

Progress Board Annual Report 2009-2010



Background

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. This recovery will be distributed among those planning units with greater than 10 animals in 2007. 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.

Progress Board

Government delivered on the commitment to establishing a cross-sector Progress Board to oversee implementation of the MCRIP and to monitor its effectiveness. 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 has been kept apprised of Plan implementation through regular newsletters and updates, including access to the minutes of the MCRIP Directors' Team meetings. Now that much of the implementation delivery structure is in place, the Progress Board needs to deliver its first annual monitoring report. 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. Progress Board membership is outlined in Appendix A.

The Terms of Reference for the Progress Board include in its scope of work to:

- annually review the progress and quality of implementation activities, marked by deliverables set out in the respective Terms of Reference for each component of the Mountain Caribou Recovery Implementation Plan, and
- define the scope and content of annual reports as well as reports for the general public, as set out in section 6.0 (Deliverables)

The Deliverables component of the ToR, states the Progress Board will develop "an annual public report to be submitted to the Directors' Team by December 31st of each year, reporting on the state of recovery implementation for all components of the Mountain Caribou Recovery Implementation Plan. The report will include a non-technical section to inform policy-makers and the general public." On a Progress Board conference call in November 5, 2009, it was decided that MCRIP staff and Progress Board members would meet in spring 2010 to develop an annual report.

On March 2 and 3, the Progress Board convened to produce an annual report for MCRIP activities implemented in 2009/10. Forestry, environmental, public and commercial recreation sectors had representation at the meeting. MCRIP staff presented the key accomplishment for each of the management actions (Appendix B). MCRIP provided the Progress Board with several focussing questions (Appendix C) to help direct discussion to meet the reporting expectations contained in the terms of reference. Members considered the results presented to them and evaluated that MCRIP performance as exceeding expectations, meeting expectations, or failed to meet expectations. Members provided specific examples where performance was either good or poor and made recommendations for future MCRIP effort. This discussion was recorded and distilled into a report that was reviewed and endorsed by the Board. This document represents that report.

Progress Board Evaluation

General Observation

The Progress Board expressed qualified satisfaction with performance by government delivering the MCRIP. However, Board members wish to emphasize that the MCRIP was endorsed as a

package of distinct but interwoven management actions which need implementation as a package. Failure to deliver a well balanced program of activities will erode public, stakeholder and Progress Board support. Some of the activities require significant fiscal resources (eg augmentation), and/or a long term commitment (eg monitoring) and/or political will (eg predator or prey management). The Progress Board expects to see government support the MCRIP through adequate resourcing (eg operational and staff budgets) and “political will”.

Habitat Protection

General opinion of the Progress Board is that measures implemented to manage mountain caribou habitat met expectations. This general opinion was qualified with:

- 1) An expectation that MoE would coordinate the collection of data on tree removal and road building in habitat covered by Government Action Regulation (GAR) order. (See section on Adaptive Management and Monitoring for more details).
- 2) An expectation that habitat improvement occurring through rehabilitation or natural succession would be monitored.
- 3) An expectation that the exemption provisions for forest health management in GAR order areas would be completed quickly. The draft would be available for review by interested Progress Board members.

Public Recreation

General opinion of the Progress Board is that measures implemented to manage the impact of public recreation on mountain caribou met expectations. The work on the snowmobile closures was generally well respected. The snowmobile sector does not want to contribute to a “black eye for caribou recovery” by not stepping up to their responsibilities.

This general opinion was qualified with:

- 1) Expectation that government will actively enforce the closures. A well resourced and well coordinated compliance and enforcement presence in the early days of the closures is important to indicate that government is serious about managing snowmobile use.
- 2) Expectation that government will continue to resource and to work with the local clubs from the Association of British Columbia Snowmobile Clubs, British Columbia Snowmobile Federation BCSF to produce and distribute information (eg web-based information and maps, brochures, signs) to help educate the snowmobiling public, especially non-club member riders.
- 3) Expectation that government will demonstrate a political will to support enforcement.

