LOOKING FOR ACTION: *Caribou losing ground*

Second annual report on governments' efforts to conserve Canada's boreal caribou

December 2014





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This report is our second annual review of Canada's progress in conserving boreal woodland caribou habitat since the 2012 release of the federal recovery strategy for boreal caribou under the *Speciesat-Risk Act* (SARA). The reason that we are tracking provincial and territorial progress toward developing and implementing meaningful boreal woodland caribou conservation measures is because this species is often an indicator of a healthy boreal forest ecosystem.¹ If we successfully conserve our remaining boreal caribou populations, we will not only save one of our country's most iconic wildlife species, but will also be conserving significant areas of the world's remaining intact forests and wetlands. Canada's boreal forest provides billions of dollars of value annually in clean air, clean water and climate mitigation services.

Our main finding this year is that threats to boreal caribou from industrial developments have outpaced progress on habitat conservation and restoration measures across the country. Examples of these threats include: more natural gas development in BC; continued sale of oil and gas leases in Alberta; the approval of a mine in a provincial park in Manitoba; expansion of forestry roads and clearcuts in Ontario and Québec in ranges facing already high risk situations; and a proposed new mining exploration road in Newfoundland and Labrador, all through important boreal caribou habitat.

Further, no jurisdiction in Canada has yet produced a range plan that reflects the science in the federal recovery strategy and meets the requirements under SARA. Fifty-one plans are needed by 2017. In most cases, governments have not made information about range planning processes publically available, and only in a few jurisdictions are stakeholders even aware of how these processes will proceed. Given the pace of efforts so far, there is a very real risk that the 51 range plans will not be completed in time.

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Executive Summary

Photo: Gary Gulash



Another major challenge we've identified is that jurisdictions are relying on the premise that boreal caribou populations will be able to maintain themselves within landscapes undergoing increasing levels of disturbance, despite evidence to the contrary. To compound matters, this past year Québec suspended all recovery teams' work until spring of 2015, and Newfoundland and Labrador terminated an entire branch dedicated to caribou science and management.

We are aware of work being done by federal, provincial, and territorial staff on various boreal caribou-related plans and science in jurisdictions across Canada. However, only Manitoba has protected more habitat for caribou in 2014 and only the Northwest Territories has adopted new legal protection for caribou in the past year. In November, Manitoba permanently protected 100,300 hectares of boreal caribou habitat, and earlier this year the Northwest Territories listed the boreal caribou as threatened under its new species-at-risk legislation.

Given these findings, our key recommendations to Canada's governments are to:

- 1 IMPLEMENT CONSERVATION AND RESTORATION MEASURES NOW. The provinces and territories already have the tools to limit further disturbance where caribou are not self-sustaining. For example, jurisdictions can immediately change the way they review industrial developments in caribou ranges and limit cumulative disturbances while range plans are being drafted. In addition, restoration measures required in permitting processes need to be implemented and their effectiveness monitored.
- 2 ACCELERATE IMPLEMENTATION OF CARIBOU CONSERVATION AND PROTECTED AREA PROPOSALS. Québec, Newfoundland and Labrador, Ontario and Northwest Territories all have pending plans from 2013 or before to conserve areas that contain important boreal caribou habitat. Moving forward with these will quickly make a significant contribution towards boreal caribou protection before more habitat is lost or compromised.
- **3** MANAGE FOR UNCERTAINTY. Apply the precautionary principle so that decisions about land use affecting local caribou boreal populations do not increase their risk of extirpation. Monitoring population viability is key to understanding how decisions are impacting caribou.
- **4** BE MORE ACCOUNTABLE. Greater transparency is needed on how caribou conservation range plans will be created and implemented. In addition, governments should also make transparent the manner in which interim decisions are being made.
- **5** USE BETTER DECISION-MAKING PROCESSES. Seek input from Canadians through meaningful public consultation, and meet legal obligations to indigenous communities around consultation. In addition, undertake adequate scientific and peer review of caribou conservation plans.

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Executive Summary

Canada's boreal woodland caribou¹ are in trouble. They were assessed as *threatened* by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) in 2002. This month, COSEWIC confirmed that the species continues to be threatened. A press release released in December 2014 reported that boreal caribou habitat has deteriorated since the 2002 assessment, and the species is declining, especially in the southern part of the range.^{II} This information supports findings published by Environment Canada in 2012, which reported that only 14 of the 51^{III} local populations² of boreal caribou in Canada are *self-sustaining*.^{IV}

In some parts of Canada, scientific assessments dating back to the late 1990s indicated that boreal caribou were in trouble and action was needed.^v Most of the provinces and territories where boreal caribou still reside – Labrador, Québec, Ontario, Manitoba, Saskatchewan, Alberta, British Columbia, Northwest Territories, and Yukon – have had policy documents describing the state of boreal caribou in their jurisdiction, their recovery goals, and the steps needed to recover local boreal caribou populations since the mid-2000s.^{vi} In addition, boreal caribou are now listed in every province and territory that has provincial species-at-risk legislation.^{vii}

In 2012, the Federal Government released its "Recovery strategy for the woodland caribou, boreal population (*Rangifer tarandus caribou*) in Canada,"

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Introduction

¹ Hereafter called *boreal caribou*.

² The Federal Recovery Strategy defines a **self-sustaining** population of boreal caribou as one that on average demonstrates stable or positive population growth over the short-term (≤20 years), and is large enough to withstand stochastic events and persist over the long term (≥50 years), without the need for ongoing active management intervention.

