

**MEMORANDUM OF UNDERSTANDING
REGARDING MANAGEMENT OF
HELICOPTER AND SNOW-CAT SKIING
IN MOUNTAIN CARIBOU HABITATS**

BETWEEN:

The Province of British Columbia Represented by

The Ministries of
**Forests, Lands and Natural Resource Operations, and
Environment,**

AND:

Mike Wiegele Helicopter Skiing

(Collectively referred to as the "Parties")

WHEREAS, the Ministry of Forests, Lands and Natural Resource Operations is responsible for policy, administration, and use of Crown land for adventure tourism purposes such as helicopter and snow-cat skiing and the implementation of recovery actions for species at risk;

AND WHEREAS the Ministry of Environment is responsible for policy, recovery planning, and regulatory development for species at risk such as mountain caribou;

AND WHEREAS it is part of the mission of Mike Wiegele Helicopter Skiing (MWHS) to set standards for environmental stewardship for the helicopter and snow-cat skiing industry and that wildlife issues are one of a number of areas addressed in this Memorandum of Understanding and in the "Stewardship of Mountain Ecosystems - Best Practices for Sustainability" manual;

AND WHEREAS the Parties agree that there is a range of human, biophysical and climatic factors that may affect recovery of mountain caribou in British Columbia;

AND WHEREAS the Parties agree that – at the time of signing of this agreement – there is no established causal link between declines of mountain caribou and activities associated with MWHS;

AND WHEREAS the Parties recognize that MWHS have developed, and continue to develop wildlife operating practices, and that these practices have improved significantly in response to mountain caribou conservation concerns;

AND WHEREAS the Parties agree on the need to understand the effects, if any, of helicopter and snow-cat skiing on mountain caribou;

AND WHEREAS the Parties agree on the need to develop a more consistent approach in the way commercial backcountry recreation is managed in BC;

THEREFORE the Parties agree to enter this Memorandum of Understanding as follows:

Principles

Activities undertaken in the context of this memorandum will be based on the following principles:

- **Consistency with mountain caribou recovery objectives** – any actions or initiatives undertaken need to be consistent with relevant objectives set for mountain caribou recovery at the provincial level through the Ministry of Natural Resource Operations.
- **The role of science** – to the greatest extent practicable, proposed management activities will be driven by the best available science¹ relevant to this sector. Where science is available, it will be immediately applied to the operational approaches taken by the sector.
- **Information sharing** – between the parties will allow for the application of the best science available to the specific realities of this sector and facilitate the development of the most effective management recommendations possible.
- **Adaptive management** – activities will – without putting the mountain caribou at risk – be considered as learning experiences that will allow for continued improvement of operational practices.
- **The role of local processes** – it is also recognized that in some parts of the province, existing local processes (such as land use plans, tenure review committees, etc) should, where appropriate and consistent with the current provincial recovery process, continue to play a key role in ensuring that the operational practices (below) are implemented, monitored and improved.
- **Ecosystem approach** – while the focus of this agreement is on mountain caribou, both parties recognize the need to take an ecosystem approach to mountain operations. This normally means that activities and procedures will be conducted in a manner that recognizes and addresses the need to maintain the integrity of ecosystem processes, functions and native species.

Operating Practices

In order to ensure appropriate and consistent operational approaches in all areas of the province, the Parties agree that MWHS will operate under authorized tenures in a manner that is consistent with their government-approved management plan and the operational practices outlined in Appendix A.

It is recognized that MWHS may need to enhance or modify these practices in specific areas where, through collaborative efforts with the Ministries of Natural Resource Operations and Environment, and the operator, an agreement is reached that such enhancements or modifications are necessary. It is also recognized that differences between these practices and those currently being used by operators under government-approved management plans will be dealt with in a manner that is consistent with implementation of the Tourism-Wildlife Guidelines.

Research and Adaptive Management Trials

The Parties agree to work together to develop, pursue funding for, and implement specific research projects and adaptive management trials which will address questions related to the potential effects of sector activities on mountain caribou and their habitats.

¹ For the purposes of this MOU, “best available science” is defined as scientific research involving the testing of hypotheses using generally-accepted methodologies, or less rigorous adaptive management trials.

Further, that MWHS agree to support – through expert consultation and information sharing – the provincial mountain caribou recovery implementation process currently underway under the auspices of the Ministry of Natural Resource Operations.

Monitoring and Inventory

The Parties agree to work together, along with other partners in government, industry and conservation groups, to develop monitoring and inventory projects that will:

- monitor the effectiveness of, and compliance with the operating practices in Appendix A; and
- continue to build an understanding of the distribution, sub-population sizes and nature of habitat use by mountain caribou and caribou-human interactions.

Communications

The Parties agree to work together to prepare communication materials relating to any aspect of this agreement, and to look for opportunities to promote this agreement through academic, professional and public presentations.