The Progress Board recommends that government demonstrate leadership in developing a provincial licensing and registration program for off-road vehicles. Effective enforcement is strengthened when enforcement official can legally identify a vehicle that is subject to an offence.

Commercial Recreation

General opinion of the Progress Board is that measures implemented to manage the impact of commercial recreation on mountain caribou require more information in order to meaningfully be evaluated.. The early stages of the work undertaken with the sector are of a pilot nature and resulting interim reports have not been shared with the Progress Board. Those Progress Board members who are outside of this sector have seen these reports and therefore cannot comment on whether the measures met expectations or not. This general opinion was qualified with:

- 1) Expectation that the commercial recreation sector will be monitored in a manner similar to other sectors.
- 2) Expectation that management provisions and monitoring protocols will be generally available to interested parties.

Predator Management

General opinion of the Progress Board is that measures implemented to manage the impacts from predators on mountain caribou has failed to meet expectations. Members' views are divided on this area. Some members feel that implementation of this management action is trailing other actions, leading to distrust and ill-will with some stakeholders. All members felt that predator management actions to date have lacked a clear rationale which in some cases may make matters worse in terms of garnering support. An improvement in the communication of the rationale and any plans for predator management would be a welcome improvement. To be successful, any predator management activity needs to be accompanied by a well written presentation of a clear rationale supported by the technical merits, operational objectives and associated risks. This general opinion was qualified with:

- 1) Expectation that government will improve its communications and present clear messages on this controversial subject. Aids to improved communication may include a "Frequently Asked Question and Answer" document.
- 2) Recommendation that government formally assess the feasibility and efficacy of trapping and hunting as effective wolf control measures. The results of this assessment would determine whether such measures were used in the future.

Prey Management

General opinion of the Progress Board is that results from measures implemented to manage the impacts from primary prey on mountain caribou are unclear. Activity in this area has been limited and too early to tell if it is effective.

Augmentation

General opinion of the Progress Board is that measures implemented to augment mountain caribou populations at low numbers have yet to meet expectations. Activity in this area has been limited, and it is premature to determine whether the measures have met expectations or not. Augmentation is recognized as an "expensive" component that needs to be delivered in multi-year timeframes to be effective. The resourcing consequences (eg opportunity cost to other MCRIP activities) and the sensitivity on impacts to donor herds mean that a strong "business case" is required to support a augmentation project. However, failure to support augmentation will have serious implications over the short term to MCRIP objectives. This general opinion was qualified with:

- 1) Expectation that government will continue to support this work as an important component of the MCRIP. If government is unable or unwilling to support augmentation activities, it may need to change its recovery message and objective.
- 2) Expectation that the first augmentation project will be under considerable scrutiny and that government will provide sufficient resources to ensure a successful project.

Adaptive Management

General opinion of the Progress Board is that measures to implement an adaptive management and monitoring program met expectations. The Progress Board stresses that a commitment to collecting information, effectively storing it, using it to report on performance, and adjust activities or objectives is key to the success of the MCRIP. Many of the management activities are based on limited base-line information. A monitoring program needs to be forward looking and establish thresholds or metrics proactively to enable an evaluation of activities towards recovery objectives. A monitoring program needs to be conducted in a manner that allow changes to be detected before they reach a crisis condition. The program needs mechanisms to institute change. This general opinion was qualified with:

- 1) Expectation that government will maintain or increase resources assigned to the adaptive management and monitoring component of the MCRIP to enable consistent application across management actions and through time.
- 2) Expectation that government will include a “cumulative impacts” aspect to monitoring programs. This is important when considering small scale actions/impacts permitted under the exception or exemption provisions of the MCRIP.
- 3) Expectation that government will engage stakeholders and knowledgeable parties early in the adaptive management process to improve project design at the early stages and reduce the amount of “retro-fitting” projects.
- 4) Concern that the term “adaptive management” is often quoted but activities rarely approach the standard members would expect from a genuine true adaptive management approach.