Photo: rberdan/canadiannaturephotographer.com



hereafter the *Federal Recovery Strategy*, as required under the *Species-at-Risk Act* (SARA). The federal science cited in the Federal Recovery Strategy identifies habitat loss and fragmentation from industrial resource extraction and the resulting predator/prey dynamics as major risks to boreal caribou population viability.

Despite the knowledge and direction provided in the Federal Recovery Strategy, many jurisdictions have implemented only a limited number of the measures needed to help boreal caribou maintain self-sustaining populations. And most jurisdictions have fallen behind on the milestones and promises made in policy documents, such as provincial boreal caribou recovery plans.

This report is our second annual review of provincial and territorial progress toward developing and implementing meaningful caribou conservation measures. We are also tracking new information as it emerges about the condition of boreal caribou habitat. Our goal is to identify what steps the provinces and territories have taken to conserve boreal caribou in 2014, and those which still need to be taken. This includes any steps the provinces and territories are taking to advance either caribou range³ or action plans⁴ that would support the Federal Recovery Strategy. In the Federal Recovery Strategy, the Minister of the Environment set a 2017 deadline for the completion of provincial and territorial plans demonstrating the steps being taken *to achieve self-sustaining local populations in all boreal caribou ranges throughout their current distribution in Canada, to the extent possible^{viii} – for each of the 51 ranges identified.*

Threats to Boreal Caribou Survival

Boreal caribou live in forest ecosystems that have evolved over centuries. They require large areas of undisturbed habitat with mature coniferous forest, lichens, muskegs, peat lands, and upland or hilly areas.^{ix} Large areas are required so that they can move across the landscape when conditions are not favourable. This occurs, for example, when the area has been disturbed by fire or human activity causing food supplies to dwindle and their risk of predation to rise.

Since 1880, North America's woodland caribou have lost about half of their range due to the expanding human footprint on the landscape from infrastructure such as roads, pipelines, well pads, mines and forestry activities (see Figure 1).* These activities, combined with other stresses that damage boreal caribou habitat, such as the large fires seen in the Northwest Territories this year, are resulting in a landscape that is increasingly inhospitable for boreal caribou. In addition, the impact of climate change on boreal caribou and their habitat is of increasing concern. Climate change not only impacts the health of the boreal forest, by increasing the size and frequency of fires and insect outbreaks^{xi} it is in some cases facilitating the expansion of white-tailed deer across the southern boreal,^{xii} which in turn is leading to increased wolf densities. The increase in wolf densities, combined with more disturbed landscapes, has been shown to have a significant impact on boreal caribou populations.^{xiii}

Work commissioned by Environment Canada to support the Federal Recovery Strategy demonstrated a direct relationship between the level of disturbance

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³ A **range plan** is the term used in the Federal Recovery Strategy to identify the document that will describe how the critical habitat in a given range will be protected. The range plan must explain how a given range will be managed over time and space to maintain or attain a minimum of 65% undisturbed boreal caribou habitat, and will result in the local population either continuing to be self-sustaining or becoming self-sustaining over time.

⁴ An **action plan** is a term defined in the Species at Risk Act (SARA). An action plan needs to include a broad spectrum of subjects, including: measures to address threats and achieve population objectives; an evaluation of socio-economic costs and benefits to be derived from its implementation; and an approach for monitoring and reporting on how the population is doing over time. It is not range specific. in a boreal caribou herd's habitat and their ability to be self-sustaining.^{xv} Given these findings, the Federal Recovery Strategy identifies 65% undisturbed habitat in a range⁵ as a minimum *management threshold* to guide the development of range plans by provinces and territories. This level of undisturbed habitat in the range is linked to a 60% probability that the boreal caribou herd, or *local population*⁶, will be self-sustaining.^{xvi}

In the Federal Recovery Strategy, Environment Canada:

- a) provides the level of anthropogenic and natural disturbances in each range;
- b) makes the link between the level of disturbance in boreal caribou habitat and the probability of a local herd being self-sustaining clearer; and
- c) sets a 2017 deadline for jurisdictions to develop plans that outline range-specific population and habitat management activities with measurable targets to achieve the recovery goal.

⁵ The Federal Recovery Strategy defines a range as the geographic area occupied by a group boreal caribou that are subject to similar factors affecting their demography and used to satisfy their life history processes (e.g. calving, rutting, wintering) over a defined time frame. ⁶ The Federal Recovery Strategy defines a **local population** as a group of boreal caribou occupying a defined area distinguished spatially from areas occupied by other groups of boreal caribou. I FGFND Historical Woodland Caribou Range Bodies of Water Boreal Caribou Ranges Human Footprint 1,600 km 800 Human Footprint Overlapping with Boreal Caribou Ranges

Figure 1: Human Impact on Canada's Boreal Caribou Ranges^{xiv}

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Further supporting COSEWIC and Environment Canada's findings that there are significant disturbances in caribou ranges are this year's findings by Global Forest Watch Canada. New satellite-based data indicate that in 24 ranges, large areas of boreal forest had been degraded either primarily or significantly due to industrial activity between 2010 and 2012. In eight cases, this degradation overlapped with the boreal caribou ranges that had already been assessed as more than 40% disturbed in 2010.^{xvii} Six ranges were in Alberta, and two in British Columbia.

Despite the information and directives provided to jurisdictions, disturbances to boreal caribou habitat are continuing to take place across Canada. There are examples of land use, licensing and management processes across Canada that will likely result in further loss or fragmentation of boreal caribou habitat. These include the sale of oil and gas licenses in Alberta and the approval of a mine in a Manitoba provincial park. Scientists have found that boreal caribou habitat can take up to five decades to recover from disturbances.^{xviii} Although research is being conducted, including by Environment Canada, it is not yet known how quickly ecosystems degraded by industrial disturbances can once again become viable boreal caribou habitat.

