



Mountain Caribou Recovery Implementation Plan

*Update to the Mountain Caribou Progress Board
February 2009*

The purpose of this paper is to provide details of the current status of actions being taken under the Mountain Caribou Recovery Implementation Plan (MCRIP). Background and process details are also provided to put the current actions into context.

What led up to the Mountain Caribou Recovery Implementation Plan

The decline of mountain caribou

The BC population of mountain caribou (*Rangifer tarandus caribou*) has been in decline, with some subpopulations experiencing a decline of >50% within the last 10 years. Decline has been determined by caribou scientists to be primarily associated with habitat loss and fragmentation, and increased mortality from predators, with secondary effects associated with motorized backcountry recreation. The most recent census figures (May 2008) provided an estimate of 1,883 animals in 18 sub-populations, compared to an estimated 2,500 caribou in 1995.

Interim measures

In 2005, the Species at Risk Coordination Office (SaRCO) enacted interim measures to maintain caribou numbers, and established a 14-member Science Team to identify what actions would be necessary to either maintain or recover the mountain caribou population throughout its existing range. These interim measures included:

- A *Land Act* moratorium on new commercial recreation tenures over 927,149 ha within the range of mountain caribou (initially established in March 2005);
- An approved variance to the Kootenay Boundary Higher Level Plan, March 2005, refining the caribou habitat line-work based on new information; and
- Memoranda of Understanding to reduce potential impacts on mountain caribou through training, best practices, monitoring, and information sharing, with BC Helicopter and Snowcat Skiing Operators' Association (BCHSSOA) in November 2005; the British Columbia Snowmobile Federation (BCSF) in March 2007; and the Association of British Columbia Snowmobile Clubs (ABCSC) in July 2007.

The Draft Recovery Implementation Plan

In 2006, the Mountain Caribou Science Team recommended the following management actions to recover mountain caribou:

- Protect core caribou habitat from logging and road building;
- Remove specific predators that are known to prey on caribou;
- Reduce moose and deer adjacent to caribou herds to reduce presence of predators;

- Manage backcountry recreational activities in core caribou habitat; and
- Augment caribou from larger to smaller herds.

Consultation on the 2006 Draft Recovery Implementation Plan

In November 2006, based on the Science Team's findings, SaRCO released the *Draft SaRCO Mountain Caribou Strategy* via SaRCO's website and through media releases in order to facilitate consultation efforts with stakeholder groups and industry sector representatives. From November 2006 to March 2007, SaRCO met with over 80 stakeholder groups including federal and provincial agencies, municipalities, First Nations, community groups, forest industry, environmental groups, recreation groups, and other interested parties, in order to communicate information to individuals and organizations that had indicated an interest in, or could be potentially affected by, actions necessary to recover mountain caribou in British Columbia. All stakeholder recommendations and socio-economic concerns communicated to SaRCO during the consultation process were reviewed and, to the greatest extent possible, incorporated in the development of the final Recovery Plan. Government's decision was to apply the management actions only to the eight planning units that had more than ten animals, as this would provide the greatest return on investment. The three planning units with less than ten animals were to maintain status quo management (which already included specific measures for caribou).

The Mountain Caribou Recovery Implementation Plan, October 2007

On October 16, 2007, government announced the Mountain Caribou Recovery Implementation Plan (MCRIP) with the support of the forest industry, commercial and public recreation sectors, environmental sector representatives, and First Nations.

The goal of the Plan is to restore the mountain caribou population to the pre-1995 level of 2,500 animals within 20 years in those planning units with greater than 10 animals. This will be achieved by implementing the following management actions:

1. Protect 2.2 million hectares of mountain caribou range from logging and road building, capturing 95% of the caribou's high suitability winter habitat.
2. Manage human recreational activities in mountain caribou habitat in a manner that ensures critical habitat areas are effectively protected.
3. Manage predator populations of wolf and cougar where they are preventing the recovery of mountain caribou populations.
4. Manage the primary prey of caribou predators.
5. Boost caribou numbers in threatened herds with animals transplanted from elsewhere to ensure herds achieve critical mass for self-sufficiency.
6. Support adaptive management and research and implement effective monitoring plans for habitat, recreation and predator-prey management.
7. Institute a cross-sector progress board in spring 2008 to monitor the effectiveness of recovery actions.

