

# A year of Muddy Boots

#### Looking back on a year like no other

Around here, we like to talk about our approach to conservation as "getting our boots muddy." That's a reference to our work as field scientists who spend lots of time getting wet and dirty trekking through forests, wading in rivers, climbing up mountain slopes (while keeping an eye out for grizzlies), traveling across the tundra and boating through ice floes in the Arctic Ocean. We do this so we can understand firsthand the conservation challenges facing wildlife across Canada, particularly key species like caribou, wolverine, sturgeon and bats. It makes us pretty unique among conservation organizations in Canada and today we have 40 scientists and other conservation staff doing this work to save wildlife everywhere from the Arctic and Yukon to the far north in Ontario — and hundreds of places in between through our Key Biodiversity Areas program (of course, there is also plenty of time spent in front of computers, analyzing data and developing scientific papers and recommendations based on our observations).

Read our Annual Report and go wild!

We're excited to release <u>our 2020 Annual Report</u> explaining more about our work, our scientific studies and how we use these to shape decisions about everything from endangered species recovery plans to the potential impacts of new roads and mines. We focus on some of the most globally important ecologically intact areas in Canada, areas that are also the homelands of many Indigenous peoples with whom we work in a spirit of knowledge exchange and reconciliation. Without better conservation approaches, these areas could be undermined by the same sorts of human development pressures that have transformed – and ecologically devalued --

other areas. Particularly with the growing threat from climate change, we need proactive efforts to protect wildlife and wild places now. Our science helps decision makers better understand both what is at stake in some of Canada's wildest places, but also how to conserve values like natural carbon storage, biodiversity, climate refugia and connective corridors.

You can find out how our cutting-edge science is informing efforts to address the twin crisis of biodiversity loss and climate change -- not to mention just what it takes to track wolverines or eavesdrop on whales -- in this colourful overview of our work.



WCS Canada scientist Dr. Hilary Cooke gets her boots muddy in a Yukon wetland. Photo: Lila Tauzer/WCS Canada

# What will it take for Canada to deliver on its international biodiversity commitments?

Despite the perception of many Canadians (and even more so among those who view the country from afar) that our country is rich in great wild areas, Canada is facing the same threats to biodiversity as most of the rest of the globe: land conversion, overfishing, climate change, pollution and invasive alien species. The good news is that Canada was the first G7 country to sign the Convention on Biodiversity in 1992, a clarion call for action to protect and restore biodiversity. The bad news is that Canada has struggled to take action on these commitments thanks to an implementation process that relies on a bewildering array of laws and regulations largely focused on other objectives, from resource exploitation to setting rules for hunting and fishing. Only one jurisdiction in Canada – Nova Scotia – has actually attempted to pass a law directly aimed at protecting biodiversity and this effort proved so controversial that, for now, the law has been stripped of any actual enforcement measures.

With negotiations around completing the <u>Post-2020 Global Biodiversity Framework</u> well underway, it is high time to get our legal house in order so we are in a position to implement it. In <u>The Conservation</u>, WCS President Dr. Justina Ray, KBA Research Associate Jaime Grimm and University of Toronto professor Andrea Olive <u>discuss their findings about the inadequacies of Canada's biodiversity protection framework and what needs to be done to fix it. With Canada joining the "High Ambition" group of countries committed to protecting 30% of their lands and waters by 2030, it is going to take both political will and stronger processes to get us to this critical conservation goal.</u>

Fortunately, there are signs that governments are increasingly ready to act, with Canada among the countries that signed onto a "Nature Compact" at the recent G7 summit in which they <u>committed to championing</u> "ambitious and effective global biodiversity targets" and recognized the need to go beyond even the 30 x 30 target.



Prime Minister Trudeau discusses the importance of Canada's "High Ambition" commitment for conservation.

## New homes for bats

Researchers, supported in part by WCS Canada, are looking at ways to help bats find new homes in an area with heavy logging activity in the West Kootenay region of British Columbia. They are installing "artificial bark" around trees and modifying trees to create cracks and fissures bats can use to roost. More in this story and video from the Nelson Star.