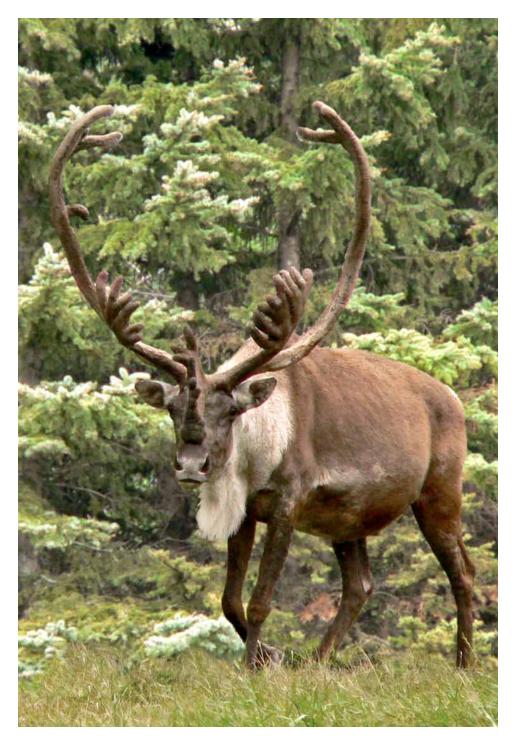
The remainder of this report explores in more detail the activities that will impact boreal caribou conservation in the nine provinces and territories where critical habitat has been identified in the Federal Recovery Strategy. In addition, we look briefly at those activities being undertaken by Environment Canada. The final section provides our conclusions and recommendations for 2015.

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Photo: Wayne Lynch



To assess provincial and territorial progress to conserve boreal caribou, CPAWS is tracking the actions that jurisdictions promised through their provincial or territorial recovery documents or parallel processes such as protected area strategies. These are actions that could be taken today to ensure the effective conservation of boreal caribou habitat, and demonstrate a more sustainable management of the boreal forest ecosystem. We are also tracking the steps that these jurisdictions are taking to develop range plans that meet the requirements outlined in the Federal Recovery Strategy.⁷ Finally, we are tracking where activities are being planned or implemented that may have a negative impact on boreal caribou habitat.



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Provincial and Territorial Action in 2014 on Boreal Caribou Conservation

⁷ These are described in more detail in section 7.4 of the Federal Recovery Strategy. However, in order to be adopted in whole or in part as an action plan by the Minister of the Environment, the range plan and the process used to develop it will need to meet the requirements of section 48 (cooperation) and section 49 (content) of SARA.

Photo: CPAWS MB

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YUKON

Boreal caribou reside in the northeast corner of the Yukon, which overlaps with the Peel River watershed. Northern mountain and barren ground caribou occupy the rest of the territory.

The Yukon does not have an endangered species act or any other policy or legal framework which includes boreal caribou, however one positive move Yukon government could take for boreal caribou now is to list them as a "specially protected species" under the *Yukon Wildlife Act*.

Range planning for boreal caribou in Yukon will take place with the Gwitch'in portion of the NWT range plan process, which is currently planned for 2016. In the meantime, the Peel Land Use Plan is one legal tool that could be leveraged to conserve its boreal caribou population. This plan, which was developed through seven years of study and negotiation and designed to protect 80% of the Peel watershed, was re-written at the end of the process in 2014 by the territorial government leaving the majority of the area open to industrial development.

However, in December of this year First Nations, CPAWS and Yukon Conservation Society successfully challenged the plan in court. This is a first step in finalizing a land use plan that, if adopted, will offer better protection for all wildlife in the Peel including caribou.



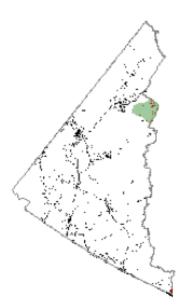


Photo: Peter Mather

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NORTHWEST TERRITORIES

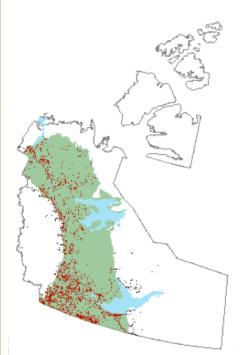
Last year, we reported that the Government of the Northwest Territories (GNWT) was taking a number of promising steps to conserve boreal caribou, spurred by the release of the federal recovery strategy, documented population declines in the southern NWT, and continuing threats to their habitat from natural and human processes. The progress has continued in 2014. The GNWT is now in the process of developing a territorial boreal caribou recovery strategy, after listing the species under its *Species at Risk (NWT) Act* as *threatened* earlier this year. The territory is committed to developing and implementing a recovery strategy by November 2016.

The GNWT is prioritizing range plans in the Dehcho and Sahtu regions where current disturbance is high, and future disturbance is likely. In addition, the GNWT is committed to developing range plans by working with wildlife co-management partners from the Inuvialuit, Gwich'in, Sahtu, Tłįchǫ and Dehcho regions. The intent is that the regional plans will be coordinated for connectivity and combined into an overall plan that achieves 65% undisturbed habitat at the range level.

These are all promising developments, and we are also encouraged that community supported protected area proposals and draft land use plan conservation zones have been put forward for government approval. These areas encompass a number of ecological and cultural values including large tracts of boreal caribou habitat. After over a decade of work, two areas have advanced to near completion through the NWT Protected Areas Strategy.

Regional Aboriginal governments have sent requests to Environment Canada for the establishment of Edéhzhíe (Horn Plateau) and Ts'ude niline Tu'eyeta (The Ramparts) as National Wildlife Areas. Each encompasses more than 10,000 km². Support from the federal and territorial governments to establish these protected areas in 2015 is the next necessary step.

