established travel routes and trails, etc.).

Block 37

Single tree removal of overstory trees only. Retain all undamaged trees ≤ 20 cm DBH throughout the block. Leave legacy trees currently supporting lichens adjacent to existing clearcuts for lichen inoculation purposes.

Block 38

Harvest in small groups (< 0.5 ha. openings) with 66% of the existing area retained within the proposed block.

Block 39

No harvest. Leave intact as a travel corridor between the heavily used habitat surrounding upper Wilkie creek to the north, and the all-season caribou habitat found in Deep creek to the south.

Block 40

Single tree removal of overstory trees only. Retain all undamaged trees ≤ 25 cm DBH throughout the block. Leave legacy trees (chosen for abundant lichen) adjacent to existing clearcuts for lichen inoculation purposes.

Block 41

Single tree removal of overstory trees only. Retain all undamaged trees ≤ 25 cm DBH throughout the block. Leave legacy trees (currently supporting lichen) adjacent to existing clearcuts for lichen inoculation purposes.

Block 44

Single tree removal of overstory trees only. Retain all undamaged trees ≤ 25 cm DBH throughout the block. Leave legacy trees (currently supporting lichen) adjacent to existing clearcuts for lichen inoculation purposes.

Block 45

Single tree removal of overstory trees only. Retain all undamaged trees ≤ 25 cm DBH throughout the block. Leave legacy trees (currently supporting lichen) adjacent to existing clearcuts for lichen inoculation purposes.

Block 46

Single tree removal of overstory trees only. Retain all undamaged trees ≤ 25 cm DBH throughout the block. Leave legacy trees (currently supporting lichen) adjacent to existing clearcuts for lichen inoculation purposes.

Create small openings or strips less than 0.5ha. through the lower 1/8 of this block. Establish a wildlife tree patch around the bear den located in the lower part of this block

Block 47

No harvest. Leave intact as a travel corridor between the heavily used habitat surrounding upper Wilkie creek to the north, and the all season habitat found in Deep creek to the south

Block 48

No harvest. Leave intact to maintain connectivity, travel corridor between the heavily used habitat surrounding upper Wilkie creek to the north, and the all season habitat found in Deep creek to the south.

Block 49

No harvest in order to prevent further fragmentation of the early winter habitat through the connectivity #1 zone mapped along the east border of this proposed block.

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

- Command, Bruce. Trapper, Nakusp, BC.
- Seaton, Doug. Wildlife Consultant, Nakusp, BC.

List of Appendices

- Appendix I: Field Comments
- Appendix II: Map
- Appendix III: WHA field cards
- Appendix III: 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 field forms and PU field map			
COMMENTS (Reference No. to also be located on Field Map)			
Reference No.	Lat/North	Long/East	COMMENTS
1			Area to the south of proposed block 39 disturbed by fire in 2003.
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			

Appendix II: Map

Appendix III: WHA field cards

Appendix III: PEM Based Caribou Habitat Ratings