Progress Board

General opinion of the Progress Board is that measures to implement an independent oversight and monitoring body met expectations. The Progress Board thinks it can and has provided value to the MCRIP (eg input to draft products, advice to senior government officials). But the Progress Board is disappointed by the pace of delivery of MCRIP products and initiatives. More timely deliver of products will increase the effectiveness of the MCRIP. This general opinion was qualified with:

- 1) Expectation that government will seriously consider the recommendations/feedback from the Progress Board and will provide a response to the Progress Board Annual Report. Failure to see “value added” from Progress Board participation will likely result in diminished participation and possible disbandment.
- 2) Expectation that the Progress Board will be supported to continue to have a combination of meetings and conference calls to enable it’s contribute to MCRIP delivery.

Conclusion

When MCRIP progress is considered in total, the Progress Board is not overly satisfied with performance by Government. While there are several areas of satisfactory performance (eg adaptive management), there are several other areas where performance has been slow or lacking (eg prey management, augmentation). Government needs to continue work started in several management actions and step up delivery in others to ensure MCRIP is implemented as a complete package, rather than just parts of it. It is critical for Government to find and maintain the political will to stay the course. The Progress Board feels it provides a valuable function for the MCRIP, but failure to see “value added” from Board participation will likely result in diminished participation and possible disbandment.

Appendix A Mountain Caribou Recovery Implementation Plan Progress Board Membership

Dave Butler, Director of Sustainability, Canadian Mountain Holidays Inc., Heli-Cat Canada

Jim Hackett, President, Interior Lumber Manufacturers' Association

Archie MacDonald, Council of Forest Industries

John Dunford, Manager, Forestry & Sustainability, Tolko Industries Ltd.

Sam Phillips, Simpk First Nation

Les Austin, British Columbia Snowmobile Federation

Candace Batycki, Forest Ethics

John Bergenske, Wildsight, Mountain Caribou Project

Barry Smith, (Ex officio member) Environment Canada

Gavin Dirom (pending) Association for Mineral Exploration British Columbia

Appendix B Report of Activities and Accomplishments of the Mountain Caribou Recovery Effort. Submitted to Progress Board Members on March 2 &3, 2010

A Report of Activities and Accomplishments of the Mountain Caribou Recovery Effort for 2009/10

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

The goal of the MCRIP is to halt the decline of the mountain caribou population within seven years for each planning unit and to recover mountain caribou to 1995 population levels (2500 animals) across the mountain caribou range within 20 years in those planning units with more than 10 animals.

The goal 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 to minimize the disturbance and displacement of caribou from their preferred habitat.
3. Manage predator populations of wolves and cougar where they are preventing the recovery of mountain caribou populations.
4. Manage the primary prey of predators of mountain caribou.
5. Increase caribou numbers in threatened herds with animals transplanted from elsewhere to ensure that 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.

On March 31, 2009, the Species at Risk Coordination Office was disbanded, and the Ministry of Environment (MoE) took over the role of fully coordinating delivery of the MCRIP. The MCRIP continues to be a collaborative, inter-agency and multi-stakeholder government priority. Key staff from the MoE and Integrated Land Management Bureau staff (ILMB) were assigned to move this initiative forward (Appendix 1).

This report outlines the accomplishments completed in 2009/10 toward the seven key management actions.

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

Government Actions Regulation Amendments

On 16 December 2008, before the Government Actions Regulation (GAR) orders were established in February 2009, the Deputy Minister of Environment wrote to all parties affected by the GAR orders, including the forest sector, the mineral exploration sector, and the adventure tourism sector. The letters acknowledged that general wildlife measures (GWMs) pertaining to forestry-related activities required for forest health, mineral exploration, and adventure tourism (heli- and cat-skiing operations) remain outstanding in the GAR orders. The letters committed to continued collaboration with stakeholders and government partners to develop these GWMs in sufficient time to consider amendments to the GAR orders by late mid-2009.

In December 2009, the GAR orders were amended to include GWMs that addressed certain forestry-related activities associated with mineral exploration and adventure tourism sectors. This amendment was supported by the development and executive approval of the two guidance documents entitled "Notice of Work Permit Conditions and Operational Guidance for Mineral Exploration Activity in Mountain Caribou Habitat" and "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." The purpose of these documents is to provide practitioners with guidance when conducting certain forestry-related activities within mountain caribou habitat identified under the GAR orders to ensure that these activities occur in a manner that supports mountain caribou recovery habitat objectives.

