# wildsight WILD TIMES 10



Grizzly in the Flathead Valley by Joe Riis, ILCP

## **OUR WILDLIFE NEED SPACE TO ROAM**

The majestic grizzly. The fearless wolverine. Our wildlife is part of our identity—one we need to protect.

You might think the most significant threats to our large carnivores are hunting, development or logging. But although these do have a big impact, the biggest one of all is even simpler: roads.

While grizzlies die in significant numbers from being hit on the highway—especially in the once grizzly-dense Elk Valley—roads are a threat on an even more basic level. Biologists have found that once the density of backcountry roads increases above roughly 0.6km of road per square kilometer, sensitive species like grizzlies start to decline.

What does that mean? The more roads we build, the more trucks, quads, snowmobiles, and people there are traveling through wildlife habitat—driving grizzlies, wolverines, and other carnivores out.

We tend to think of our backcountry as a vast wilderness, a big empty space between human

habitats. But as we keep adding more roads, traveling deeper into the backcountry and higher into the delicate alpine, our backcountry is being cut into a thousand tiny pieces.

For grizzlies and wolverines, with ranges in the hundreds of square kilometers, parks are never enough. They can tolerate some logging and recreation in their habitat, but with too many roads, their connected landscape becomes fragmented.

So let's give wildlife back their wild places. Let's reduce road densities, in line with sound science. Let's make sure we reclaim our forestry roads when we no longer need them. Let's keep our motorized recreation out of our sensitive alpine ecosystems, where damage can take centuries for nature to repair. Let's leave as much as we can for wildlife, wilderness, and quiet recreation.

Grizzlies, wolverines, and other wildlife need their space. Let's make sure they have it.



Photos: David Dodge, below: Art Twomey

## **MOUNTAIN CARIBOU: FRACTURED LANDSCAPES**

Sometimes, what we don't see tells the story. Just a century ago, mountain caribou thrived everywhere at higher elevations in the Kootenays. But today, with only eight herds left in the Kootenay and Columbia—many down to just a dozen or so isolated animals each—endangered mountain caribou are a rare sight. And they're telling us something important as they disappear.

How did this population change so drastically in such a short time? If you guessed that humans have something to do with it, you're right.

If you've hiked in the wet old-growth forests of the Kootenays, you know the lichens that dangle from every tree. Unlike Canada's other woodland caribou, mountain caribou rely almost entirely on lichen growing on trees as food during our long winters. As we've logged more and more of our old growth forests, pushing roads and clearcuts higher into the mountains, caribou have lost their homes and their crucial winter food source.

As our mountain forests regrow, brushy open areas become perfect habitat for elk, moose and deer, attracting wolves and cougars that prey on them. But the predators stay even after the elk, moose and deer have moved to lower elevations for the winter—only caribou, vulnerable outside the dense old-growth forest, are left for them to eat. Roads and snowmobilers creating packed trails into the backcountry make it easier for predators to travel, and changes in snowpack add to the pressure on caribou—so much that we've lost three herds in the last decade. So what are the disappearing caribou telling us? By logging our old-growth forests and pushing industry and motorized recreation deep into the backcountry, we've fractured the landscapes that caribou need to roam. Although some caribou habitat is off-limits to logging or requires special logging plans, we need to protect all critical caribou habitat to give mountain caribou a fighting chance. To bring the caribou back, we need to reconnect the few, shrinking herds—and that means reconnecting our fractured landscapes, before it's too late.

If we don't act now, mountain caribou could disappear completely in our lifetimes and be forgotten by our children.

Please stand up for mountain caribou today. Send a message to Environment Minister Catherine McKenna to demand she act on her responsibility under the Species at Risk Act to protect critical habitat at mountaincaribou.ca.





Photo: Garth Lenz, ILCP

## **SELENIUM IN OUR WATER: ELK VALLEY COAL MINES**

The Elk River's sparkling surface hides a dark secret.

The crystal-clear waters of the Elk used to be the perfect home for bull trout, westslope cutthroat trout and other fish. But in the last two decades, the amount of selenium leaching from waste rock dumps at the huge mountaintop-removal coal mines of the upper Elk Valley has been increasing steadily. Selenium travels up the food chain, causing reproductive failure and deformities in fish, amphibians, and birds. Fish are born missing part of their gills or with crooked spines and birds may be born with two sets of beaks. Even worse, some fish simply can't reproduce because of the elevated selenium levels in their ovaries.

