

OVERCOMING EXTINCTION — WE'VE DONE IT BEFORE, LET'S DO IT AGAIN

something

treasure



Charlotte Dawe Conservation and Policy Campaigner @ClimateChar

uack! A single duck bobbed on the calm waves of the Pacific Ocean off the west coast of Canada, unaware of the two bald eagles eyeing it from a towering fir tree just metres away. I sat up slowly, eyes glued, watching in anticipation; I barely noticed the shadow darting beneath my kayak. A foot away from where my hand gripped the paddle, a curious seal emerged from the dark below. It made me wonder, what else was down there that I couldn't see? Life is all around us, in plain sight

or hiding unseen. But if we don't do something If we don't do drastic now, we risk losing all the species we treasure. You and I drastic now, we are living through the risk losing all sixth mass extinction. the species we In Canada, half of our wildlife species are experiencing population declines.1 Irreversible damage to our ecosystems lies ahead if we don't make a change.

Not too long ago, we faced another extinction crisis. The iconic bald eagle was nearly wiped out in the U.S. in the 1960s. DDT, a toxic pesticide, was widely used.

Everywhere it was, birds of prey, fish and amphibians became fewer and

farther between.2 At that point in history there were two options — continue down the path of using DDT or ban it. Rachel Carson's 1962 book Silent Spring described just how grim a future would be without birds, showing us what

was at stake. "There was a strange stillness. The birds, for example – where had they gone?"3

Thankfully, governments listened to concerned citizens and began to ban DDT in 1972 in the U.S., 1990 in Canada and worldwide for agricultural uses by 2001. 456 As a result, wildlife rebounded and

even the bald eagle bounced back from the edge of extinction. The story of DDT gives me hope that when our backs are against the wall, widespread action is possible and communities around the world can work together to overcome

even the most difficult challenges.

We have come to realize that we are a part of biodiversity — the network of living things on Earth — and our existence depends on the health of this network. Species protection in today's world is not as straightforward as banning one pesticide. But if we work together again, we can stop the decline of wildlife.

Steps to save wildlife at risk have been taken. In 1992, with growing awareness of the tie between human existence and the diversity of living things, the world came together to protect our natural life support systems. Over 175 countries, including Canada, signed the Convention on Biological Diversity, an agreement to protect the world's incredible variety of species.7 A decade later Canada finally enacted the Species at Risk Act (SARA) to protect wildlife.

Yet despite 15 years of SARA in action, Canadian species across the country risk extinction more than ever. Read on to find out more about the federal SARA: the good, the bad and the much-needed makeover.





Photo top: Southern resident killer whale pod (John E. Marriott) Photos above: Bald eagle (Earl Havlin), coastal grizzly bear (John E. Marriott).

BIODIVERSITY — THE BACKBONE OF LIFE

ur vibrant planet has a dizzying variety of living organisms. Biological diversity, or biodiversity, encompasses all living things on Earth and their relationships to each other.

Recent trends show that we're losing species at an alarming rate.



Photo: Monarch butterfly

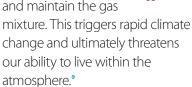
We've caused this extinction event by rapidly changing and eliminating wildlife habitat with industrial

projects like logging, oil and gas development, mining, agriculture and hydro dams. All while human-caused climate change and urban expansion put additional stress on wildlife.

The decline and disappearance of species is having an unnerving impact on human civilization, as we rely on biodiversity in many ways:

- Insect diversity is vital for pollination.
- Pollinators are responsible for one-third of the food we eat. When we decrease pollinator populations, we increase the risk of crop failures.8
- Plants, animals and microorganisms contribute to the mixture of gases in our atmosphere.
 - Our atmosphere is balanced to

support human life. We can't live in an environment with too much carbon dioxide, nitrogen oxide or methane. As Earth loses biodiversity, we change the species that contribute to and maintain the gas



- The loss of organisms below ground decreases the fertility of the soil.
 - Fertile soils are full of nutrients and are the very foundation of our food system. Organisms below ground convert dead and decaying matter into nutrients to be taken up by plants. Without these organisms our soils are deprived of muchneeded nutrients.10
- Landscapes with a diverse array of plant species ensure we have a dependable source of freshwater and protection against floods.
 - Plants filter and help store freshwater. When we lose the diversity of plants in our watersheds and forests, less water gets absorbed into the ground. Instead, water is carried along the surface of the ground to lower elevations.



Photo: Eastern meadowlark nest of

This is known as runoff. Increased runoff causes less freshwater to be stored below ground and increases risk of floods.11

Species should be protected regardless of the direct human benefits. Wild spaces

are part of our identity. When picturing a place like Canada, images of vast forests, grasslands or cold northern tundras flash through our minds. When you spend time in nature you crave wild spaces full of birds, mammals, flowers and trees places teeming with life — not a desolate landscape. We're related to the species in the network of living things and perhaps that's why we care so deeply about protecting them.