Implementation of the Mountain Caribou Recovery Implementation Plan

RECOVERY ACTION #1: PROTECT 2.2 MILLION HECTARES OF MOUNTAIN CARIBOU RANGE FROM LOGGING AND ROAD BUILDING

Habitat loss and fragmentation were identified by the Science Team as the underlying causes of mountain caribou population declines, with mortality by predators as the related cause. Halting and reversing habitat loss is central to the Plan's success. Government committed to achieving this by increasing the amount of fully protected high-suitability winter mountain caribou habitat from 65% to 95%, thus protecting a total of 2.2 million hectares of forested land within mountain caribou range. Government also committed to protecting the viability of key resource sectors, and subsequently to address isolated or otherwise ineffective habitat by increasing protection elsewhere, ensuring future recruitment of high suitability habitat.

In October 2007, the MCRIP Directors' Team posted on the SaRCO website Terms of Reference for five regional Habitat Teams: the Kootenay Team; Revelstoke-Shuswap Team; Wells Gray-Thompson Team; Caribou Chilcotin Team; and Prince George Team. These teams consisted of agency representatives from the following ministries: Environment (MoE); Forests and Range (MoFR); Tourism, Culture and the Arts (MTCA); and the Integrated Land Management Bureau (ILMB).

From November 2007 to March 2008, the Habitat Teams were directed to use the Science Team habitat suitability model and available local information to make recommendations to the MCRIP Directors' Team on the protection of high suitability caribou habitat within their assigned planning units, including the allocation of 77,000 hectares of incremental timber harvesting landbase (THLB). The MCRIP Directors' Team provided incremental habitat budgets to the Habitat Teams for their respective planning units. Incremental THLB budgets were defined as incremental to existing legal habitat retention requirements and aspatial retention budgets.

Habitat Teams were also directed to communicate with local stakeholders, affected licensees, any active local ENGOs, and First Nations who expressed interest in being involved.

Habitat Teams submitted final reports and recommendations to MCRIP Directors' Team for review on March 25 and 26, 2008. These reports were also provided to ENGOs for review and comment as well as other interested parties. The MCRIP Directors' Team approved the Habitat Teams' reports in March 2008. Government made a decision to use the *Forest and Range Practices Act* (FRPA) and specifically Ungulate Winter Ranges (UWRs) and Wildlife Habitat Areas (WHAs) to provide legal protection for the mountain caribou habitat. MoE is the responsible agency for designating UWRs and WHAs under the authority of sections 9(2) and 12(1) of the Government Actions Regulation (GAR) of the FRPA.

Draft GAR orders were released for review and comment on June 20, 2008. A number of comments were received from concerned groups, and those comments were considered, and addressed where appropriate through several modifications to both the language of the GAR orders and the mapping. In support of the Habitat Teams' identification of incremental habitat, MoFR released the Summary Report of the Mountain Caribou Recovery Plan: Timber Supply Risk Assessment, in June 2008, prepared by the Economics and Trade Branch. This Assessment, with additional information provided by license

holders, identified increased risks in the Kootenay region and the Revelstoke TSA. The Kootenay mitigation process was concluded in December 2008 under the direction of MoFR. A process to rationalize the caribou line-work will soon be initiated in the Revelstoke TSA. In December 2008, GAR orders were finalized for consideration by the MoE Deputy Minister.

A total of ten orders for mountain caribou have been approved and will come into effect between February 12th and February 19th 2009. Notification of five of the ten GAR orders was published in the February 12th issue of the BC Gazette. The five orders published in this week's issue (February 12th) of the Gazette are as follows: WHAs 5-088 to 5-117 (Quesnel Highlands), U-3-004 (Wells Gray Thompson), 3-005 (Revelstoke Shuswap), U-4-010 (Kinbasket), U-4-012 (Southwest Kootenay).

