



We stand for wildlife



Bowheads making new winter moves by staying put

Bowhead whales detected overwintering in Canada's Arctic for the first time by WCS Canada scientists

Our Arctic research team is used to hearing the grunts, moans and even singing of whales picked up by the acoustic recorders they have deployed in various parts of the Arctic Ocean to monitor whale movements. What they are not used to hearing is these sounds in the dead of winter when much of the Arctic Ocean should be covered in a thick layer of ice. But with climate change leading to more areas of ice-free water even in the darkest and coldest winter months, [our team recorded bowhead whales in three areas throughout the winter months of 2018-19](#) – the first time whales had been recorded over winter in Canada's Arctic.

Bowhead whales are amazing creatures that can live up to 200 years, have a layer of blubber half a meter thick and a thick skull for bashing through ice. So they are well suited to life in the Arctic, but usually leave the eastern Canadian Arctic on their annual 6000 km westward migration to the Bering Sea as winter sets in. Our recordings show that this may be changing with at least some whales choosing to stay put instead of undertaking this long migration.

There could be various explanations for this new behaviour. Dr. Stephen Insley, who led this research for WCS Canada, thinks that in addition to less ice, it may also be related to a need to stay in colder waters. As water temperatures rise thanks to climate heating, that thick layer of blubber could lead to overheating for bowheads. It could also be that the bowheads are avoiding predatory killer whales, which have expanded their range in a warming Arctic. Or it could be that the bowheads found a ready food supply and open water in these areas and decided to save their energy instead of migrating.

Whatever the specific reason these whales chose not to migrate, what is clear is that the whales' behaviour is being impacted by climate change, which is happening more than twice as fast in the Arctic as at lower latitudes. More details are in [the paper the team co-authored in Royal Society Open Science](#).



Bowhead mother and calf. Bowhead whales have thick skulls and can navigate through heavy ice.
Photo: NOAA

Sounds from the deep

Want to hear what our scientists hear when they download recordings from acoustic monitors floating deep in the Arctic

Ocean? Have a listen:

[Bowhead whale upsweep call](#)

[Bowhead whale complex sounds](#)

BC Hydro pushes bats to the brink

A [revealing investigation by the Narwhal](#) shows that BC Hydro ignored the advice of scientists when they decided to proceed with quarrying Portage Mountain as part of the Site C dam project. This mountain is unique, offering bats an “all in one” habitat mix: A unique hibernaculum environment in a cliff face warmed by geothermal vents; mature forests around the mountain that provide high-quality maternity roosting sites; and large wetlands that may have provided both food and water. A team of

biologists, including WCS Canada's bat specialist Dr. Cori Lausen, expressed concerns and provided recommendations to a technical committee working with BC Hydro.

Despite pleas from scientists to consider other sites, BC Hydro insisted that Portage Mountain was the most practical place for its quarry, and road construction and blasting began despite the scientists' concerns. Two species that use Portage Mountain -- northern myotis and little brown myotis – are listed as endangered under the federal Species at Risk Act due to the devastation [caused by white-nose syndrome](#), a fungal disease that wakes bats during hibernation and causes them to waste precious energy.

Dr. Lausen worries that much the same thing could happen with constant truck traffic to and from the quarry. "As the bat is disturbed, it will warm up, panicking, thinking it might have to fly, and burn some fat in doing so. And then if the threat disappears, they go back down and keep a nice cold temperature again until they get disturbed again. If the trucks are going by repeatedly, it's quite possible that these bats are warming up and burning through their fat more quickly than they should, and that means they may not survive the winter," [she explained to Narwhal reporter Sarah Cox](#).

Unfortunately, BC Hydro was mostly free to ignore the warnings from scientists about both its project's impacts on a site identified as 'critical habitat' for these bats, and the weakness of its mitigation plans, because BC is the only large province to not have provincial species at risk legislation. The utility has already filled in one wetland and built a road that stunned scientists when they saw its impact on the surrounding landscape.