Next Steps

With the completion and application of the guideline documents for mineral exploration and adventure tourism, staff of the MoE, ILMB, Ministry of Forests and Range (MoFR), and the Ministry of Energy, Mines and Petroleum Resources (MEMPR) will work together to document the amount of sector activity occurring within mountain caribou habitat and to coordinate delivery of this information to the Adaptive Management Team.

Forest Health

The Stock et al. (2008) forest health report is being used to develop GWM language that will support amendments to the GAR orders. A preliminary draft of GWM language has been developed and is currently under internal review within the MoE. It is expected that this language will be attached as an addendum to the forest health report to provide additional guidance for practitioners addressing forest health issues within mountain caribou habitat under the GAR orders.

Next Steps

Staff of MoE and MoFR will work together to finalize the forest health GWMs in 2010.

GAR Order Linework Adjustment

A Terms of Reference document was developed in winter 2009 to make linework adjustments to the GAR orders established in the Revelstoke area. This document addresses the government's commitment to allow forest licensees to examine the spatialization of mountain caribou habitat before the habitat was protected under the GAR orders. This should allow for efficiencies in managing mountain caribou habitat and timber supply in the future.

Next steps

Staff from the MoE, MoFR, and a herd expert (Rob Serrouya) are reviewing proposals from licensees. This process is expected to be finalized by March 31, 2009.

GAR Order Mitigation

The MoFR has initiated a process to examine opportunities for mitigating undue impacts on forest licensees caused by the MCRIP. The MoFR is working with licensees to identify options and solutions, while making sure that government's commitment to mountain caribou recovery remains the primary objective.

Next steps

Staff of MoFR will continue to work to finalize options to mitigate undue impacts to forest licensees from MCRIP .

Recovery Action #1 Key Accomplishments

- Approximately 2.2 million hectares were protected under the GAR orders in February 2009.
- Completed the guidance document entitled "[Notice of Work Permit Conditions and Operational Guidance for Mineral Exploration Activity in Mountain Caribou Habitat.](#)"
- Completed the guidance 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."
- Drafted GWM language to address forest health issues under MoE internal review.
- Amended GAR orders in December 2009 for certain forestry-related activities associated with mineral exploration and adventure tourism.

RECOVERY ACTION #2: MANAGE HUMAN RECREATIONAL ACTIVITIES

Wildlife Act Closures

In February 2009, government closed approximately 1 million hectares of mountain caribou habitat to snowmobile use. Maps and brochures highlighting the closed areas have been printed and distributed to MoE regional offices and snowmobile clubs. Maps of the closed areas are available online at www.env.gov.bc.ca/fw/wildlife/snowmobile-closures/.

The MoE continues to deal with vandalized and/or stolen signs. However, efforts are being made to initiate sign replacement and installation, and to work through local user groups to install signs, find better locations, and inform the users of these areas. The MoE is encouraging anyone who may witness or hear anything about a theft or vandalism of a sign to report it to the RAPP line: 1-877-952-7277.

In summer 2009, a monitoring protocol was developed to set a standard for monitoring closed areas for compliance. Regional MoE staff are implementing this strategy this sledding season by conducting monitoring and compliance flights in certain areas across the mountain caribou range. In addition, information/planning sessions have been held in Prince George, Williams Lake, and Kamloops with the Conservation Officer Service, MoE, and MoFR compliance and enforcement staff. These sessions are being used to ensure that two primary goals are achieved this winter 2009/10: first, to ensure that enforcement activities are coordinated across the province with regard to MCRIP, and second, to ensure that a consistent message is available to the snowmobiling public. The information collected through the monitoring strategy will be used in the adaptive management process to determine the effectiveness of this management action.