Notification of the final five orders will be placed in the February 19th issue of the BC Gazette; U-4-013 (Southeast Kootenay), U-4-014 (Central Kootenay), U-7-003 (Hart Ranges Upper Fraser), U-8-004 (Okanagan Shuswap), U-8-012 (South Monashee).

Notice of all ten GAR orders has been posted on the MoE website Thursday February 12th. The orders, accompanying GAR rationale and boundaries are available from the following websites:

WHA: http://www.env.gov.bc.ca/cgi-bin/apps/faw/wharesult.cgi?search=show_approved

UWR: http://www.env.gov.bc.ca/wld/frpa/uwr/approved_uwr.html

GAR order / Planning Unit	Incremental THLB targets provided by the Mountain Caribou Directors' Team, October 2007	Total Incremental THLB (Final GAR Orders)	Total Incremental THLB where harvest is not allowed (Final GAR Orders)	Total forested area protected (Final GAR orders and Existing Protected Areas)
1A - Southwest Kootenay	3,803	4,708.04	4,518.17	114,330
1B - Southeast Kootenay	5,984	7,083.15	6,759.27	259,279
2B - Central Kootenay	19,985	19,882.63	16,676.47	197,126
3A - Revelstoke-Shuswap	10,000	10,010.38	10,010.38	249,328
4A - Wells Gray Thompson	6,000	5,936.78	5,936.78	429,004
5A/6 - Upper Fraser/Hart Ranges	6,132	6,376.87	6,376.87	537,678
5B - Quesnel	25,000	24,766.11	24,766.11	296,166
Other (Kinbasket, South Monashee, Okanagan-Shuswap)	0	0		170,443
Total	76,904	78,763.96*	75,044.05*	2,253,355

*Note: In the short- to mid-term, the GAR orders capture 78,763.96 ha of THLB. However, in order to mitigate undue impacts, it was negotiated in the Kootenay region that 3,720 ha could be available for harvesting over the next 20 years.

The purpose of the MCRIP is to address the key threats to mountain caribou as identified by the Science Team, notably, habitat alteration, predation, and disturbance associated with backcountry motorized recreation. Government also committed to protecting the viability of key resource sectors. Under the GAR orders, required activities of some sectors may be affected, however, it was not the intent to halt all activities required for other sectors to maintain their business viability, but to identify how required activities can be carried out that are low risk to caribou.

Any activities covered by FRPA that fall within the area of the GAR orders that cannot be accommodated by the established GWMs will require an exemption if they are to proceed. Exemptions are administered by the MoE Regional Manager. Activities specifically related to forest health, guided adventure tourism (heli and cat skiing) and mineral exploration that cannot be accommodated by the

GWMs will require an exemption. This approach is being taken as a short term measure until final GWM language can be developed to identify those specific low-risk circumstances where the requirements of no timber harvesting and road building should not apply to these activities, and therefore an exemption would not be required. It is MoE's intention that these GWMs will be completed and that orders will be considered for amendment to include these GWMs prior to late mid-2009. Currently, three initiatives are underway to support future amendments to the GAR orders:

Forest Health

The MCRIP Directors' Team released the Mountain Caribou and Forest Health Management report on May 20, 2008. Review comments were received from the forest industry and ENGOs. The Directors' Team is using the report together with comments received to develop appropriate language to support amendment to the GAR orders.

Best Management Practices for Mineral Exploration

The Ministry of Energy and Mines and Petroleum Resources (MEMPR), SaRCO and MoE are working jointly with the Association for Mineral Exploration BC, Mining Association of BC and regional mineral exploration and mining interest groups to develop Best Management Practices (BMPs) for mineral exploration activities in identified mountain caribou habitat areas. The intent is to append BMPs to work permits as conditions of exploration activities in designated mountain caribou habitat. These BMPs will be used to develop appropriate language to support amendment of the GAR orders.