Of course, as the Narwhal has [previously reported](#), there are huge questions about

the need for the Site C project, especially given its ballooning costs. And one of the biggest hidden costs of the project could be its impact on a number of endangered species – from bull trout to bats.



Little brown bats are listed as endangered in Canada thanks to white-nose syndrome killing millions of bats in eastern provinces. They are among a number of BC bat species that use the Portage Mountain site. Photo: Cori Lausen / WCS Canada



Just released from a live trap after being fitted with a GPS collar, this wolverine isn't about to stick around. Our wolverine team has collared 17 wolverines over three winters (all released unharmed)

Together for wolverines

Our wolverine crew had a busy winter tracking the movements of these elusive animals in a large area around Red Lake, Ontario (about 200 km northwest of Thunder Bay). This is isolated work at the best of times and often requires heading out in the middle of the night to check triggered live traps deep in the bush. But this year COVID added a new dimension, with our crew (Matt Scrafford, Jacob Seguin, Laura McCaw, and Liam Cowan) essentially isolating together for six months in their research camp.

The sacrifices proved worthwhile as the crew had continued success in monitoring female wolverines and identifying their reproductive habitats. This is an important element of our work to assess how wolverines, particularly females, are faring in a landscape that has a mix of undisturbed forest and active logging. We use GPS collars to track wolverine movements, but to find reproductive dens we often have to switch to on-the-ground tracking using radio receivers because GPS signals are blocked by the thick roofs of the dens. We have found six wolverine dens and have worked with the Ministry of Natural Resources and Forests and the local logging operator to develop rules for reducing disturbance around them.

Our field season ended in late April as the weather turned warm and travel conditions became difficult in the bush. We also did not want to come up against a bear drawn to our live traps because of the scent of fresh bait! Snow is also important for reading and following tracks and we will have more to say about that in an upcoming blog.

Wolverine F10 captured this winter near Red Lake, Ontario. Wolverines have distinctive chest patches that can be used to identify individuals. You can also catch a glimpse of their long powerful claws. Our team followed wolverine tracks to a site where the burly animal had ripped apart a beaver den, a favourite prey. Photo: Liam Cowan/ WCS Canada



Work for us to stand up for wildlife

WCS Canada is seeking a dynamic and skilled conservation scientist to collaboratively lead the development of WCS Canada's portfolio of national initiatives into a cohesive national conservation program. [Our Director of National Conservation](#) will help us deepen our efforts to develop effective conservation responses on climate change, biodiversity protection and wildlife health. [This is a chance to join a](#) tremendously talented team of scientists and researchers who are on the ground developing conservation solutions across Canada and to work for a cutting-edge conservation organization with global influence.



We are looking for a dynamic conservation scientist to be our Director of National Conservation and help species like caribou. Photo: Susan Morse.

Monkey business

WCS Canada scientists go to some lengths to study wildlife, including venturing out repeatedly in pitch darkness to have a look at what large carnivore might be in a live trap or landing on a remote Arctic beach in a small plane bouncing along on balloon tires. But as far as we know, none of them has ever dressed up as a leopard to see how a group of monkeys would respond. [Our WCS colleagues in the Republic of Congo did just that.](#) They decided to go the costume route knowing that the putty-nosed monkeys they were studying were not going to fall for any easy tricks, like static

decoys or recorded spooky noises. They kept it simple – a leopard print sheet draped over a volunteer who then crawled through dense underbrush toward the monkeys – but turned up remarkable results. The team discovered that these monkeys have a unique two-phase alarm system. First females make a call to alert the male of the group to an intruder. The male will then confront the threat and signal back that he is on the case. It seems the monkeys even have different alarms for airborne and ground-based threats. Its all in a day's work for WCS researchers working to protect wildlife from Canada's Arctic to the steamy tropical forests of Congo.



That may not look like a leopard to you, but it was enough to get an alarmed response from a group of putty-nosed monkeys. Photo: WCS

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 [making a secure donation](#) right now!

Top banner image of northern lake: WCS Canada

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