The opportunity exists in the NWT to prioritize sound management and the conservation of habitat necessary for sustaining a healthy population of boreal caribou. However the time to do so is now, while the territory still has the space to effectively balance conserving boreal caribou habitat and industrial activities. In addition, the NWT will need to consider the impact of the fire activity this past summer. The fires extended over more than 33,000 km², an area larger than Vancouver Island^{xix}, and damaged boreal caribou habitat. It is critical that timelines for implementing range plans and the recovery strategy are met with a robust approach to prioritizing boreal caribou habitat.





- Human Footprint
- Human Footprint Overlapping with Boreal Caribou Ranges

BRITISH COLUMBIA

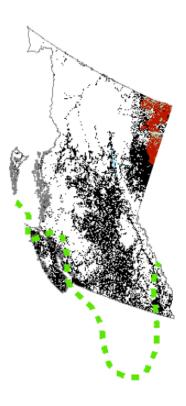
Boreal caribou are only found in northeastern British Columbia, an area that continues to face significant development pressures from the oil and gas industry, as we reported last year. Many thousands of kilometres of linear infrastructure such as seismic lines, pipelines and roads due to conventional oil and gas activities as well as hydraulic fracturing (fracking) are steadily reducing the amount of intact boreal caribou habitat and contributing to increased predation of boreal caribou.

In the past year, the province has made no measurable progress towards producing range plans for any of BC's boreal caribou herds, even though BC has some of the most disturbed boreal caribou ranges in Canada. In the meantime, the province's focus on further developing its natural gas resources in the northeast,^{xx} with a view to exporting liquefied natural gas (LNG), means that there will be an increased industrial footprint overlapping with boreal caribou habitat.^{xxi} Even the approval of just one of the many proposed LNG projects would mean that thousands of new wells and associated infrastructure would be required in order to supply the necessary volume of gas to make the pipeline viable.⁸

As reported last year, the *Implementation Plan for the Ongoing Management* of Boreal Caribou in British Columbia (BCIP) is far too weak, in its present form, to prevent extirpation of some boreal caribou herds in the face of looming industrial threats, and provides no road map to recovery for any of the remaining herds. There are also significant policy gaps between what the BCIP addresses and what the Federal Recovery Strategy describes as necessary for conservation. On a positive note, the province is now reassessing the BCIP and considering a revision to the plan that could address some of these policy gaps and help find a way forward in getting started on recovery efforts.

British Columbia made good progress again this year collecting baseline data on boreal caribou herd numbers, habitat use, and wintering areas, which was previously lacking. These new data have indicated that around 20% of boreal caribou are venturing outside of the currently defined range boundaries in BC. This data is key to informing the range planning process so it is a good step forward in the recovery process; however, data collection is only in early stages and if it continues to progress at this pace, the deadlines for range plans set out by the Federal Recovery Strategy will not be met and the decline of some herds can be expected to continue in the interim.

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⁸ CPAWS-BC is a member of Organizing for Change, a coalition of environmental groups that has identified LNG as a strategic priority for the coming year. We are urging the BC government to work with First Nations and local communities to undertake a big picture Regional Strategic Environmental Assessment that considers the cumulative effects of proposed development – including impacts on boreal caribou – before approving any one LNG project.

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ALBERTA

Last year, we reported that all of Alberta's boreal caribou populations were under tremendous pressure from industrial activities, largely due to oil and gas development. In 2014, the situation for Alberta's boreal caribou remains virtually the worst in the country, with no evidence of effective action by the province to conserve remaining critical habitat.

A 2013 article in the Canadian Journal of Zoology showed that eight of the province's local boreal herds had rapidly declining populations, while three more were precariously balanced.^{xxii} Of these, six herds were declining by about 10% per year, while overall their population is estimated to have declined by almost 50% in 8 years.⁹

Rapid and extensive development of energy sector activities across the province, in addition to continued forest harvesting and fires, are fragmenting what is left of the province's large areas of old growth forests, leaving boreal caribou increasingly stressed and vulnerable to predators and other pressures. Boreal caribou numbers have continued to decline despite steps taken by the government to reduce the impact of new industrial activities in boreal caribou ranges since 2011.^{xxiii}

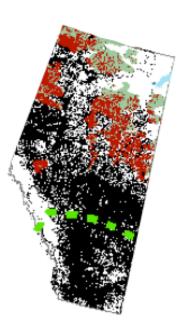
Alberta has attempted a number of times to develop range plans that would conserve boreal caribou habitat, but with no clear resulting actions. In 1996, the government presented their first range plans to stakeholders, but these were not adopted.^{xxiv} In 2005, the province promised again in the *Woodland Caribou Recovery Plan* (Alberta Plan) to develop and adopt range plans.^{xxv} Again the plans were developed, this time with further stakeholder input, but still not implemented.^{xxvi}

Since the release of the province's Plan in 2005, over 25,000 km² of land in boreal caribou ranges have been auctioned off for oil and gas development^{xxvii} – more than double the size of Jasper National Park. Nearly 5,000 km² – or the area of Prince Edward Island – have been auctioned off since the release of the Federal Recovery Strategy. In addition, bitumen leases were in place in over 80% of caribou ranges in northeast Alberta as of 2011.^{xxviii}

In December of 2014, Alberta scientists released a study reviewing the impacts of what the government has done – a seven-year wolf cull in the Little Smoky Range that started in 2005 and resulted in 841 wolves being killed by 2012. While the cull stopped the immediate decline of the Little Smoky herd, the authors note that it is not a long term solution.^{xxix} The scientists in both this study and the 2013 study find that "maintenance and recovery of woodland caribou populations will be highly unlikely unless short-term predator management and long-term effective habitat conservation and restoration programs are implemented in a combined manner to reverse population trends."^{xxx}

Moving forward the government could show leadership by becoming the first province to complete a range plan using the science presented in the Federal Recovery Strategy. This offers the best chance for the province to achieve what it has failed at so far, which is to protect what remains of boreal caribou habitat from further industrial disturbance, and restore habitat where necessary. Alberta has a number of tools for moving forward towards achieving this goal in 2015, including the Upper and Lower Peace and Athabasca region land use planning processes.