Operational Guidelines for Commercial Backcountry Skiing Operations

SaRCO is working with the Heli-ski industry to develop operational guidelines for activities such as glading, spacing, snow trails, and heli-pad construction activities in Mountain Caribou habitat. The guidelines are intended to support tenure management plans, and the development of appropriate language to support amendment of the GAR orders.

RECOVERY ACTION #1 - NEXT STEPS

GAR amendments

On December 16, 2008, the Deputy Minister of Environment wrote to all parties affected by the GAR orders, including the forest sector, the mineral exploration sector and the commercial recreation sector. The letters acknowledge that general wildlife measures (GWMs) pertaining to activities required for forest health, mineral exploration, and heli-skiing/glading remain outstanding in the GAR orders. The letters committed to continuing to collaborate with stakeholders and government partners to develop these GWMs in sufficient time to consider amendments to the GAR orders by late mid-2009. It is expected that, where appropriate, GWMs will be as consistent as possible for equivalent activities between sectors.

Mitigation of undue impacts of the GAR orders

MoFR has committed to initiating a process which examines the possibility of mitigating forest licensees for undue impacts caused by the MCRIP. As part of the mitigation process for licensees in the Kootenay region, MoFR has committed to pursue actions under Section 18 of the *Forest Act*, whereby the Minister may transfer all or part of the cutting rights authorized under a forest license from one timber supply area to another, for a specified term.

In the Revelstoke region, aspatial targets for caribou were translated to spatial line-work without adequate time for review by the licensees. MoE and MoFR have committed to review the new caribou line-work in conjunction with caribou herd experts. Terms of Reference will be developed shortly and it is expected that this process will begin in spring 2009. It is acknowledged that this process may result in the need to amend the GAR order for the Revelstoke region.

In all regions, where appropriate, MoFR will be working with licensees to identify options and solutions for mitigation, while ensuring the primary objective remains the recovery of mountain caribou.

Adaptive Management and Monitoring of the GAR orders

As part of the MCRIP, MoE will be working with agency partners and stakeholders to develop and implement a comprehensive adaptive management and monitoring framework for all management actions related to caribou recovery. A number of monitoring questions and indicators will be developed around habitat protection and it is expected that all partner agencies and stakeholders will participate in different monitoring components of the MCRIP (e.g. data collection and reporting), including monitoring the implementation of GAR orders.

RECOVERY ACTION #2: MANAGE HUMAN RECREATIONAL ACTIVITIES

The Mountain Caribou Science Team identified disturbance due to activities such as snowmobiling, heli-skiing and cat-skiing as a threat to caribou by displacing them from their preferred habitats. Based on analysis of high suitability winter habitat, the Science Team recommended over one million hectares across the mountain caribou range to be closed to motorized winter recreation (snowmobiles) to facilitate recovery of mountain caribou populations by avoiding displacement of caribou from high quality winter habitat.

Public Recreation

Prior to the MCRIP, legal and voluntary closures to protect mountain caribou were agreed to in the Cranbrook and Creston Valley areas through negotiations with the ABCSC, snowmobile clubs, and through the multi-stakeholder process that resulted in the 2005 Cranbrook West Recreation Management Strategy. In addition, in 2006, a process led by MoE and the ABCSC resulted in snowmobile closures in the South Selkirk region to support caribou recovery.

Between March 2007 and March 2008, the Province provided \$105,000 to the British Columbia Snowmobile Federation (BCSF) and \$11,000 to the Association of British Columbia Snowmobile Clubs (ABCSC) to develop best management practices, provide education and outreach materials, implement a snowmobiler awareness campaign, purchase and install signage, monitor snowmobile use and compliance with closures, and provide snowmobilers with mountain caribou movement and location information.

Under the MCRIP, government committed to continue to work with recreational users to manage their activities so as not to displace mountain caribou. In conjunction with the ABCSC and the BCSF, SaRCO produced stewardship guidance brochures and maps for the snowmobile clubs. In 2008, as an alternative to the closure of riding areas, government provided snowmobile clubs with the opportunity to propose

Stewardship Management Agreements (SMAs) for appropriate areas, which would outline how, when, and where snowmobiling would occur that would avoid disturbance of caribou or displacement from their preferred habitats.