Recent changes to Work Safe BC regulation on working in avalanche areas has reduced the capability to conduct on the ground compliance or enforcement activities. Government is clarifying the tools and training required for staff to conduct field work safely. Prior to winter 2010/11, a safe work program for avalanche areas should be in place to enable more field compliance activities.

In spring 2009, MoE made a commitment to stakeholders of the MCRIP to investigate options of implementing closures in the Revelstoke area recommended by the Mountain Caribou Science Team that were not incorporated in the February closures. A work plan was developed and negotiations with local Revelstoke clubs are currently under development. This process is expected to be finalized by March 31, 2010. In addition, in fall 2009, minor linework issues regarding the closed areas were identified by regional staff, who worked with local clubs to find solutions. A linework amendment has been proposed to accommodate these changes and is expected to be completed by March 31, 2010.

Next Steps

Continue to support snowmobile clubs by distributing educational materials regarding the closed areas. Work across agencies to identify the need to replace and/or install new signs.

Continue to work across agencies to monitor closed areas and to collate this information for enforcement and adaptive management purposes.

Stewardship Management Agreements

Stewardship Management Agreements (SMAs) have been completed and signed across the MCRIP range. Regional MoE and ILMB staff completed 12 SMAs in three regions in January 2010. When combined with a previously established SMA in the Revelstoke area in 2008, it brings a total of 13 established SMAs to support mountain caribou recovery efforts. Assessment

of the need for changes to existing access closures or SMAs will likely occur in 2010 after results of snowmobile monitoring and additional caribou surveys are available.

Currently, MoE and ILMB staff are working with clubs from the British Columbia Snowmobile Federation and the Association of British Columbia Snowmobile Clubs to ensure that adequate signage is in place and accurate maps are available to all users.

Next Steps

Continue to support snowmobile clubs by distributing educational materials regarding the closed areas. Work across agencies to identify the need to replace and/or install new signs.

Meet with clubs holding SMAs to discuss implementation in 2009/10 and possible improvements.

Commercial Recreation

Building on the heli- and cat-skiing monitoring recommendations provided by AMEC and Jelinski (2008), a team consisting of MoE and ILMB staff, a consultant, and heli- and cat-skiing sector representatives met in Kamloops in October 2009 to determine the goals, objectives, and operational realities of implementing a compliance and effectiveness-monitoring strategy. The outcome of this meeting and subsequent discussions led to development of a draft strategy entitled "Implementation and Effectiveness Monitoring of Standard Operating Procedures for Heli-skiing and Snow-cat Skiing Activities in Mountain Caribou Habitat." The intent of this strategy is to ensure that operational practices identified under the 2005 Memorandum of Understanding between this sector and government are being implemented and to test whether these practices are effective in supporting mountain caribou recovery objectives. Considering the skiing season was already underway by the time the strategy was developed, the team decided to implement the strategy on a pilot basis with a few operators to test its utility and identify any unforeseen issues.

The information collected through the monitoring strategy will be used in the adaptive management process to determine the effectiveness of this management action.

Next steps

At the end of this skiing season the team will review the outcomes of the pilot, refine where appropriate, and seek sector approval prior to bring forth to government for endorsement to implement this program across the sector before the 2010/2011 skiing season.

Recovery Action #2 Key Accomplishments

- Approximately 1 million hectares of areas closed to snowmobiles were established in February 2009.
- 12 SMAs were signed in December 2009.
- Worked with and supported local clubs in distributing and installing educational material and signs.

- Established a protocol for monitoring snowmobile closed areas.
- Proposed options for snowmobile closures in the Revelstoke area.
- Identified cross-agency support for compliance and enforcement initiatives.
- Completed a draft compliance and effectiveness-monitoring document for heli- and cat-skiing.

RECOVERY ACTION #3: MANAGE PREDATOR POPULATIONS

A Predator–Prey Strategy entitled “Recommendations for Predator-prey Management to Benefit the Recovery of Mountain Caribou in British Columbia” was developed through a consultant and MoE. The report was subject to external peer review as well as review by stakeholders and BC government specialists. The report was accepted by MoE executive in May 2009 and approved for public release in September 2009. The Strategy constitutes best science advice to the MoE to meet the recovery objectives identified under the MCRIP. These recommendations were subsequently endorsed by the Mountain Caribou Science Team in September 2009.