## WILL TOXIC SELENIUM FLOW INTO THE ELK RIVER FOR A THOUSAND YEARS?

How did the situation get so bad? Vast areas of rock are removed to excavate the coal underneath. This waste rock is dumped in the nearest valley. As water trickles through these loose piles, selenium leaches from the rock. Seleniumcontaminated water flows downstream into the Fording and Elk Rivers, and eventually into the Kootenay River, home to the endangered white sturgeon.

The problem hasn't gone unnoticed. Teck, an international mining company that owns the five Elk Valley coal mines, has a government-mandated short-term mitigation plan that relies on biological treatment plants to remove selenium.

Unfortunately, they've only built one plant to date, and although it removes much of the selenium, it's converting much of what's left into highly bioavailable forms, likely increasing overall selenium toxicity. What's worse is that selenium leaching will continue for many centuries.

What's the long-term solution? Go back to basics, and stop making the problem worse. Without a proven long-term method to address selenium in our water, we need to stop building waste rock dumps that leach selenium. Without water or oxygen, selenium won't leach—so by sealing or compacting the waste rock dump, to keep one or both out, we can avoid the problem. Even better, if we dump waste rock in previously mined areas where little water flows, leaching in minimal.

Of course, changing mining practices can come at a price. The good news, if you own Teck stock, as so many of us do through mutual funds, is that Teck Coal made \$1.4 billion last year on revenues of \$4.1 billion—a profit margin that gives Teck the financial resources to mine responsibly and still make a profit.

In the meantime, the outlook is grim: five new coal mines in the Elk Valley are in the environmental assessment process, and exploration continues for more mines. How can we consider new mines when selenium levels from existing waste rock dumps are still rising? With a new BC government in power, now is the time to demand reasonable regulations that ensure responsible mining and clean water—now and forever.

## **30 YEARS OF KEEPING WILD PLACES WILD**



On June 12, 2017, Wildsight officially celebrated 30 years of working to protect wildlife, clean water and wild places. And it's been quite the journey.

From Jumbo Wild to the Flathead, from the Columbia Wetlands to the Elk River, and from our backyards to our backcountry, our story is woven together with the landscapes that we love.

So here's to 30 years of long field days and somehow even longer days of meetings, 30 years of inspiration from the grandeur of the mountains to the humble elegance of a caddisfly and 30 more years of working together to keep the places we love wild.

## **ECOSTEWARDS:** FIRST STEPS FOR YOUNG ACTIVISTS



Every year, Wildsight's EcoStewards whisks students away from their desks and out into their wild backyards, where textbook concepts are brought to life and bonds between students and their natural world are forged. Students' own wild backyards inspire stewardship projects for each class to give back to their communities.

From Revelstoke students planting over 200 native plants along the Illecillewaet River to reducing erosion to Creston students designing environmentally-minded outdoor spaces for their schoolyard, Nelson students creating a field guide to plants around their school and Kimberley students pulling invasive weeds, EcoStewards continues to jump start careers of young environmental activists.

## LIVING LAKES CANADA: FAMILIAR FACES, NEW ORGANISATION



Photo: Pat Morrow

Protecting our water has always been central to Wildsight's work. The headwaters of the Columbia River in Canal Flats give birth to a river of life that sustains our human communities and provides habitat for hundreds of species. The Columbia Basin is our home.

In 2010, we launched a project called Living Lakes Canada to empower our communities to take care of the water central to our lives. Now, Living Lakes Canada has become an organization in their own right, joining Wildsight alumni protecting our water like the Lake Windermere Ambassadors and the Elk River Alliance.

We'll be celebrating on September 22 in Invermere with a water celebration on the Columbia Wetlands.

#### WILDSIGHT IS PEOPLE LIKE YOU

Being a member of Wildsight means being part of our team. Valuing wilderness, wildlife and healthy communities. Believing that by taking care of the things we love, collectively, through action, we can change the world. Become a lifetime member for \$20 at wildsight.ca!

250 427 2535 | 2 - 495 Wallinger, Kimberley, BC V1A 1Z6