SaRCO designated a backcountry recreation manager to coordinate a process with the BCSF, ABCSC and snowmobile clubs to negotiate areas for closure from snowmobiling and areas to remain open under SMA. Proposals were received from across the mountain caribou range in a variety of formats. A decision framework was developed to assess proposed SMAs. Risk to caribou recovery was assessed as a combination of: risk of displacement; likelihood of increased snowmobile use; and the likelihood of the SMA being effective. Risk was expressed as critical, high, medium or low. Recommendations were developed using a combination of the assessed risk to caribou recovery and the principles in the decision framework. Each riding area was assessed individually. Those clubs with multiple riding areas will likely develop a single SMA, incorporating multiple areas.

A draft report was released in July 2008, followed by further negotiations with the clubs. The final recommendation report from the backcountry recreation manager was submitted to government in October 2008. The report recommended closure for approximately 94% of the Science Team proposed closures. Government has now enacted new closures to protect caribou. Enabled under the Motor Vehicle Prohibition Regulation of the *Wildlife Act*, the new closures cover approximately 1,000,000 ha and take effect on February 15, 2009.

Commercial Recreation

Further to the 2005 *Land Act* moratorium on new commercial backcountry recreation applications, a further moratorium (also under the *Land Act*, s 16) was established pursuant to the announcement of the MCRIP, extending the area by 1,276,617 ha. Both reserves are now in place until March 31, 2013 to allow time to implement and monitor the effects of best practices by the commercial backcountry recreation sector.

The 2005 MOU with the BCHSSOA was designed to address and minimize those activities that have the potential to disturb or displace caribou. On May 2 and 3, 2008, SaRCO and consultants held a workshop with members of the heli-ski industry, ENGOs and government agencies to discuss a compliance and effectiveness monitoring framework, indicators, and future research needs related to heli-ski and cat-ski operations in mountain caribou habitat. The report from the May 2008 workshop provides detail for the development of the MCRIP adaptive management and monitoring framework.

Recognizing that some commercial recreation activities (e.g. glading of ski-runs and development of cat trails) may alter caribou habitat, SaRCO held two one-day workshops, August 11 and 12, 2008, to begin to identify operating guidelines to minimize disturbance to caribou. In mid-October 2008, SaRCO hired a consultant to work with the recreation sector to further develop a guidelines document. It is expected that these guidelines will support tenure management plans, as well as the development of general wildlife measures and 'exception' language, due to be incorporated into amended GAR orders by late-mid 2009.

RECOVERY ACTION #2 - NEXT STEPS

Review of Stewardship Management Agreements and Wildlife Act closures

Recently, MoE closed approximately 1 million hectares of critical winter habitat to motorized recreational access. While this represents over 94% of the area recommended by the Science Team, concern remains that additional closures may be necessary to achieve the objective of mountain caribou recovery. Therefore, MoE in consultation with herd experts will determine if additional closures are warranted once the 2009 mountain caribou survey data are available and the effectiveness of voluntary closures is assessed. If a decision is made to proceed with additional closures, all interested parties will be consulted in advance of recommendations to the Minister of Environment. The intent would be to have such recommendations, if required, to the Minister sometime during the fall of 2009. MoE has committed to monitoring progress on mountain caribou recovery objectives and to adjusting management approaches accordingly. Members of the Mountain Caribou Progress Board will be informed of any contemplated change to current management actions.

Communication materials for new Wildlife Act closures

Maps:

Maps of the new closures are available online at <http://www.env.gov.bc.ca/fw/wildlife/snowmobile-closures/>. The intent at this time is to show all NEW closures. The maps include some, but not all, pre-existing closures and access trails. Maps are also available in the Hunting and Trapping Synopsis at <http://www.env.gov.bc.ca/fw/wild/synopsis.htm> which provides information on pre-existing closures and access trails. MoE expects to revise the maps over time to show more information.

