



We Stand for Wildlife



It's the season for muddy boots

From the Arctic coast to recently burned forests in the boreal, our scientists take to the field to learn first hand how we can better protect wildlife.

Now that summer has arrived, you may be thinking about kicking back and relaxing. But for WCS Canada's field scientists, the warmer months of spring and summer are a time to kick field research into high gear.

Our Arctic team took advantage of less frigid (but not exactly warm) conditions in May to do some important surveys of seal populations in the western Arctic. Arctic sound specialist Dr. William Halliday, along with Maya Chartier and Mariana Barbosa (PhD student at University of Victoria), travelled to Ulukhaktok on Victoria Island in the Northwest Territories for a day of aerial surveys to count seals (think of flying from Toronto to Vancouver while looking out the window the whole time trying to spot seals) followed by over a week of work on the sea ice with ringed seals.

The group headed out onto the sea ice south of Ulukhaktok, where they used a drone, acoustic recorders and underwater cameras to zoom in on seal behaviour. Seals play an important role in the Arctic marine ecosystem and their habitat is on the front line of rapid climate change. They are also a culturally important food source, which is why the group also shared insights with the Olokhaktomiut Hunters and Trappers Committee and other local community partners. They'll be back at it again in late July with a goal of tagging some of the hundreds of ring seals surveyed in their first foray.



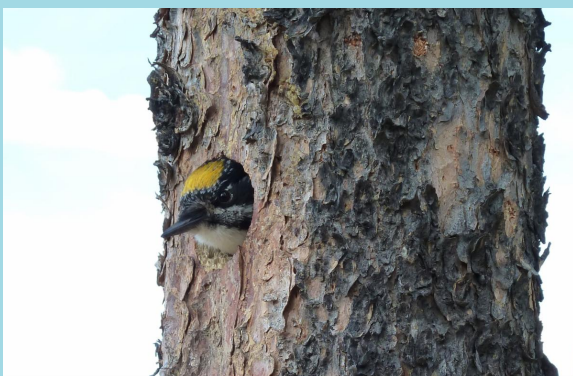
The team deployed sound recorders to monitor seal activity. Photo: Maya Chartier.



A bearded seal surfaces near shore. Photo: William Halliday/WCS Canada

In the Yukon, work on the “Birds and Burns” project got underway for a third season. The goal of the project is to see how the community of birds that nest in tree cavities use recently burned forests – both the woodpeckers that excavate nest cavities (i.e., holes) and the other birds that subsequently use them. Many dead standing trees are left behind after a forest fire, creating habitat for these cavity-nesting birds and for the fire-loving beetles that lay their eggs in dead trees, which results in a buffet of beetle larvae for the woodpeckers. Under the direction of Dr. Hilary Cooke, the team members -- Michael Quinn, Emily Hollick and Kim Melton – are looking at how cavity nesting birds use these burned forests.

Working at the site of a 2022 fire in central Yukon, the group hit an early bird bonanza, finding not just fire-following black-backed woodpeckers, but three-toed and hairy woodpeckers as well, along with other cavity nesting birds, including northern flickers, tree swallows and mountain bluebirds. Fire is becoming a bigger influence on our wild landscapes as a result of climate change. Understanding how more intense and larger fires may affect bird habitat is critical conservation information.



A three-toed woodpecker peeks out of its tree cavity nest. Photo: Hilary Cook/WCS Canada



Sawyer beetles consume dead wood after forest fires and are also a food source for woodpeckers.

Elsewhere in Yukon, Dr. Chrystal Mantyka-Pringle and Dr. Lorna Harris went searching in the territory’s peatlands and found depressions formed by thawing permafrost (called thermokarst) filled with *Sphagnum* moss and some large, sedge-covered fen areas. These discoveries help us better understand the variety and distribution of peatland ecosystems in Yukon, which helps us advance our work to protect these important carbon storage sites.

Our Ontario Northern Boreal team has launched another season of surveying lake sturgeon in

the remote – and largely undammed – rivers flowing into James Bay. These globally endangered and long-lived fish help us understand the state of aquatic ecosystems. They are also a culturally important species for the Indigenous communities that steward the lake sturgeon populations that persist in these intact northern rivers. The team was out on the water in May retrieving acoustic recorders that log sturgeon movements, and collecting water samples from the rivers they inhabit.

In July, they will be testing out a new non-invasive way of assessing fish health that involves swabbing mucous from fish bodies (hey, we didn't say it is glamorous work) and taking more water samples to document how water quality changes over the seasons. They'll also be attempting to collect some invertebrates from river bottoms to fill some gaps in knowledge on sturgeon diet. This summer work will also involve youth from the Moose Cree First Nation community, part of our ongoing effort to build on the traditional stewardship of these ancient fish.



Warren Iserhoff from the Moose Cree conservation team pulling up a receiver used to track the movement of sturgeon in the North French River. Photo: WCS Canada.