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⁹ The same 2013 paper also demonstrated that Alberta's mountain woodland caribou are also rapidly declining. In May of 2014, COSEWIC recommended that Alberta and BC's mountain woodland caribou populations be elevated to "endangered" status.

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SASKATCHEWAN

As in 2013, our assessment this year is that Saskatchewan is continuing to make progress on conducting necessary herd research and developing boreal caribou conservation plans for the province. However, we also note that threats to boreal caribou habitat continue to mount in the province and it still lacks an endangered species law or other legal tools to provide effective conservation for its boreal caribou ranges if necessary.

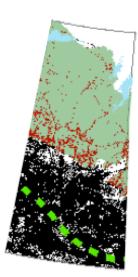
Examples of threats to boreal caribou in Saskatchewan include an 18 km² peat mining project in the Pasquia Bog, where the level of disturbance is already considered high.^{xxxi} The project is an example of incremental development, as it is going ahead after a 22 km access road was built in 2011, also through boreal caribou habitat. Oil sands exploration projects are also advancing within boreal caribou habitat in the province, including one on Buffalo River Dene Nation traditional lands. That proposal withstood a legal challenge by the First Nation and was given court approval in 2014.^{xxxii}

On the positive side, in 2014 a provincial working group finished drafting a new Management Strategy for boreal caribou which, at time of writing, was awaiting government approval.^{xxxiii} The government has also kicked off the boreal caribou range planning process. The first one to be developed will be for boreal caribou living within an area that overlaps with Prince Albert National Park.

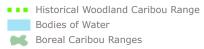
In the Boreal Shield range across the north of the province, the province is continuing a suite of studies. For example, one study is looking at the impact of high fire returns in boreal caribou habitat on the behavior of the Saskatchewan herds and what that might mean for their tolerance of new disturbances. Another looks at refining the level of disturbance in the Boreal Shield from fires.

In addition, this year the government has also been in discussion with stakeholders about a potential new protected area in the eastern Boreal Plain that would also conserve boreal caribou habitat. Protecting this large area would go a long way to bridging the gap between the existing protected areas in the province and the provincial goal.

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LEGEND



Human Footprint

Human Footprint Overlapping with Boreal Caribou Ranges

MANITOBA

This year, Manitoba released a draft of "Manitoba's Boreal Woodland Caribou Recovery Strategy" (hereafter Manitoba Strategy).^{xxxiv} This action places Manitoba second after Québec in updating a previous recovery document with the new science and approach contained in the Federal Recovery Strategy. The Manitoba Strategy states that the province intends to "protect and manage 65 to 80 percent intact suitable boreal caribou habitat in management units."^{xxxv} While details about where, when and how this will be achieved are not included, a number of potential tools including forest management plans, protected areas, and the inclusion of cumulative impact assessments in development planning are listed.^{xxxvi}

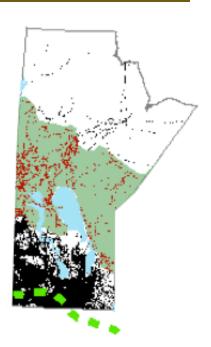
In addition to releasing the Manitoba Strategy, the province and Skownan First Nation created a new provincial park, the Chitek Lake Provincial Park. This 100,300 hectares of intact forest area has been under interim protection since 1999. The park is a home for boreal caribou, moose, elk, and white-tailed deer. In addition, wood bison were successfully introduced in the area in 1991.^{xxxvii}

On a less positive note, the Manitoba government approved a new mine in Grass River Provincial Park. The park is in the Naosop-Reed Range. This range is estimated to have the highest level of anthropogenic disturbance in Manitoba, as well as high natural disturbances, xxxviii and therefore is a high priority for caribou habitat planning according to the Manitoba Strategy. This demonstrates the need for Manitoba's Strategy to more explicitly outline the ways that disturbance thresholds will influence decisions on whether to advance activities that will cause new disturbances. This should include a legal requirement to explicitly measure and manage disturbances at the range or management unit level.

The Manitoba Strategy proposes to develop action plans by 2016 for "high risk" management units.¹⁰ In these plans, access and development guidelines will be developed to ensure sufficient habitat is conserved. One concern is that plans rely too heavily on restoring landscapes that have been logged, or otherwise disturbed, as caribou habitat over time. The Manitoba Strategy indicates that this may be an approach used,^{xxxix} despite the lack of scientific evidence to its effectiveness. This approach needs to be carefully controlled and used with caution. Large areas of currently occupied caribou habitat will need to be conserved to act as an insurance policy until it is scientifically shown that boreal caribou thrive in regenerated habitat in the long term. It is promising that the Manitoba Strategy states, "Manitoba will ensure that protection and forest management planning supports conservation of large suitable areas of caribou habitat through the development of dynamic caribou habitat plans within management units along with large core areas where forestry does not occur." In tandem, the province needs to work with other industrial operators on the landscape to ensure large core caribou areas are not impacted by developments.