MoE is printing local area maps for distribution to snowmobile clubs and associations; these will be available through local MoE offices.

Signage:

Government has committed up to \$75,000.00 to make and install signs identifying areas closed to snowmobiling, limited trail access, local riding areas, etc., using standardized, approved signs. Clubs are encouraged to work with their regional biologists to identify signage priorities as soon as possible. The intent is to install smaller signs as soon as possible; larger signs will need to be installed when weather and snow conditions permit.

Stewardship Management Agreements:

Prior to finalizing areas recommended for closure by the Science Team, government provided snowmobile clubs with the opportunity to identify appropriate areas where Stewardship Management Agreements (SMAs) could be developed as an alternative to closures. Areas for SMAs were agreed to through the 2008 process led by the SaRCO backcountry recreation manager. The intent is to finalize SMAs by fall 2009.

SaRCO is currently developing a workplan to identify the process steps and participants needed to complete the SMAs. It is expected that this workplan will be available by March 2009. Clubs are encouraged to work with MoE regional biologists to complete SMAs by fall 2009. In the absence of SMAs, government committed to reviewing further areas for closure to snowmobiles in order to protect Mountain Caribou.

Commercial Recreation Operating Guidelines

The operating guidelines document for heli- and cat-skiing activities will be available for review in March 2009. The document will support the development of general wildlife measures for the GAR orders by late-mid 2009.

RECOVERY ACTION #3: MANAGE PREDATOR POPULATIONS AND PRIMARY PREY POPULATIONS

While habitat loss was identified by the Mountain Caribou Science Team as the underlying cause of mountain caribou population declines, high predator populations and unsustainable predation rates on caribou are related contributors to mountain caribou declines. The Science Team recognized that habitat protection alone would not reverse negative caribou population trends. The MCRIP committed government to a variety of measures to address unsustainable predation rates, including increasing cougar and wolf harvests, wolf sterilization, and targeted removal of individuals or packs where necessary. The MCRIP also committed to actions to reduce moose and deer populations in key areas adjacent to caribou herds to reduce the presence of predators. These actions would be sequential to predator control, likely one to two years after effective predator control.

Hunting seasons for wolves and cougars were liberalized by MoE in 2007 over the entire range of mountain caribou. Also, in 2007, a total of 22 wolf packs have been collared, representing approximately 70% of the packs between Williams Lake and Revelstoke. The home ranges of most of the other packs, including the packs in the Kootenays, are now known.

Between 2007-2008, direct government trapping and snaring actions resulted in the lethal removal of twenty wolves across the range of mountain caribou including: two within the range of the South Purcells herd, five within the range of the Columbia South herd, two from the Narrow Lake caribou range, and eleven within the Quesnel Highlands caribou range. An additional two wolves in the Wells Gray-North Thompson area were injured during live-capture events for radio collaring and were subsequently euthanized. Seven radio collared wolves across the range either died or dispersed. Sixteen wolves are currently known to have been killed across the range of mountain caribou: eight by hunters; five by trappers; and three by motor vehicle accidents. This number is an underestimate as not all wolf kills are reported. In addition, six alpha male and six alpha female wolves were surgically sterilized in the Quesnel Highlands and as a result the six targeted packs all failed to reproduce in the 2008 season.

A number of caribou herds were surveyed in 2007-2008, including South Selkirks (slightly increasing), Central Selkirks (increasing), North Columbia (stable), South Columbia (decline to 20 animals from 38), Wells-Gray Thompson including part of Quesnel Highlands (results not yet compiled), Narrow Lake (stable), and the Parsnip portion of the Hart Ranges (significant decline- although the Parsnip is not a distinct herd and caribou may have shifted their habitat use into other areas of the Hart Ranges).

Caribou habitat and matrix habitat has been modeled to develop target populations of predators and alternate prey across the mountain caribou range. This information will be used to help guide wildlife management decisions and hunting/guide allocations.

