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WCS CANADA

We Stand for Wildlife

Time for a new approach for caribou

Report raises warning signs about status of caribou in northern British Columbia

An analysis of mountain caribou populations in northern British Columbia detailed in a new WCS Canada Conservation Report raises warning signs about the need to put in place stronger protection measures to prevent these herds from following in the footsteps of southern BC populations that have experienced steep population declines in the past 20 years.

The report looks at the degree of combined human and natural disturbance in the ranges of 17 herds in the northern half of the province and finds that disturbance levels exceed known caribou tolerance thresholds in low elevation habitat in five ranges. Understanding of long-term trends for most populations is difficult due to a lack of population surveys, which is why the study uses range conditions instead. In fact, long-term trends are only known for four herds, which points to the need for more comprehensive ongoing monitoring of herds.

Caribou are known to be very sensitive to the disturbance of habitat, particularly the combination of human development (forestry, roads, mining) and fire. This sensitivity has led to steep declines in populations in the southern half of the province in the face of forestry, mining, road building and recreation activities that have destroyed or deeply altered the extensive mature forests caribou need to survive. The result is that many southern herds are in a critical state or have been extirpated altogether. Now, desperate last gasp — and expensive — measures like predator culls and maternity penning are being deployed to try to save what is left of these herds.

Mountain caribou in northern British Columbia need core habitat protected to avoid the fate of southern herds that are struggling for survival. Photo: © Garth Lenz. No use permitted without written permission.

This new research complements the conservation plan for the Greater Muskwa-Kechika region — a core area for healthy caribou populations — developed by WCS scientist Dr. John Weaver. The study's recommendations include better ongoing monitoring of herds and the need to embrace Indigenous-led conservation proposals. We are also calling on governments and industry to better recognize and manage the impacts of cumulative effects, including the growing frequency and intensity of forest fires due to climate change.

WCS President Dr. Justina Ray, a coauthor of the report, recently spoke to the Narwhal about its findings and what we need to do differently if we want to maintain healthy caribou populations.

Taking a deep look at a key conservation opportunity

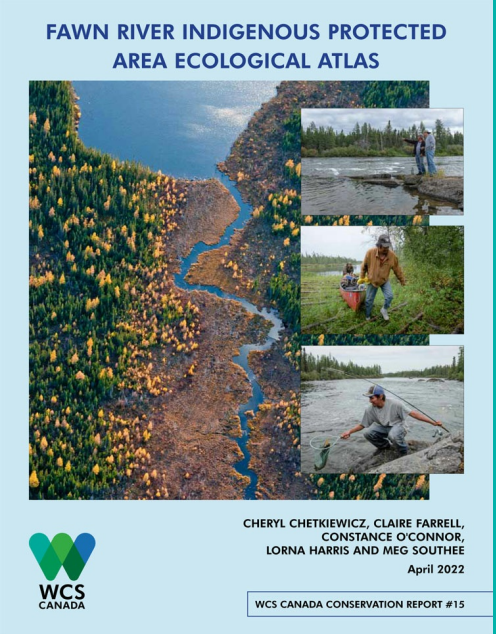
WCS Canada is supporting a number of First Nations communities with their efforts to establish Indigenous Protected Areas (IPAs), Indigenous Protected and Conserved Areas (IPCAs), and First Nation Protected Areas including the Fawn River IPA with Kitchenuhmaykoosib Inninuwug. To help with this work, we have compiled an Atlas summarizing the published scientific information about the Fawn River watershed, both the animals found there and the freshwater and terrestrial ecosystems, including carbon-rich areas. Our report compliments and supports the cultural atlas developed by the community. The report will also help the community to communicate its long-term commitment to conservation to provincial and federal governments while elevating their rights and responsibilities in taking care of their homelands.

To make it easier for you to explore this intact and ecologically and culturally significant area,

we have posted both the full Atlas and key sections:

Fawn River Indigenous Protected Area Ecological Atlas

- Fish
- Birds
- Mammals
- Peatlands



Needle in a haystack

If we want wolverines to survive in Ontario, then we need to make sure they can successfully raise young. That might sound pretty obvious but determining the location, timing and success of wolverine reproduction is no easy thing. Our wolverine team has spent hundreds of hours capturing and tracking wolverines around Red Lake, Ontario in the depths of winter in part to better understand this critical part of their biology. Tracking females back to den sites has taught us a lot about the kinds of places these elusive members of the weasel family use for giving birth to young. In fact, it is often the only way to discover well hidden den sites in deep forests.

