View online



#### A watershed moment

Working with the Na-Cho Nyäk Dun to protect salmon and an intact watershed

Living in the beautiful intact Beaver River watershed in Yukon, the Na-Cho Nyäk Dun people are justifiably worried about the prospect of a new 65 km mining access road being built through the area. In particular, there is grave concern about potential impacts on wild salmon, a cultural food source for the Na-Cho Nyäk Dun people and a key component of the watershed's ecosystems.

WCS Canada worked with the First Nation to assess risks to the watershed, including the potential for landslides or erosion triggered by the road and permafrost melt, and to identify key salmon spawning areas. We've captured this work in a new story map that explains how we worked collaboratively to gather and weave together traditional and scientific knowledge to inform upcoming land-use planning for the area. It is a great example, (with some beautiful images) of how WCS Canada is working with Indigenous communities on the ground to advance conservation and ecosystem protection efforts.



From the storymap: Every summer, Jessie Germaine, a First Nation of Na-Cho Nyäk Dun Elder went to her fish camp with her family to fish for two months: "It's a very spiritual time as I use it to heal and clean my thoughts from city life." Jessie, a keen conservationist who advocated for the protection of the Beaver River, sadly passed away unexpectedly in April 2020. Photo: Chrystal Mantyka-Pringle / WCS Canada

Fast Fact: Male wolverines can have home ranges that stretch over hundreds of square kilometers. Roads and industrial activity can disrupt their wide-ranging travel.



WCS President Cristián Samper (right on screen) addresses delegates at the One World Summit as French President Emmanuel Marcon looks on (screen left) on Jan. 11, 2021.

## One Planet

A number of world leaders, including Prime Minister Justin Trudeau, gathered virtually in early January at the <u>One Planet Summit</u> to further develop strategies for meeting the goals of the United Nations Convention on Biodiversity, particularly expanding protected areas. <u>WCS's international president Dr. Cristián Samper addressed the world leaders</u> and told them there was three things we must do to save our planet:

- Expand protected areas and other effective area-based conservation measures to cover at least 30% of land and sea by 2030
- Make sure the protected and other conserved areas represent the diversity of ecosystems and species and are effective for conservation in the long-term
- Make sure that these areas are managed effectively

Prime Minister Trudeau, meanwhile, announced the Canadian government would be contributing "up to \$55 million" to a United Nations initiative aimed at preventing

further degradation of land and protecting vital ecosystems.

Helping to ensure Canada achieves these goals – for the good of Canadians and our planet – is at the core of WCS Canada's work. As Dr. Samper noted at the summit, this work will build on the long legacy of ecosystem protection undertaken by Indigenous peoples and local communities.



Bats have many different ear shapes, which often depend on the kind of prey they hunt

## The Amazing Sounds of Bats

Bats can detect an object as fine as a human hair in total darkness. And they do it using sound. Bats' use of echolocation has inspired everything from the development of radar and sonar to superheroes. WCS bat expert Dr. Cori Lausen <u>explains</u> how screamingly loud bat calls (fortunately out of the normal hearing range of humans) can be used to help us better understand our only flying mammal and take steps to protect them from threats like habitat loss and the spread of deadly whitenose syndrome. Cori gives a shout-out to bats' amazing sound abilities in a Live Science blog and you can also listen to the sounds themselves and more from Cori about why we need to help bats in this audio interview.

# Getting ready for a noisier Arctic

Living next to a busy highway, you may learn to tune out the sound of traffic. But if you live along a lightly travelled rural road, the sound of a vehicle will likely quickly get your attention. It's a similar situation for whales and other marine mammals (and even fish) in Canada's Arctic. Previously, thick ice limited ship travel in the region, while ice cover and other factors also kept natural noise levels to a minimum. But with climate change rapidly reshaping the Arctic, this is already changing. WCS scientists have been studying how whales, in particular, react to ship noise in Arctic waters. Dr. William Halliday explains, for example, how belugas may go quiet or leave an area when ships pass nearby in a recent piece for The Conversation.

We are using the scientific findings from our research to help shape the new Ocean Noise Strategy being developed by Fisheries and Oceans Canada. In our comments, we stress that the Arctic has many unique characteristics, from low natural noise levels to unique water chemistry, that need to be taken into account in any noise mitigation strategies. We also recommend that the strategy work from the baseline of current noise levels in the extremely quiet Arctic rather than being informed by levels

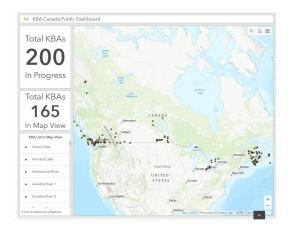
common to much noisier ocean environments. And finally, that research on how different species are affected by noise continue so we can better understand the complex interactions of species and vessels in an increasingly open Arctic.



Noise from ships could increase sharply in a rapidly warming Arctic as conditions increasingly allow ship traffic to transit the once ice-locked region.

# Key Biodiversity Areas explained

CBC's Quirks and Quarks recently focused on what it is going to take to reach Canada's target of protecting 30% of its land base and oceans by 2030. WCS Canada's Dr. Ciara Raudsepp-Hearne who coordinates the Key Biodiversity Areas (KBAs) program in Canada, explained to host Bob McDonald how KBAs are a key tool for addressing biodiversity loss and ensuring stewardship for some very rare – and in some cases, vanishing – species and how they can complement efforts to create new protected areas. Have a listen.



Our KBA Dashboard provides dynamic info on our efforts to identify potential KBA sites across Canada.

To further explain how the KBA program works, our colleagues at Birds Canada have put together a great storymap about KBAs, what they are and how they come to be. This visual explainer walks through why we need to focus stewardship on areas with unique biodiversity values, such as endemic species. It also includes a couple of examples of KBAs that happen to be in regions where biodiversity is highly imperilled by human development.

## Help wanted

Our <u>W. Garfield Weston Fellowship program</u> has been a stepping stone for many young conservation scientists building careers in conservation while pursuing important research in our priority areas, such as the far north in Ontario and the Northern Boreal Mountains region of BC-Yukon. We're looking for more bright young minds to join the program for the 2021 field season. If you are a graduate student with a project that aligns with our key area or species focus, we want to hear from you! See our website <u>for details on the program and application process</u>.



W. Garfield Weston Fellow Samantha Morin assess a bobcat kitten. Photo: Robby Marrotte

### 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!

DONATE NOW