On the wings of eagles

Drive along the shoreline of Lake Erie this summer and you are almost guaranteed to see a bald eagle, says our Director of National Conservation Dan Kraus. But that definitely wasn't always the case. These magnificent birds were essentially wiped out in eastern North America by the late 1970s, Dan notes in an [interview with CBC radio's Ontario Morning](#). Then a few important things changed: indiscriminate shooting of raptors was stopped and, even more

importantly, the destructive pesticide DDT was banned.

Bald eagles have rebounded magnificently since this low point and Dan cites estimates of 2,500 nests in Ontario today. Dan says the story of bald eagles can teach us a lot about how [endangered species](#) can be brought back from the brink if we are willing to take action and stick with it – noting that it took 30-40 years for bald eagles to recover. Today, the major threat to many endangered species [is habitat loss](#), he explains, and with action to conserve woodlands, wetlands and grasslands, we can change the course for these species. Dan talks about how his kids will hopefully see many more species follow in the wingbeats of bald eagles [in this inspiring interview](#).



A bald eagle takes flight in Quetico Provincial Park. Photo: Sam Kett

Hot start



After a hot start to the wildfire season in Alberta, it was [eastern Canada's chance](#) to feel the burn – and the smoke. This is just one of the real-life consequences of breaking planetary heat records and hotter, drier spring weather: More intense and larger fires are producing smoke that literally blocks out the sun in major cities, reminding us that what happens in remote regions affects us all. The best way to address the growing threat of more frequent and intense fires is to reduce climate damaging greenhouse gas emissions of course, while also protecting [critical areas for natural carbon storage like peatlands](#) and intact forests.

But given the amount of CO₂ already in our atmosphere, we are also going to have to adapt to a new fire regime by making sure protected areas are large enough to not be completely impacted by a single fire and protecting [climate refugia](#). Connections between intact areas will also be more and more important as habitats are reshaped by fire and wildlife need to move.

Fire impacts are a growing focus for WCS research, such as our Birds and Burns work described above, and for peatlands. Two of our Weston Family Boreal Research Fellows are also taking a close look at what happens once the flames subside.

Elise Brown-Dussault, an MSc candidate at Wilfrid Laurier University, is looking at how to accelerate the return of the lichen that caribou need after fires. It can take up to 80 years for these lichens to return naturally after a fire, so Elise is looking into the idea of transplanting lichens to burned over areas and which areas would be best for transplants.



Jocelyn Biro, a PhD candidate at Wilfrid Laurier University, is studying what happens to food supplies for moose after fires and forest harvesting. She is looking at whether post-fire interventions can improve conditions for moose and whether the common assumption that moose benefit from forest disturbance is completely true.



The Arctic is getting louder

This terrific video from our colleagues at Oceans North looks at why we need to take action now to curb the impacts of growing ship noise in a rapidly warming Arctic and features



Help Us Boost Our Summer Field Research

As the warm rays of the summer sun touch our beautiful landscapes and waters, wildlife across Canada embrace the season with a burst of vibrant energy. From the elusive wolverines venturing through the deep forests to graceful migratory birds traversing the skies and the magnificent beluga whales slipping through ocean waters, the Canadian landscape comes alive with an awe-inspiring display of nature's wonders.

Just as these incredible wildlife embark on their summer activities, our dedicated scientists at WCS Canada eagerly embark on their field research season. Our field research is crucial to finding effective and practical conservation solutions that will protect wildlife and their precious habitats across the country.



With your generous contribution, we can extend our reach further and implement effective conservation strategies. Your support will allow us to invest in cutting-edge research, vital ecosystem conservation efforts, community engagement initiatives, and advocacy for sustainable policies. Together, we can create a future where wildlife thrives, and our shared natural heritage remains intact for generations to come.

Donate today!

Understanding how climate change is affecting Arctic environments requires using the short window of warmer conditions to conduct field studies. Above: Steve Insley weighs a thick-billed murre. Below: Matt Pine and Bill Halliday deploy acoustic recorders in the Arctic Ocean. Top photo: Rosana Paredes; bottom photo: WCS Canada

A great love story

WCS Canada is a big believer in the power of diversity, both in our people and in the natural world we work to protect. So we want to introduce a lovely way to share the story of diversity with your kids, especially as Pride month wraps up. In [Every Family Is Different](#), WCS Canada scientist Dr. Connie O'Connor and coauthor Natalia Rojas look at how animal families come in all shapes and sizes – some animal families have two moms or two dads, other families have lots of extended family helping raise the offspring, and some have parents who adopt offspring to call their own. It's a great read with beautiful illustrations by another WCS Canada scientist with an artistic bent – Lucy Poley.



Connie poses with her little one. It's a [terrific book to read to your young ones!](#) (also available locally in Thunder Bay, and [various places online](#)).

**MORE WCS CANADA
NEWSLETTERS**