RECOVERY ACTION #3 - NEXT STEPS

- A Draft Predator-Prey Strategy was developed through a consultant and MoE, and shared with stakeholders in summer 2008. Final Recommendations for the Predator Prey Strategy were submitted in December 2008 and reviewed by government experts. The Strategy is currently being peer-reviewed externally. The Strategy constitutes best science advice to MoE and will be released to the Progress Board in March 2009.
- Radio-collaring and predator removal by approved methods will continue this year as budgets allow. Results from 2008 suggest that actions were successful in reducing wolf densities in Quesnel Highlands and perhaps in other areas (e.g. Revelstoke) but the response of caribou will take several years to determine.
- We will be monitoring the success of our actions to date. Survey results between late March and mid April will influence future actions. Very small subpopulations are sensitive to any predation so it is our intention to maintain pressure on predator populations through hunting, trapping and direct removals.

RECOVERY ACTION #4: BOOST CARIBOU NUMBERS IN THREATENED HERDS

Augmenting small mountain caribou populations of 10-50 individuals with animals transplanted from elsewhere can increase population growth rates and more quickly reduce the demographic risks associated with small populations. The Plan committed government to augment the southernmost mountain caribou herds as well as working co-operatively with First Nations.

The Itcha Ilgachuz caribou herd was initially identified as a potential donor population. Census efforts in this area were unsuccessful in 2007-2008 due to poor weather, therefore the status of this herd as a potential donor population is unknown. Also, the Ulkatcho First Nation has stated that they do not support removal of caribou from this herd.

In summer 2008 government representatives reviewed US conservation breeding centres to consider the potential for captive breeding of caribou, and also reviewed caribou augmentation techniques used in Finland. A review of potential maternity penning as an augmentation tool has been deemed largely infeasible.

For some herds to survive, there will need to be augmentation of additional animals to build the population, and to add genetic diversity to the group. Augmentation of herds will require more census work of mountain caribou populations and cannot occur unless stable donor populations are identified. Augmentation is not being considered in the short term but remains an option for future action.

RECOVERY ACTION #4 - NEXT STEPS

- MoE is developing cost estimates for potential translocations. MoE regional staff hope to consult with First Nations, in both potential donor and potential recipient areas. MoE will work through the First Nations Consultation Coordination Teams in engaging First Nations at a strategic, government-

to-government level. The key challenges for this recovery action are finding a stable donor herd, obtaining First Nations support, and ensuring that predator populations are well under control prior to initiating any translocation of animals.

RECOVERY ACTION #5: SUPPORT ADAPTIVE MANAGEMENT AND RESEARCH AND IMPLEMENT EFFECTIVE MONITORING PLANS

The MCRIP includes the development of an adaptive management and effectiveness monitoring plan for all management actions associated with mountain caribou recovery. The intent is to closely monitor components of the MCRIP to determine whether the strategy needs to be modified in order to meet the recovery goal of restoring the mountain caribou population to the pre-1995 level of 2,500 animals throughout their existing range in British Columbia.

MoE has proceeded with the development of an Adaptive Management and Monitoring Strategy. The Strategy will identify key adaptive management and monitoring questions, indicators, and desired future conditions. Adaptive management involves setting goals and targets and changing actions if current practices do not meet the established goals. Monitoring involves implementation monitoring (did we do what we said we'd do?); compliance monitoring (are we following what we've put in place?); and effectiveness monitoring (are the actions meeting our goals for caribou?). All aspects of monitoring are necessary to determine what is working and what may need to be changed. A more detailed implementation plan will identify responsibilities for data collection and compilation.

The Terms of Reference of the Mountain Caribou Progress Board require that government supports the Board in developing an annual monitoring report, due by December 31st each year. It is government's expectation that all stakeholders involved in the MCRIP will participate in monitoring appropriate components of the MCRIP. The level of implementation of the monitoring plan will be determined by capacity within government as well as participation by stakeholders.

