Mountain Caribou Recovery Implementation Plan

Predator/Prey Component

Terms of Reference

These Terms of Reference (ToR) support the October 2007 BC Mountain Caribou Recovery Implementation Plan. They are intended to guide the development of a predator-prey management strategy which, in conjunction with the TORs provided for other objectives below, will support mountain caribou population recovery.

The BC Ministry of Environment (MoE) has the authority to carry out activities related to objectives 3 and 4 below. It is anticipated that recommendations from the regional biologists will be endorsed by MoE executive and the cross-government directors' team as part of the Mountain Caribou Recovery Implementation Plan.

Background: October 2007 Mountain Caribou Recovery Implementation Plan (MCRIP)

The goal of the MCRIP

To halt the decline of mountain caribou within seven years for each Planning Unit and recover mountain caribou to 1995 population levels (2500 animals) across the mountain caribou range within 20 years in those Planning Units with greater than 10 animals.

This recovery goal will be realized through the following six recovery objectives:

1. Protect all high suitability early and late winter habitat

The Mountain Caribou Science Team identified habitat loss as the underlying cause of mountain caribou population declines with mortality by predators as the proximate cause. Halting and reversing this habitat loss is a central tenet of the Recovery Implementation Plan. Government's goal is to protect 100% of the high suitability winter habitat within identified herd areas. Accommodations will be made to protect local forest operator viability and to address isolated or otherwise ineffective habitat by increasing protection elsewhere, ensuring future recruitment of high suitability habitat.

2. Ensure the effectiveness of protected habitat by managing the human footprint

Activities such as snowmobiling and commercial winter backcountry recreation (e.g., heli-skiing) can displace mountain caribou from their preferred early and later winter habitat. These activities need to be managed in order to secure effective habitat for mountain caribou. The Recovery Implementation Plan commits government to work with users to manage their activities in a manner that does not displace mountain caribou. Where activities cannot be undertaken without displacing mountain caribou, areas will be closed to those activities. Consultations with users are currently underway and many areas have already been closed through legal designations or voluntary agreements.

3. Manage predator populations where they are preventing the recovery of mountain caribou populations

Although habitat loss was identified by the Science Team as the underlying cause of mountain caribou population declines, unsustainable predation rates on mountain caribou have resulted in significant declines in mountain caribou populations since the mid-1990s. Thus, habitat protection alone will not reverse negative population trends in the short-term. The Recovery Implementation Plan commits government to undertake a variety of measure to address unsustainable predation rates on mountain caribou. These measures include changes to hunting allocations to increase harvest of cougars and wolves, incentives for trappers to trap wolves, non-lethal control measures such as wolf sterilization, and targeted removal of individuals or packs where necessary.

4. Manage the primary prey of caribou predators to better reflect historic conditions

Habitat alteration and hunting allocations combined with fewer severe winters in recent years have resulted in higher populations and wider distributions of moose and deer than hypothesized historic averages. This in turn has resulted in higher populations of predators, mainly wolves and cougars, which prey opportunistically on mountain caribou. The Recovery Implementation Plan commits government to reduce moose and deer populations through changes in hunting allocations to reduce predator numbers.

5. Augment critically endangered herds that are feasible to recover

Small populations are slow to recover, even with favourable environmental conditions. Augmenting small mountain caribou populations (10-50 individuals) with animals transplanted from healthy herds elsewhere can increase population growth rates and more immediately reduce the demographic risks associated with small populations. The Recovery Implementation Plan commits government to augmenting the southernmost mountain caribou herds with the possibility of augmenting two other small herds in the Central Kootenay. In addition, government is considering using maternity pens to protect transplanted cows and their newborn calves from predators.

6. Support adaptive management and research to increase the probability of successful recovery

The Science Team identified key uncertainties related to mountain caribou ecology and the efficacy of proposed recovery actions. Implementation efforts will need to be monitored closely and assessed to determine whether the strategy needs to be modified in order to meet recovery goals. In addition, research addressing knowledge gaps should be supported. The Recovery Implementation Plan includes the development of adaptive management and effectiveness monitoring plans for habitat, recreation and predator-prey management efforts.

These Terms of Reference addresses the implementation of Objective #3 - Manage predator populations where they are preventing the recovery of mountain caribou populations; and Objective #4 - Manage the primary prey of caribou predators to better reflect historic conditions.

Project Objectives:

To reduce adult caribou mortality and increase caribou calf survival by (a) conducting predator management activities consistent with MoE policy and (b) integrating prey harvest allocations concurrently with predator management activities to ensure effectiveness of predator management.

Project Description:

Government has committed to carrying out predator management activities to meet the mountain caribou recovery goal. These activities will be consistent with existing MoE policy "Protecting Species at Risk from Other Species" wildlife policy (Volume 4, Section 7, Subsection 4.01.3).

The purpose of these TOR is to outline a process to develop and recommend a predator-prey management strategy that will assist in reducing adult caribou mortality and increase caribou calf survival.

The Ecosystems Branch Caribou Coordinator will develop a provincial predator-prey management strategy in conjunction with the provincial ungulate specialist, regional biologists and herd experts to develop recommendations for each herd area.

Predator management is intended to provide a window of time to increase caribou survival in a manner that does not threaten the long-term viability of other indigenous species, Management of predators may include such options as capture and moving, sterilization, targeting specific individuals and packs known to prey on caribou, targeting specific individuals and packs inhabiting core caribou habitat, and killing through existing management means such as trapping and hunting. There is no intent to eradicate predators, only to reduce numbers in some select areas or to remove particular individuals in order to reduce the risk of predation on caribou.