It will also be vital for the province to ensure that Aboriginal and Treaty Rights are upheld in all boreal caribou conservation efforts. We recommend that a commitment to consult Aboriginal governments regarding new development and protected area proposals be added to the Manitoba Strategy before it is finalized.

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¹⁰ The Manitoba Strategy defines a **management unit** as a geographical area that contains one or more caribou ranges to be managed for population sustainability, connectivity and habitat goals.

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ONTARIO

Ontario has lost 40-50% of its historic distribution of boreal woodland caribou. The province's Caribou Conservation Plan (CCP) from 2009 requires it to manage and limit cumulative disturbances within boreal woodland caribou ranges. Unfortunately, implementation continues to falter badly and threats to caribou habitat continue to accumulate. As we described last year, range assessments were to have been completed and publically released as per the CCP. We are still waiting on these and other documents.

Resource development activities in all sectors (for example, mining, road building, transmission lines, forestry) are being approved in a piecemeal way. The situation has not improved under the newly released Forest Management Guide for Boreal Landscapes. Forest management plans are to be approved in caribou country that permit logging in intact habitat irrespective of the state of the ranges or the health of local caribou populations. The guide is not aligned with the *Endangered Species Act* requirements and does not explicitly include measures from the CCP, e.g., range management planning and management of cumulative disturbance.

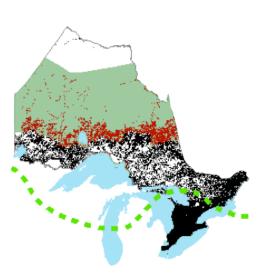
An additional worrying factor is that Ontario seems to be relying on the premise that populations will be able to maintain themselves and habitat supply will be adequate within landscapes that suffer increasing levels of disturbance, despite evidence to the contrary.

To make matters worse, the government enacted broad and sweeping exemptions for industry from the *Endangered Species Act* (ESA) last year. The exemptions prompted Ecojustice lawyers, acting on behalf of Ontario Nature and Wildlands League, to file a lawsuit in Divisional Court alleging that the Ontario government acted unlawfully by making a regulation that undermines the ESA. A hearing is scheduled in early 2015. The five-year forestry exemption is particularly troubling for woodland caribou because it represents an enshrining of the status quo. The prohibitions around harming or harassing caribou or damaging or destroying caribou habitat do not apply if companies are operating under an approved forest management plan.

There is sufficient knowledge now about the high risk situations facing caribou in at least six ranges that there should be no expansion of the industrial footprint here until such time as peer-reviewed science demonstrates positive trends in population condition at the range level, and improved range conditions.

Until the province stops threats to caribou habitat and gets serious about recovery measures, the long-term survival of this species is far from clear. Hard decisions will need to be made if government is committed to recovery of woodland caribou as stated in the Caribou Conservation Plan.

LOOKING FOR ACTION: *Caribou losing ground*



LEGEND



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 Human Footprint

Human Footprint Overlapping with Boreal Caribou Ranges

QUÉBEC

Québec was the first province to update their caribou recovery plan after the Federal Recovery Strategy was released. The *Plan De Rétablissement du Caribou Forestier* (Rangifer tarandus caribou) *au Québec* — 2013-2023 (hereafter Québec Plan) is notable in that it was developed using the best science available in the province and extensive inputs from stakeholders. It provides robust approaches for conserving caribou, including significant habitat protection. The proper implementation of this plan would represent a significant step forward for effective caribou conservation.

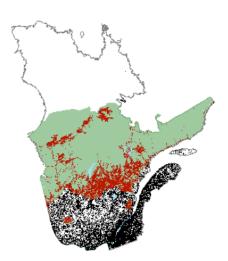
The disparity between the ambition of the Québec Plan and its implementation in 2014 however, is discouraging. Despite a commitment to create one or two 10,000 km² protected areas for endangered wildlife – and more broadly to protect 12% of the province by 2015 – no such protected areas were announced. Approving the Broadback protected area proposal however, put forward by the Cree Nation Government in 2013, would allow the government to meet this 2015 commitment. The government has also not made any progress in developing the smaller conservation areas (1000 km²) identified by the caribou recovery team in 2012.

In October 2014, the government suspended the caribou recovery team's work until April 2015 as part of the government's "austerity measures". In the same month, more than 50 jobs were cut from the Ministry of Forest, Wildlife and Parks, including biologists working on caribou research projects, and game wardens monitoring illegal hunting.^{xi} This will further delay an important report that was due in the spring and then delayed to the end of this year. This report was meant to clarify the disturbance level and critical habitat in each range, and the potential socio-economic impacts of various management scenarios.

Meanwhile threats to boreal caribou habitat are continuing. For example, in the Saguenay-Lac-St-Jean region, new forestry activities and vacation cottage leases overlap with conservation areas identified by the boreal caribou recovery team. The need to move forward with protected areas and robust range plans before the habitat is lost is clear.

All told, this year has not been one of progress for boreal caribou in Québec – what we see is rather a step backward in caribou conservation.

LOOKING FOR ACTION: *Caribou losing ground*





- Human Footprint
- Human Footprint Overlapping with Boreal Caribou Ranges

NEWFOUNDLAND AND LABRADOR

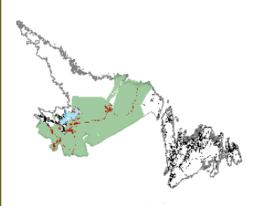
Implementation continues to be a problem in Newfoundland and Labrador for the conservation of woodland caribou. The central Labrador populations of boreal caribou have been listed as threatened in the Newfoundland/Labrador *Endangered Species Act* since 2002. Despite this and the development of a provincial recovery document in 2004, the province is still behind on implementing a number of its commitments such as formally identifying critical habitat for the central Labrador herds. The province has still not implemented the Eagle River waterway park that would protect habitat important to the Mealy herd. Nor is it clear that the province has any intention of engaging the range planning process requested by the federal government for these boreal herds.