Current efforts include wolves being radio-collared and monitored in three regions. Information on overlap between wolves and mountain caribou home ranges will help form the basis for any discussions on intensive wolf removal. Wolf removal by registered trappers and legal hunting seasons continued this year on a limited basis. 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 mountain caribou will take several years to determine.

A wolf sterilization project has been underway in the Cariboo region. The goal is to determine the effectiveness and operational applicability of the method, including resource implications. A truncated sterilization and removal program continued in 2009/10 in the Quesnel Highlands. An assessment of the operational application of this method of wolf control will be completed in spring 2010.

Success of actions to date will be monitored. Survey results between late March and mid-April will influence future actions. Very small subpopulations of mountain caribou are sensitive to any predation, so the intention is to maintain pressure on wolf populations through hunting, trapping, and direct removals.

A small undergraduate project entitled “Social acceptability of predator control in aiding endangered species recovery: A case study in British Columbia, Canada” to assess public opinion on wolf control in BC was completed in 2009. The MCRIP provided information to this project but no resourcing. The results will be useful in making decisions for wolf management.

Next Steps

Complete the report of the sterilization pilot project.

Develop an information package on wolf management.

Recovery Action #3 Key Accomplishments

- Completed most field work for the sterilization pilot project.

RECOVERY ACTION #4: MANAGE THE PRIMARY PREY OF CARIBOU PREDATORS

The MCRIP committed government to reducing the densities of primary prey (moose and white-tailed deer) to reduce the densities of their predators to support mountain caribou recovery. moose-wolf systems dominate northern areas of the mountain caribou range, whereas cougar-deer systems, including elk, dominate the southern part of the range. The MoE currently has two pilot moose-reduction projects in the Parsnip (region 7) and Revelstoke (region 4) areas to assess how effective reducing moose densities is in reducing wolf densities. A prey management strategy to support mountain caribou recovery has not been implemented by government across the mountain caribou range.

Next Steps

Determine the effectiveness of the pilot projects in May 2010.

Recovery Action #4 Key Accomplishments

- Initiated pilot projects to determine the effectiveness of reducing moose to control wolf densities.

RECOVERY ACTION #5: BOOST CARIBOU NUMBERS IN THREATENED HERDS

Augmentation continues to be an important focus of mountain caribou recovery. Recently the Mountain Caribou Science Team reconvened to discuss and evaluate recovery progress to date. Augmentation was one of the key discussion points and the Purcell South herd has been identified as the highest priority for augmentation. The most recent population estimate for the Purcell South is 14 (March 2009); the population target for this herd is 159. A project proposal for augmenting the Purcell South herd has been developed and reviewed by BC government specialists.

Important issues need to be addressed before any capture and transplantation can take place. These include the need to identify a suitable donor herd. The following herds are being reviewed for suitability as a donor population: Chase, Wolverine, Spatizi, Rabbit, Muskwa, and Itcha-Ilgachuz. Each herd has its own unique challenges regarding their suitability as a donor population. Work with herd experts to collect relevant information continues: population, herd density, calf recruitment, and logistical considerations. Once a donor herd has been selected based on the parameters outlined, consultations will begin with First Nations in both the donor and receiving areas to ensure that all pertinent information is available to decision makers.

To date the Itcha-Ilgachuz herd has been the focus of much of the discussion around donor herds. A survey of the Itcha-Ilgachuz herd was completed in June 2009 to confirm its suitability as a donor herd. Approximately 2090 caribou were observed, which is substantially lower than surveys completed in 2004 and 2006. There is not a clear answer why fewer caribou were observed, although the area has undergone significant changes due to the mountain pine beetle infestation. Internal discussions are ongoing, but a final decision on a donor herd has not been made.