RECOVERY ACTION #5 - NEXT STEPS

- The draft Adaptive Management and Monitoring Strategy will be distributed for review to the Progress Board in March 2009. All sectors involved in the recovery of mountain caribou will be strongly encouraged to participate in monitoring the MCRIP and its outcomes.

RECOVERY ACTION #6: INSTITUTE A CROSS-SECTOR PROGRESS BOARD

Government committed to establishing a cross-sector Progress Board to oversee implementation of the MCRIP and to monitor its effectiveness. The Board consists of key sector representatives from the Association of British Columbia Snowmobile Clubs, British Columbia Snowmobile Federation, Council of Forest Industries, Heli-Cat Canada, Interior Lumber Manufacturers' Association, the Mountain Caribou Project (a consortium of non-government environmental organizations) and other stakeholders. The Board also includes seats for First Nations representatives.

The initial purpose of the Board was to oversee government's implementation of the Plan, prior to reporting on its effectiveness once recovery measures are in place. The Board was formally established

in spring 2008 and held its first meeting May 1, 2008. A second meeting via conference call was held October 2, 2008. The Board has been kept apprised of Plan implementation through regular newsletters and updates, including access to the minutes of the MCRIP Directors' Team meetings, via the Mountain Caribou SharePoint site. Now that much of the implementation delivery structure is in place, the Progress Board will be well-placed to deliver its first annual monitoring report later this year.

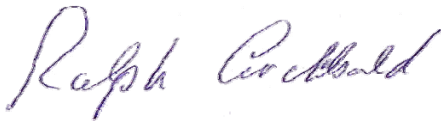
SUMMARY OF MOUNTAIN CARIBOU RECOVERY IMPLEMENTATION PLAN - NEXT STEPS

1. MoE, in conjunction with partner agencies and stakeholders will develop General Wildlife Measures for forest health, mineral exploration, and commercial recreation activities in sufficient time to consider amendments to the GAR orders by late mid-2009.
2. MoFR will proceed to develop and implement mitigation processes for impacted forest licensees, where appropriate, in spring 2009, including a review of the Revelstoke line-work.
3. MoE and agency partners will proceed to review existing stewardship management agreements and snowmobile closures and make recommendations to the Minister in fall 2009 if required.
4. MoE will continue to distribute maps, communication materials, and signage for the new *Wildlife Act* closures for snowmobiling and areas to be managed under SMA.
5. SaRCO will release a draft workplan for completion of SMAs in March 2009.
6. MoE will work with agency partners and stakeholders to complete all SMAs by fall 2009, or review these areas for closure and make recommendations to the Minister.
7. SaRCO will provide draft Operating Guidelines for the Heli-ski Industry to the Progress Board for review in March 2009.
8. MoE will release a Predator-Prey Strategy as information to the Progress Board in March 2009.
9. MoE will continue with radio-collaring of predators and predator removal as budgets allow. Surveys between March and April will influence future actions.
10. MoE will continue to work to meet the conditions necessary to successfully transplant caribou into critically endangered herds.
11. MoE and SaRCO will provide a draft adaptive management and monitoring framework for review in March 2009.
12. MoE will convene the Mountain Caribou Progress Board at least bi-annually and engage all partner agencies and stakeholders in developing an annual monitoring report.

FUTURE COORDINATION OF THE MOUNTAIN CARIBOU RECOVERY IMPLEMENTATION PLAN

SaRCO was established in 2004, in part to obtain government direction on a recovery plan for mountain caribou, and to coordinate implementation of the Plan for its first year. On November 1, 2008, SaRCO was transferred to MoE in order to transition the coordination role to MoE. As of March 31, 2009, the SaRCO will no longer exist as a distinct entity, and MoE staff will take over the role of fully coordinating delivery of the MCRIP. The MCRIP continues to be a collaborative, inter-agency and multi-stakeholder government priority. It is hoped and expected that all partners will continue to support caribou recovery and the significant strides we have accomplished together towards achieving the goal of recovering mountain caribou.

Sincerely,



Ralph Archibald
Assistant Deputy Minister