Predator management will be conducted in an adaptive management context in which success will be measured principally by the response of caribou populations.

Guiding Principles:

- The interim and the long-term strategy will be approved by MoE Executive.
- Efforts will be prioritized provincially if resources are limited.
- An executive-approved communication plan will guide interactions with other sectors working on caribou recovery and the general public.
- Predator-prey management activities will be aligned with habitat protection measures and other activities supporting caribou recovery.
- A directed and targeted approach to predator and prey management will be taken, supported by a science-based biological rationale.
- Predator management will be limited to liberalization of hunting and trapping effort wherever possible.
- Monitoring of results will focus ongoing management to stabilize caribou numbers and their habitat to a state that can sustain normal predation pressures over the longer term, where feasible.

Organizational Units, Roles and Responsibilities:

MoE Executive*: (Kaaren Lewis, Al Martin, Nancy Wilkin, Joan Hesketh)*

Responsible for:

- Approving the interim predator strategy and the provincial predator-prey management strategy
- Approving recommended predator management activities consistent with ministry policy
- Approving communication plan
    - Communications plan, media relations, issues management

Key accountabilities include:

- Provide necessary resources to carry out activities
- Provide direction to caribou coordinator, carnivore specialist and ungulate specialist on integration of policy with regional operational activities including communications
- Issue management
- Communications management

Wildlife Science Manager (Alec Dale), Wildlife Management Manager (Ian Hatter), Caribou Coordinator (Steve Wilson), Ungulate Specialist (Gerry Kuzyk) and Carnivore Specialist Tony Hamilton (with contractor Rod Davis), Manager, First Nations Relations (Bryan Williams)

Responsible for:

- Working with and guiding regional biologists with advice on policy direction coming from the executive
- Developing an interim predator strategy to address management actions to be implemented immediately where the risk of predation to caribou is considered to be very high and currently sanctioned techniques are feasible
- Developing the provincial predator prey management strategy including but not limited to:
    1. Prey management rationale:
        a. Population objectives for deer and moose, aligned with mountain caribou recovery objectives by planning unit
        b. Other objectives related to recreation and biodiversity management
    2. Prey management actions:
        a. Current and proposed harvest regulations by region/MUs
    3. Prey population monitoring:
        a. Hunter survey data analysis of trends
        b. Targeted inventories and analysis
        c. Reporting in relation to population indicators

4. Prey management adjustments:
    a. Thresholds that trigger management change
    b. Preferred levers for additional management changes (bag limits, season timing, GOS/LEH, etc.)
5. Predator management:
    a. Population objectives for cougar and wolves, aligned with prey population and mountain caribou recovery objectives, by planning unit
    b. Other objectives related to recreation and biodiversity management
6. Predator management actions:
    a. Current and proposed harvest regulations by region/MUs
    b. Rationale and objectives for direct predator control by region/MUs in relation to predator-prey harvest management
7. Predator population monitoring:
    a. Hunter survey data analysis of trends
    b. Targeted inventories and analysis
    c. Reporting in relation to population indicators
    d. Linkage to mountain caribou monitoring (e.g., herd productivity)
8. Predator management adjustments:
    a. Thresholds that trigger management change
    b. Preferred levers for additional management changes (bag limits, season timing, direct control, etc.)

- Developing a provincial communication plan and contract deliverables for external communications consultant
- Coordination and management of overall project budgets
- Developing briefing material and options and recommendations to executive on issues requiring decision
- Integrating predator management activities with prey management activities with the provincial ungulate specialist
- Prioritizing provincial allocation of resources with regional biologists and herd experts
- Coordination of First Nations engagement on all aspects falling under MoE responsibility. Co-lead with ILMB (Williams)

Regional Biologists*:*

Key accountabilities include:

- Working with herd experts, the provincial caribou coordinator, ungulate specialist, and large carnivore specialist to develop herd-specific recommendations for predator-prey management activities
- Develop documented rationales for recommended activities that can be used transparently in public relation discussions

- Propose regional harvest allocations consistent with the provincial predator-prey management strategy
- Identify priority areas for actions regionally
- Identify costs and manage budgets within approved allocation from HQ
- Contract management as necessary

Participants Include:

Provincial Expertise**:** Ian Hatter, Alec Dale, Gerry Kuyzk, Steve Wilson, Tony Hamilton, Helen Schwantje, Rod Davis
Regional Involvement: Garth Mowat, Doug Jury, Randy Wright, Doug Heard.
Herd Experts to engage: Rob Serrouya, Bruce Mclellan, Dale Seip

Key Project Deliverables:

By January 1st of each year document proposed regional ungulate harvest allocations for consultation that are consistent with the Provincial Predator Prey Management Strategy (Confirm the consistency of this date with Wildlife Act regulation consultation requirements with Fish & Wildlife Branch).

By October 30th 2007 hold a provincial workshop to draft predator management actions for 2007-8, and develop the principles of a long-term predator management strategy.

By December 15th, 2007 draft an interim predator management strategy.

By January 31st, 2008, hold a provincial workshop to draft prey management actions for 2008-9 and develop the principles of a long-term prey management strategy.

By January 31st 2008 have endorsement of the interim predator management strategy and measures by MoE executive.

By March 31st, 2008 implement actions outlined in the interim predator management strategy.

By April 30th, 2008 draft a long-term predator-prey strategy suitable for consultation with First Nations and stakeholders.

By April 30th, 2008 develop a communications plan for the predator-prey strategy.

By June 30th, 2008 have MOE executive approval for the predator-prey strategy.