In addition, the Island of Newfoundland populations of woodland caribou are in steep decline. According to the latest COSEWIC assessment, populations have plummeted by 68% since the 2002 assessment.^{xii} The island population has just been assessed as 'special concern' in the updated status review by COSEWIC. While these caribou live in the boreal forest, the island population is not listed as a boreal woodland caribou, and therefore is not listed as threatened under SARA.

Meanwhile, the implementation of an effective strategy to conserve the woodland caribou on the island continues to be a concern. The Sustainable Development and Strategic Science Branch responsible for developing a Research and Management Strategy for this population was shut down in 2014 and most staff were laid off or retired. It is currently unclear as to whether the government will actually deliver on the overdue strategy. Meanwhile, threats continue, including a planned 11 km mineral exploration access road into the heart of the Avalon forest, which was released from the environmental assessment process in October.

Potentially significant for the conservation of woodland caribou on the island is the release of the province's sustainable forest management strategy in November 2014.^{xiii} The strategy, adopted by the Newfoundland cabinet, means that four million hectares of boreal forest (or 35% of the island) will be off limits for industrial forestry for at least several years, to protect large intact landscape values. Although this is not a specific strategy to conserve woodland caribou, the geographical overlap is significant; about 75% of the important woodland caribou habitat remaining on the island will now be off-limits to industrial forestry. More work is required to see how this large intact landscape deferral can be enhanced and integrated into land use planning to provide better and longer-term protections for the island population of woodland caribou.

LOOKING FOR ACTION: *Caribou losing ground*





- Human Footprint
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Last year, we stated that more federal guidance to the provinces and territories was needed on how it will assess "undisturbed habitat" and the biophysical habitat attributes required for boreal caribou to carry out their life processes. This year, we note that Environment Canada has undertaken a number of activities to support the implementation of the Federal Recovery Strategy. Earlier this spring, they released draft guidance for jurisdictions developing range plans, entitled the *Draft Boreal Caribou Range Plan*. Environment Canada received feedback from numerous sources regarding this document.

Federal scientists are also working to develop guidance on when boreal caribou habitat has been restored. This guidance should help jurisdictions identify how disturbance levels in a range may change over time, and how to develop range plans that meet the federal criteria. A first draft was not available at the time of writing this report.

Environment Canada has also been developing a Critical Habitat Effective Protection Assessment (CHEPA) framework since 2013. We understand that this framework is being piloted in Alberta and British Columbia. In addition, Environment Canada has contributed in kind and financial contributions to support the identification of boreal caribou habitat in northern Saskatchewan.

Finally, early in March, Parks Canada released a *Legal Protection Statement for the Critical Habitat of Woodland Caribou (Rangifer tarandus caribou), Boreal population, in Nahanni National Park Reserve Canada*. The statement focuses on the "ecological integrity" provisions of the *Canada National Parks Act* (CNPA) as a demonstration that there is protection against the destruction of critical habitat in the park.

LOOKING FOR ACTION: *Caribou losing ground*

Federal Government Update

Photo: Karen Stroebel

Our main finding is that threats to boreal caribou from industrial

developments continue to outpace habitat conservation and restoration measures across the country. In addition, the majority of Canada's governments have made little progress in conserving boreal caribou habitat in 2014 – a picture that has not changed significantly since we released our first annual report on this issue one year ago. We are aware of work being done by federal, provincial, and territorial staff on various boreal caribou-related plans and science in Ontario, Manitoba, Saskatchewan, Alberta, British Columbia and the Northwest Territories. However, only Manitoba has protected more habitat for caribou in 2014 and only the Northwest Territories has adopted new legal protection for caribou in the past year. In November, Manitoba permanently protected 100,300 hectares of boreal caribou habitat, and earlier this year the Northwest Territories listed the boreal caribou as threatened under its new species-at-risk legislation.

LOOKING FOR ACTION: *Caribou losing ground*

Conclusions and Recommendations

Photo: Gary Gulash



Given these findings, our key recommendations to Canada's governments are to:

- 1 IMPLEMENT CONSERVATION AND RESTORATION MEASURES NOW. The provinces and territories already have the tools to limit further disturbance where caribou are not self-sustaining. For example, jurisdictions can immediately change the way they review industrial developments in caribou ranges and limit cumulative disturbances while range plans are being drafted. In addition, restoration measures required in permitting processes need to be implemented and their effectiveness monitored.
- 2 ACCELERATE IMPLEMENTATION OF CARIBOU CONSERVATION AND PROTECTED AREA PROPOSALS. Québec, Newfoundland and Labrador, Ontario and Northwest Territories all have pending plans from 2013 or before to conserve areas that contain important boreal caribou habitat. Moving forward with these will quickly make a significant contribution towards boreal caribou protection before more habitat is lost or compromised.
- **3** MANAGE FOR UNCERTAINTY. Apply the precautionary principle so that decisions about land use affecting local caribou boreal populations do not increase their risk of extirpation. Monitoring population viability is key to understanding how decisions are impacting caribou.
- **4** BE MORE ACCOUNTABLE. Greater transparency is needed on how caribou conservation range plans will be created and implemented. In addition, governments should also make transparent the manner in which interim decisions are being made.
- **5** USE BETTER DECISION-MAKING PROCESSES. Seek input from Canadians through meaningful public consultation, and meet legal obligations to indigenous communities around consultation. In addition, undertake adequate scientific and peer review of caribou conservation plans.