When a decision is made regarding the source for donor animals, specific predator problems on the receiving end will need to be dealt with. The Mountain Caribou Science Team clearly indicated that predator populations at the receiving end need to be managed to ensure that introduced caribou are given the best opportunity to thrive in their new surroundings. At this point there is concern about moving animals into a recovery unit at great expense only to have them killed by predators before any recovery effect can be realized.

Next steps

Finalize selection of the donor herd.

Implement Purcell South transplant.

Recovery Action #5 Key Accomplishments

- Completed Purcell South transplant proposal.
- Endorsed Purcell South as priority for transplants.

RECOVERY ACTION #6: SUPPORT ADAPTIVE MANAGEMENT AND RESEARCH AND IMPLEMENT EFFECTIVE MONITORING PLANS

In summer 2009, the MoE distributed a draft adaptive management strategy to stakeholders and key sector representatives for review and comment. The strategy entitled “A Proposed Monitoring and Adaptive Management Strategy for Mountain Caribou Recovery Implementation” was revised accordingly and approved by the Directors’ Team for mountain caribou recovery in the fall 2009. The intent of this strategy is to design and implement management actions, monitor the implementation and effectiveness of these actions, and then to revise these actions where necessary to ensure that government meets its objective of 2500 mountain caribou throughout their existing range in British Columbia within 20 years.

An Adaptive Management Team consisting of cross-agency staff was developed in January 2010. The Team is currently reviewing a draft Terms of Reference document that will guide implementation of the strategy. However, components of the adaptive management strategy have already been initiated as per the overall MCRIP. Such components include monitoring public and commercial recreation activities and the monitoring of mountain caribou subpopulations. For example, mountain caribou survey results from winter 2009 are as follows:

- Narrow Lakes – 25 (48 in 2008, a segment of the population is thought to have been missed)
- South Selkirks – 46 (46 in 2008, but 3 killed on Hwy)
- South Columbia – 13 (20 in 2008).

Next Steps

The adaptive management team is expected to convene in March 2010 to finalize the Terms of Reference and start discussions regarding implementing the strategy. The success of this team will depend on support and input from those agencies and sector representatives that have been key to the success of the MCRIP to date.

Recovery Action #6 Key Accomplishments

- Completed adaptive management strategy in summer 2009.
- Developed an Adaptive Management Team in January 2010.
- Initiated certain monitoring programs.
- Conducted surveys on several caribou herds.

RECOVERY ACTION #7: INSTITUTE A CROSS-SECTOR PROGRESS BOARD TO MONITOR THE EFFECTIVENESS OF RECOVERY ACTIONS

In spring 2008, a Progress Board was formed of key sector representatives who supported the government announcement of the MCRIP in 2007. The main purpose of the Board is to review and comment on government's ability to effectively implement the MCRIP. The Board also serves as a body to provide input to government on addressing key issues associated with the MCRIP (e.g., wolf reduction program). A mineral sector representative has been identified as a potential candidate to join the Board, but has not yet notified the Board of an intention to participate.

Since the last meeting in February 2009, the Board held one meeting in December 2009 (a conference call).

Next steps

Continue input to MCRIP priorities and issues.

Finalize the annual report of the Progress Board.

Recovery Action #7 Key Accomplishments

- Continued sector support and interest from the Progress Board.

ADDITIONAL KEY ACCOMPLISHMENTS ASSOCIATED WITH THE MCRIP

Science Team Report

To address identified uncertainties and to update the technical perspective on a variety of mountain caribou recovery implementation issues and challenges, the MoE facilitated a workshop with the Mountain Caribou Science Team (MCST) on September 15 and 16, 2009. Outcomes of the workshop were captured in a report entitled “A Review of Management Actions to Recover Mountain Caribou in British Columbia.” The report was written by MoE staff who attended the meeting and represents a summary of the expert opinions and recommendations of the MCST regarding status of the MCRIP. Drafts of the report were reviewed by MCST and the Directors’ Team for Mountain Caribou recovery.

The report presents government with science advice on how to move forward with future recovery efforts to achieve government objectives and timelines associated with the MCRIP.