Dispute Resolution

The Parties agree to resolve disputes related to this agreement, or related to activities or projects undertaken through this agreement through the manager responsible for mountain caribou recovery (or the individual otherwise designated by government as being responsible for mountain caribou recovery) and MWHS. Only where disputes cannot be resolved at those levels will resolution be pursued at higher levels.

Term

The Parties agree that the term of this agreement will be in effect from November 26, 2014 until June 30, 2017. This term will allow the parties to continue to collaboratively work together to manage sector activities as per this MOU and other related documents in order to support government's mountain caribou recovery efforts. At any time, each party may request to amend this MOU, to remove and/or add practices and other management tools that – using the best available science – better support government's mountain caribou recovery efforts, and to extend or cancel this agreement, but both parties must collaboratively discuss and agree to any such amendments, extensions or cancellations.

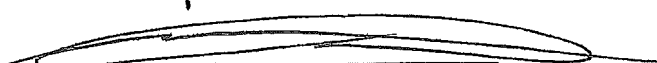
Signatories:



Hon. Mary Polak
Minister, Environment



Hon. Steve Thomson
Minister, Natural Resource Operations



Michelle Wiegele
Owner & President, MWHS

Appendix A

Wildlife Operating Procedures for Helicopter and Snowcat Skiing in Mountain Caribou Habitats

A.) Objectives

The objectives are these practices are to ensure:

- i. that operator activities in all MWHS tenures that overlap with mountain caribou habitats do not result in displacement² of mountain caribou from their preferred winter habitats;
- ii. consistency in the approach by MWHS operating in mountain caribou habitat; and
- iii. consistency in the approach by government agencies in managing and administering tenured activities for MWHS.

B.) Recognition of Habitats and Caribou Use of Habitats

MWHS will work regularly with the Ministries of Natural Resource Operations and Environment to ensure that they are aware of:

- i. mapped mountain caribou habitats in their operating areas;
- ii. management activities related to mountain caribou being undertaken within their region; and
- iii. the most current information available with respect to mountain caribou habitat use and other important information related to mountain caribou recovery efforts.

MWHS will use this information in efforts to achieve the objective of "no displacement." However, MWHS will use the procedures in this appendix in any areas where mountain caribou are located, whether or not they are in mapped mountain caribou habitats.

C.) Staff Training

MWHS will commit to include at least one 2-hour module about mountain caribou (habitats, habitat use, and the company's practices to address same) in its annual training of staff (guides, pilots, snow-cat operators, etc) prior to each operating season. Where practical, the company will use outside experts to assist with the training.

² For the purpose of this agreement, displacement is defined as the temporary (for a period of days or longer) or permanent abandonment of suitable and occupied mountain caribou habitat caused by the activities of the operator.

The training will review:

- i. relevant aspects of mountain caribou biology, including general life history characteristics and habitat use;
- ii. action an up-date on current recovery efforts;
- iii. scientific and management literature related to the effects of helicopters, snow-cats and skiing activities on the behaviour of mountain caribou and other wild ungulates;
- iv. company operating procedures, including:
 - a. office and field procedures designed to minimize the probability of displacing mountain caribou during activities;
 - b. actions taken when mountain caribou are encountered;
 - c. office procedures for recording observations and actions taken; and
 - d. roles and responsibilities of guides, pilots, snow-cat operators and other relevant staff.

D.) Information Management

MWHS operating in mountain caribou habitat will commit to developing an information management system that captures relevant mountain caribou information (e.g. current mapping, telemetry locations, etc.) as well as wildlife observations (tracks and animals) made by field staff and any operational decisions arising from those observations. The system, which can be either manual or computer-based, will:

- ensure that observations are consistent and accurate;
- include the location of observed animals (to the nearest 100 m, using UTM coordinates), the behaviour of those animals when observed, and their reaction to the presence of humans;
- include a description of the specific operational actions taken by the operator to prevent displacement; and
- ensure that the most current information is used to minimize the probability of displacing animals during activities.

Furthermore, MWHS will submit the collected data annually as outlined in the *reporting template* and the compliance *report card* identified in the document entitled "Implementation and Effectiveness Monitoring of Standard Operating Procedures for Heli-skiing and Snow-cat Skiing Activities in Mountain Caribou Habitat".

The *reporting template*, in the form of a Microsoft Excel spreadsheet, will be made available to MWHS. MWHS will submit information electronically using this template. Consistent data submission will ensure efficient and timely analysis of data. The deadline for submission will be 31 May of each year. MWHS will submit the *reporting template* to Chris Ritchie, Manager, Mountain Caribou Recovery Implementation, Ministry of Natural Resource Operations (unless otherwise advised through this agreement).. MWHS will be provided with contact information to ensure consistent data submission is successful.