## A double take on wolverines

Our wolverine team has put together <u>a couple of great snapshots</u> of their work to better understand this elusive – and powerful – member of the weasel family. To put it simply, you don't just wander into the woods and start looking around for an animal that has a reputation as both a clever trickster and a forest ghost. That's why a key part of our efforts to improve our understanding of where wolverines are in northern Ontario and how they are faring — especially in areas with significant logging activity — is live trapping.

Field technician Jacob Seguin <u>describes how the team constructs traps that are safe, strong and clever</u> enough to hold a determined wolverine (most of the time). Then program lead Dr. Matt Scrafford <u>explains a surprising twist on how our team is using these traps</u> to help a wolverine recovery effort in Washington State. Matt explains the important skill of animal tracking and how our team is helping citizen scientists in Washington improve theirs. He also provides some <u>useful tips on identifying wolverine tracks</u>, should you be lucky enough to come across them!



The trap is finished and the crew reviews everything to ensure it is ready for stealthy visitors. Photo: Jacob Seguin/WCS Canada

# Key Biodiversity Areas reaching a tipping point

With more than 250 Key Biodiversity Areas (KBAs) identified across Canada and hundreds more likely coming in the near future, we are really starting to make a mark with this program. KBAs are proving to be a great way to engage a wide assortment of community members, nature organizations and governments in identifying areas that are particularly important for biodiversity conservation. We expect they will also be an important tool as efforts ramp up to meet Canada's commitment to protect 30% of its lands and waters by 2030, including for Indigenous communities developing proposals for Indigenous Protected and Conserved Areas. But the interesting thing about KBAs is that they are open to a variety of conservation measures, not just formal protected area status. And because the process of identifying global and national KBAs is so open and accessible, we also have great opportunities to build dialogues about how best to steward these areas.

We've been hard at work on identifying KBAs, which can be anything from a small area that is home to a rare or endemic species or a very large area that is important because of its sheer size and intactness, in all provinces and two territories, with our efforts just getting launched in Ontario. You can see our progress on the "dashboard" on the KBA website and there are plenty of opportunities to get involved in this important work of identifying more of Canada's biodiversity gems.

We are also welcoming some new staff to the program:

lan Adams is our new Regional Coordinator for Key Biodiversity Areas in British Columbia. Ian has worked as a professional biologist in many capacities for over 30 years. Much of his work has focused on species at risk. Most recently, he has worked on behalf of the Ktunaxa Nation Council for wildlife conservation throughout their traditional territory in southeastern BC.



Vicky Papuga has joined us as a research intern. She is also currently working toward a Master of Environmental Studies, focusing on human dimensions in wildlife conservation at Dalhousie University. Through her research, Vicky has developed a passion for GIS, learning to spatially model wildlife habitats and movement and to communicate spatial information using visual mediums.



Dr. Lucy Poley is supporting our work on KBA designation related to ecosystems-based criteria across Canada. Lucy previously worked as a consultant with WCS Canada on projects related to woodland caribou and wolverine distribution mapping in Northern Ontario and with WCS Arctic Beringia on wolverine distribution mapping across the North Slope of Alaska. She has also worked on several design projects, illustrating infographics and graphical abstracts.



Robyn Rumney has come onboard as our Regional Coordinator for Ontario. Robyn completed a Master of Science in Biology degree at Laurentian University, studying how restoring mine-impacted landscapes affects carbon storage and biodiversity. She was the 2019 recipient of the Tom Peters Memorial Mine Reclamation Student Award, recognizing her academic and research success in the field of restoration biology.



### Support our work to save wildlife!

At WCS Canada, we stand for wildlife and are in the field every day working to save wildlife and wild places. You can support our work by <a href="making a secure donation">making a secure donation</a> right now!

Top banner image of moose: Susan Morse

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