The report highlights three key MCST recommendations:

1. Immediate aerial removal of Wolves that threaten herds with fewer than 50 animals.
2. Immediate augmentation of the South Purcell herd and all herds with fewer than 20 animals.
3. Immediate but gradual reduction of Moose densities throughout the Mountain Caribou range by adjusting hunting regulations, primarily for Moose.

The report also recommends that government continue or increase the following actions:

- Minimize forestry-related activities in core habitat;
- Enforce recreation restrictions; and
- Conduct a complete census of Mountain Caribou herds every three years (approximately one-third of the range each year).

The report was approved by MoE executive for public release.

APPENDIX 1: IMPLEMENTING THE MCRIP

In 2009/10, the MCRIP was supported by base funding from MoE, MEMPR, and ILMB. This is represented in support for dedicated staff, for MoE and ILMB regional staff, and operational funding. The following table illustrates the distribution of these resources against the recovery actions.

MCRIP Team	Habitat	Public Rec	Commercial Rec	Pred ator Manage	Prey Manage	Augmentation	Adaptive Management & Monitoring	Progress Board	Administration
Chris Pasztor (MoE) % workload		15	20				30		20
Darcy Peel (ILMB) % workload		30	10			10			10
Jeff Hoyt (MoE) % workload	5								
Chris Ritchie (MoE)	5	5		5		5	5	5	40
Regional Staff (FTE*)	0.1	0.5	0.05	0.5	0.1	0.1	0.05	0	0.1
\$ (,000)	8	139	5	162	50	17	182	9	25

*FTE – Full Time Equivalent

REFERNCES

Notice of Work Permit Conditions and Operational Guidance for Mineral Exploration Activity in Mountain Caribou Habitat. 2009. Prepared for: BC Ministry of Energy, Mines and Petroleum Resources, Victoria.

Hamilton, D., and C. Pasztor. 2009. 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. Prepared for: Ecosystem Branch, BC Ministry of Environment, Victoria.

Stock, A., White, K., Armleder, H., McLellan, B., Rivette, N., Betuzzi, C., Jones, J., Fraser, B., and T. McDonald. 2008. Mountain Caribou and Forest Health Report. Prepared for: Species at Risk Coordination Office, BC Ministry of Agriculture and Lands, Integrated Land Management Bureau, Victoria.

Wilson, S.F. 2009. DRAFT - Implementation and Effectiveness Monitoring of Standard Operating Procedures for Heli-skiing and Snow-cat Skiing Activities in Mountain Caribou Habitat. Prepared for: Ecosystem Branch, BC Ministry of Environment, Victoria.

Wilson, S. F. 2009. Recommendations for predator-prey management to benefit the recovery of mountain caribou in British Columbia. Prepared for: Ecosystem Branch, BC Ministry of Environment, Victoria.

Whittington, K. 2009. Social acceptability of predator control in aiding endangered species recovery: A case study in British Columbia, Canada. School of Environmental Sciences, University of East Anglia, Norwich, Norfolk , United Kingdom.

Wilson, S. F., and J. B. Nyberg. 2009. A proposed monitoring and adaptive management strategy for mountain caribou recovery implementation. Prepared for Ministry of Environment, Victoria, BC. EcoLogic Research, Gabriola Island, BC, and Nyberg Wildland Consulting, Brentwood Bay, BC.

AMEC and D. Jelinski. 2008. Mountain caribou recovery implementation plan and heli ski operations in southern British Columbia. Prepared for: Species at Risk Coordination Office, BC Ministry of Agriculture and Lands, Integrated Land Management Bureau, Victoria.

A Review of Management Actions to Recover Mountain Caribou in British Columbia. 2009. Prepared for: Ecosystem Branch, BC Ministry of Environment, Victoria.

Appendix C Focussing Questions

The MCRIP was announced in 2007 and included specific recommendations for recovery action (topic). Since that announcement, and specifically in 2009/10, has government effort met your expectations for that recovery action? (exceeded expectations, met expectations, failed expectations)

If expectation were met, are there key aspects that should be highlighted to government as things to strive for?

If expectation were not met, are there key aspects where more time, resources or consideration should be applied in 2010/11?