Boreal Caribou Implementation Plan Revision

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Ministry of Forests, Lands and Natural Resource Operations

Revised BCIP

2011 BCIP

Federal Expectations

Research

Caribou Monitoring

Caribou Population Model
Federal Expectations

• Boreal caribou recovery strategy posted in 2012

• Jurisdictions are expected to develop range plans to protect, and improve condition of, Critical Habitat.

• Environment and Climate Change Canada has provided Range Plan Guidance for boreal caribou.
  • General guidance on development of range plans
  • ECCC's perspective on desired content of range plan

Federal population and habitat goals:

1. Stabilize and achieve self-sustaining populations across each boreal caribou range, and;

2. Achieve and maintain at least 65% undisturbed habitat in each range.
Revised BCIP

- 2011 BCIP
- Federal Expectations
- Caribou Monitoring
- Research
- Caribou Population Model
2011 BC Boreal Caribou Implementation Plan

Goals:

• Decrease the expected rate of decline in the boreal caribou population;
• Significantly reduce the risk of boreal caribou extirpation in 4 ranges within 50 years.

Objectives:

• Protect caribou habitat to provide opportunities to recover populations in all six range within 50 years;
• Recruit capable habitat into suitable condition through restoration activities in Chinchaga, Parker, Prophet, and Snake-Sahtaneh ranges;
• Manage size of industrial footprint in all six ranges and require industry standard management practices;
• In all six ranges, mitigate effects of industrial footprint by reducing predators and fire suppression; and
• Monitor effectiveness of management actions and modify actions to ensure goals are being achieved.
2011 BC Boreal Caribou Implementation Plan

**Actions and Performance Measures:**
- Develop Research and Effectiveness Monitoring Board
- Develop and implement boreal caribou population monitoring strategy
- Establish UWRs and WHAs in Fort Nelson Forest District
- Establish UWRs and WHAs in Fort St. John Timber Supply Area (Chinchaga)
- Establish Resource Review Areas (RRAs)
- Develop performance measures for RRAs
- Develop and implement PNG industry standard operating and planning practices (IOPs)
- Determine predation risk to caribou

**To do List:**
- Determine TEK related to historic and current caribou populations **UNDER WAY**
- Develop and implement a habitat suitability monitoring strategy
- Develop and implement a fire response/suppression strategy
- Develop and implement a habitat restoration strategy
- Determine need for predator/alternate prey management, develop and implement predator management strategy if necessary **UNDER WAY**
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Boreal Caribou Population Monitoring

**Minimum Population Counts**
- Estimated from average densities
- Minimum population counts range from 2004 to 2016.

**Recruitment Rates**
- Target 28 calves:100 cows
- Recruitment rates from 2013 to 2016

*Photo Credit: D. Culling, Matrix Solutions, C. DeMars*
Mortality Risk

Mortality Cause or Suspected

- Wolf: 66%
- Undetermined: 24%
- Wolverine: 3%
- Condition: 4%
- Accident: 1%
- Hunting: 1%

[Graph showing mortality reasons and percentages]
Revised BCIP

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Caribou Population Model

- Proportion early seral habitat
- Prey density
- Wolf density
- Adult caribou mortality
- Linear feature density
- Wolf Efficiency
- Caribou recruitment
- Caribou population trend
Revised BCIP

2011 BCIP

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Caribou Monitoring

Caribou Population Model
Research, research and more research!

http://www.bcogris.ca/boreal-caribou/projects

Boreal caribou habitat restoration

Wolf density and control

Role of moose in caribou survival

Role of disturbance in caribou survival

Boreal caribou habitat requirements

Boreal caribou monitoring
Proportion early seral habitat → Prey density → Wolf density → Adult caribou mortality

Linear feature density → Wolf Efficiency → Caribou recruitment → Caribou population trend

Caribou Population Model
Revised BCIP

Management of proportion of early seral habitat
- Primary/alternate prey
- Predator density
- Availability of preferred caribou habitat
- Ecological restoration

Management of linear feature density
- Predator movement
- Functional restoration

Population management
- Predator exclusion/control

Stay tuned…