The compliance *report card* will also be made available to MWHS. It consists of a number of simple yes/no questions with additional fields for comment. The deadline for submission will be 31 May of each year. MWHS will submit the compliance *report card* to Chris Ritchie, Manager, Mountain Caribou Recovery Implementation, Ministry of Natural Resource Operations (unless otherwise advised through this agreement).

The Ministry of Environment will be responsible for all data warehousing, analysis, and reporting of monitoring data and outcomes. Any use or distribution request associated with data submitted as per the *reporting template* will need to be jointly approved/denied by the Manager, Knowledge Management Branch, Ministry of Environment and Chris Ritchie, Manager, Mountain Caribou Recovery Implementation, Ministry of Natural Resource Operations, in collaboration with a MWHS representative.

The information and data submitted to government may be used and analyzed to address specific inventory or research questions related to government's mountain caribou recovery implementation plan. More specifically, the data will be used to report out to MWHS, and the public, as to the effectiveness of MWHS operating practices, which is outlined in the *Reporting of Outcomes* section of the document entitled "Implementation and Effectiveness Monitoring of Standard Operating Procedures for Heli-skiing and Snowcat Skiing Activities in Mountain Caribou Habitat".

All parties will continue to collaborate on information and data exchange that may support and benefit government's mountain caribou recovery implementation plan.

E.) Working with Other Organizations

From time-to-time, the parties to this agreement may work with other businesses, organizations, sector associations or clubs to enhance mountain recovery objectives.

The parties agree to directly include all affected organizations in those discussions (particularly those with legal tenure rights) to ensure that:

- all parties are able to comply with the expectations in this MOU; and
- their legal tenure rights and/or operational plans and practices are not adversely affected by the outcomes of those discussions.

F.) Operational Practices to Achieve Objectives

▪ Adapt Activities to Best Information Available

MWHS operating in areas used by mountain caribou will use their information system to:

- proactively highlight specific areas where the probability of displacing mountain caribou is relatively high and to ensure that these areas are not used for skiing until appropriate reconnaissance is completed to confirm that animals are not in the vicinity;
- when caribou are in the area, suspend activities there for at least 48 hours and until a reconnaissance can confirm that the caribou have left the area;
- sufficiently document their actions to demonstrate diligence and to improve the effectiveness of the procedures in meeting the "no displacement" objective.

▪ **Flight Paths and Flight Practices**

Except where client or staff safety is an issue, guides and pilots will choose helicopter flight paths to maintain at least 500 m. (1640 ft.) horizontal or vertical separation from occupied caribou habitats. This separation distance should be immediately increased if animals occupying these habitats show any evidence of being negatively disturbed (via "flight or fright" behaviours) by the presence of the machine.

The parties recognize that scientific evidence to support specific separation distances between helicopters and mountain caribou is weak due to the large number of variables that can influence the potential impact on animals (e.g. prior experience of caribou, group size and composition, size of aircraft and approach vectors). As a result, the parties agree to regularly review the effectiveness of the operating procedures in relation to current scientific and management literature and to modify separation distances (and other practices under the control of the operators) as required.

Guides and pilots will make all possible efforts to use regular and predictable flight paths to minimize disruption to animals and maximize the predictability of the human presence.

In all cases, known cow-calf groups will be completely avoided, and the helicopters will not be used for wildlife viewing.

▪ **Ski Run Development, Helicopter Landing and Pickup Site Development, and Snow Trail Development**

Operators will need to meet the general wildlife measures established for mountain caribou under the *Forest and Range Practices Act*, as well as follow the guidelines identified in the document entitled "A Guide to Commercial Backcountry Skiing Standard Operating Practices for Ski Run Development, Helicopter Landing and Pickup Site Development, and Snow Trail Development in Mountain Caribou Habitat", to ensure operators minimize mountain caribou habitat impacts and the potential for their disturbance and displacement from forest-related cutting activities associated with commercial heli-skiing and cat-skiing tenure holders.

▪ **Skiing**

If a MWHS guide observes mountain caribou on, or in the immediate vicinity of a ski run once he/she is on that run with a group, it is important to do all necessary (within the bounds of safety) to ensure that the presence of the group does not displace those animals. This will include any or all of the following:

- Choosing a ski line and/or pick-up that will take the group away from where the animal is located;
- Using slopes that are steeper than those preferred by caribou;
- Keeping groups of skiers together to minimize the chances of disturbing animals that may not be visible prior to starting a run and to avoid the possibility of separating animals from each other if they are encountered;
- Holding the group until the animal(s) has continued on its intended path;

- Immediately contacting any following groups by radio to ensure that they use other lines or runs to avoid any further disturbance of the animals;
- Ensuring that the incident is properly entered in the information management system and that further skiing activities do not occur until a reconnaissance trip can confirm that the animals are no longer in the area.

▫ **Miscellaneous**

Helicopter and snowcat skiing operators will minimize facility development in identified mapped caribou habitats.