LOOKING FOR ACTION: Caribou losing ground

Conclusions and Recommendations ⁱ Hummel, M., and J.C. Ray. Caribou and the North: A shared future. (Toronto, ON: Dundurn Press, 2008, pg 57).

ⁱⁱ See press release from COSEWIC Assessment Meeting November 2014 http://www. cosewic.gc.ca/rpts/sct7_3_24_e.pdf.

^{III} Note that due to a regrouping of herds in Saskatchewan, the total number of ranges identified by Environment Canada moved from 57 to 51, and the number of self-sustaining local populations shifted from 17 to 14 as a result.

^{iv} Environment Canada, Recovery Strategy for the Woodland Caribou (*Rangifer tarandus caribou*), Boreal population, in Canada. (Ottawa, ON: Environment Canada, 2012).

^v See for example, Hervieux, D., J. Edmonds, R. Bonar, and J. McCammon. 1996. Successful and unsuccessful attempts to resolve caribou management and timber harvesting issues in west central Alberta. Rangifer Special Issues No. 9: 185-190 and Dzus, Elston. 2001. Status of the Woodland Carbiou (*Rangifer tarandus caribou*) in Alberta. Alberta Environment, Fisheries and Wildlife Management Division, and Alberta Conservation Association, Wildlife Status Report No. 30, Edmonton, AB. 47pp.

^{vi} Environment Canada, Recovery Strategy for the Woodland Caribou (*Rangifer tarandus caribou*), Boreal population, in Canada. (Ottawa, ON: Environment Canada, 2012), 25.

^{vii} With the listing in the NWT this year, boreal caribou are now listed under all existing species-at-risk (SAR) legislation. However, several provinces and territories – Yukon, BC, Alberta, and Saskatchewan – still so not have stand alone provincial SAR legislation.

viii ibid, 7

^{ix} *ibid*, vi

^x In Ontario, Alberta and British Columbia, woodland caribou have lost half their range. Hummel, M., and J.C. Ray. Caribou and the North: A shared future. (Toronto, ON: Dundurn Press, 2008).

xi See http://www.nrcresearchpress.com/doi/pdf/10.1139/er-2013-0064

^{xii} See for example, The effects of climate change on landscape diversity: An example in Ontario Forests at http://link.springer.com/article/10.1023/A:1005894525278 and Influence of climate and human land use on the distribution of white-tailed deer (*Odocoileusvirginianus*) in the western boreal forest. K.L. Dawe, E.M. Bayne, S. Boutin (doi: 10.1139/cjz-2013-0262)

^{xiii} See for example Latham ADM, Latham MC, McCutchen NA, Boutin S. 2011. Invading white-tailed deer change wolf-caribou dynamics in northeastern Alberta. J. Wildl. Manage. 75: 204-212 CrossRef, ISI and Latham, A.D.M. 2009. Wolf ecology and caribou-primary prey-wolf spatial relationships in low productivity peatland complexes in northeastern Alberta. Ph.D thesis, University of Alberta, Edmonton.

^{xiv} Compiled by CPAWS using information from Global Forest Watch Canada's data set on *Canada's Industrial Concession* 2013 http://www.globalforestwatch.ca/node/201 and *Canada's Intact Forest Landscape: A Partial Update to 2010* http://www.globalforestwatch.ca/node/190; and COSEWIC. 2002. Assessment and Update Status Report on the Woodland Caribou (*Rangifer tarandus caribou*) in Canada. Committee on the Status of Endangered Wildlife in Canada. Ottawa. Xi+98

^{xv} Environment Canada, Recovery Strategy for the Woodland Caribou (*Rangifer tarandus caribou*), Boreal population, in Canada. (Ottawa, ON: Environment Canada, 2012) ^{xvi} *ibid*

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^{xviii} Hummel, M., and J.C. Ray. Caribou and the North: A shared future. (Toronto, ON: Dundurn Press, 2008).

^{xix} See http://www.cbc.ca/news/canada/north/after-n-w-t-fires-concerns-about-cariboubears-bison-1.2746654

^{xx} See http://www.vancouversun.com/business/good+shape+close+billion+plant+deal+ Premier+Christy+Clark/10431442/story.html#ixzz3KIKm70nn

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^{xxiii} See A woodland Caribou Policy for Alberta at http://esrd.alberta.ca/fish-wildlife/ wildlife-management/caribou-management/documents/WoodlandCaribouPolicy-Alberta-Jun2011.pdf.

^{xxiv} Hervieux, D., J. Edmonds, R. Bonar, and J. McCammon. Successful and unsuccessful attempts to resolve caribou management and timber harvesting issues in west central Alberta. (Rangifer Special Issues No. 9: 185-190, 1996)

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The Canadian Parks and Wilderness Society, CPAWS, is Canada's voice for wilderness. Since 1963 we've led in creating over two-thirds of Canada's protected areas. That amounts to about half a million square kilometres – an area bigger than the entire Yukon Territory! Our vision is that Canada will protect at least half of our public land and water. As a national charity with 13 chapters, over 50,000 supporters, and hundreds of volunteers, CPAWS works collaboratively with governments, local communities, industry and indigenous peoples to protect our country's amazing natural places. We're also on guard to ensure that our parks are managed to protect the nature within them.

www.cpaws.org

Canadian Parks and Wilderness Society National Office 506-250 City Centre Ave Ottawa, ON K1R 6K7

> Telephone: (613) 569-7226 Fax: (613) 569-7098

> > info@cpaws.org