Wolverine females start having kits at around age three and usually give birth to one to two kits every other year. This means that population growth for this species is slow and any decline in reproductive success can deeply impact populations. After an enormous amount of fieldwork undertaken in deep snow and cold (often involving late night trips out to live traps) our team has developed a good understanding of wolverine denning behaviour, which we have used to develop a set of recommendations for how forestry operations in particular can avoid disturbing denning females.

Wolverines reproduce slowly, which means protecting den sites is important to the species survival. Photo: Liam Cowan

One of the key findings is that protecting a single den site is not enough. Wolverines will move dens if they perceive any threat or if conditions at the den deteriorate (such as when our warming climate causes early snow melt). They may also not return to the same den in following years but will often return to the same area. This is why we are recommending that forestry managers focus on protecting broader denning areas rather than individual den sites in forestry plans. A key habitat management strategy should be reducing road development within denning areas.

Entrance to a wolverine den nestled under a fallen tree. Den sites can be very difficult to find without tracking females back to their well-hidden homes. Photo: WCS Canada

Wolverines, with their highly dispersed populations and elusive behaviour, are not an easy species to get to know. But our team has made remarkable progress in breaking new ground on wolverine science thanks to years of hands-on research, even with frozen fingers.

Now Hiring

Wolverine Data Technician

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Taking a leap instead of more small steps

The federal government is revising one of its most important tools for steering this country to more sustainable practices while preparing a second tool to deal with the consequences of a deeply disrupted climate. However, in both cases, the government has failed to really come to terms with the kind of transformative change that is needed if we are going to have a real impact on the twinned climate and biodiversity crisis. Proposed revisions to the *Federal Sustainable Development Act*, for example, focus more on tweaks than the kind of deeper changes we need that would ensure we do not overrun natural limits (or even recognize that these limits exist). Similarly with its new Climate Adaptation Strategy, the recognition of the importance of natural systems stops short of embracing a vision of not just maintaining but strengthening these critical systems and recognizing that they underpin both our personal and economic health. There is a lot of work to do on both fronts and WCS Canada has submitted ideas for how both can be improved to ensure they deliver on the government's promises.

Arctic fieldwork heats up

Ice may be quickly disappearing from Canada's Arctic thanks to climate change, but that still doesn't mean it is an easy place to undertake research. There is only a small summer window that WCS Canada can use to undertake a great deal of research. With endless Arctic summer days now upon us, we are underway with a wide variety of projects, including monitoring bowhead whales; revisiting Cape Perry, NWT to continue our study of thick-billed murres, including hopefully recovering tracking tags that are helping us understand how these birds' movements are changing in response to climate change; and capturing and tagging ringed seals to study their response to ship noise while also gathering acoustic data. Later in the fall, we will work with the Coast Guard to recover and redeploy all seven of our acoustic recorders that are in the water in the southern Amundsen Gulf and eastern Beaufort Sea to monitor ships and whales. And we will be in Baffin Bay to tag sperm and bottlenose whales and study how they react to naval sonar noise. So it is an "all hands on deck" summer for our Arctic team as we race to understand the fast changing sea and soundscape in the Arctic and its impact on wildlife.

WCS Canada's Annika Heimrich and William Halliday on a 10-day fieldwork journey in Ulukhaktok last month.

Thank you friends

July 30th is the International Day of Friendship, and we want to say thank you to our friends who support our mission and join us as we Stand for Wildlife! Thank you to our donors who help us build bridges between science and policy to ensure conservation action is effective and lasting. Thank you to our volunteers, partners, and local communities who work with us to protect Canada's vulnerable wildlife and wild places. We are grateful for all our friends who value nature and join this collective effort to help wildlife thrive in healthy lands and waters across this country. By creating a better world for wildlife, we create a better world for everyone.

Want to make a difference for wildlife?

Stand for Wildlife by supporting our important research today!

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