Photos: Swift fox kits (John E. Marriott), sockeye salmon (Dale Sanders)



SPECIES AT RISK ACT – MAIN STEPS

Species Assessment

The Committee on the Status of **Endangered Wildlife** in Canada (COSEWIC) assesses the level of risk to the species.

- Extinct Extirpated
- Endangered
- Threatened
- Special concern • Not at risk

Legally Listed The minister of

environment and climate change is in charge of recommending which species be legally listed under SARA. Once a species is added to the at risk list, it becomes protected.

Recovery Strategy

Science-based plan that identifies what needs to be done to decline of a species. It sets recovery goals and objectives

Action Plan

Outlines the activities and projects that will be done to reach goals in the recovery strategy. The plan is also adjusted according to social and economic impacts. Once the action plan is finished, on the ground action

(Source: "2013 Fall Report of the Commissioner of the Environment and Sustainable Development." Office of the Auditor General of Canada. Fall 2013. https://bit.ly/2vxQWrMJ

SARA CAN PACK A PUNCH

CARA can be an effective tool when it is enforced. Greater sage-grouse 2 populations in Canada were an all-time low in 2006. Nearly 90 per cent of their population had died off since 1988, due to relentless resource extraction in the heart of their habitat. Federal officials made no sign of stepping in to take action to protect this species.

Unable to wait in silence, the Wilderness Committee and other environmental organizations, represented by Ecojustice, took the federal

government to court in 2012 for failing to fulfil their duties under SARA. As a result, in 2013 the federal government issued an emergency order to finally protect the greater sage-grouse and its habitat. The results of the emergency order were incredible. The sage-grouse population grew an astounding 150 per cent in Alberta and 233 per cent in Saskatchewan in 2014.13



Photo: Greater sage-grouse (Rebecca and Glen

WHAT'S UP WITH THE WHALES

fter decades of scientists and environmental groups ringing alarm bells over the state of B.C.'s iconic southern resident killer whales, the federal government finally acknowledged they're facing an imminent threat to their survival. There are only 75 whales left and the main threat is low chinook salmon

availability, which they rely on for 80 per cent of their diet.14 Other threats include vessel traffic, noise and pollution.

This May, the government announced partial fishery closures and \$9.5M to restore habitat for chinook. This is welcome but it's not enough as key foraging

areas are left out from the fishing closures and more needs to be done to ensure enough chinook reach their spawning ground.15

The Salish Sea near Vancouver, home of the southern residents, is a congested and noisy place.16 Vessels come and go frequently and up to 28 whale watching boats follow the pods around daily.17 Nearby boats disrupt killer whales' feeding and may mask echolocation signals reducing their ability to hunt. 1819

Although the federal government

announced \$12M for research and increased the buffer distance between whales and boats, stronger action must be taken to reduce the number of vessels and noise. Several new project proposals would do the opposite.

Roberts Bank Terminal 2 in Delta would nearly double the

amount of container ships to the terminal.20 Meanwhile, the proposed Trans Mountain pipeline expansion would increase oil tanker traffic seven times. If this happens, the whales will be around boats virtually all of the time.²¹ So regardless of salmon numbers, whales will not be able to hunt

successfully. And the threat of a diluted bitumen spill from the pipeline puts their home at risk of catastrophe.

We know the threats to killer whales and we know how to reduce them. Action needs to be taken to reduce vessel traffic and pollution. Southern resident killer whales would be on the path to recovery if we increased chinook stock by 15 per cent, and reduced vessel noise and pollution by half.22

We can do this.



SPECIES AT RISK ACT — FLAWS AND FAILURES

PART 1

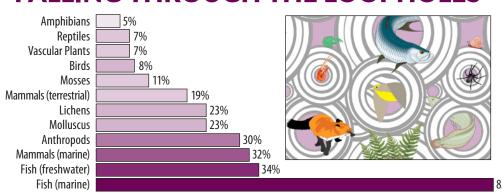
LOOPHOLE THREATENS WILDLIFE

n paper SARA seems robust, providing bulletproof protection for species at risk. But if you pick away at something long enough, you'll expose its flaws. Under former Prime Minister Stephen Harper, that's exactly what happened. He found a loophole in the law allowing government to avoid protecting species and it's been not-so-bulletproof ever since.

In Canada, we have a team of scientists who do an excellent job of determining the status of at-risk species populations — the Committee on the Status of Endangered Wildlife in Canada (COSEWIC). But in 2012, the Conservative environment minister used vague wording in the law to avoid legally listing and protecting species, regardless of whether COSEWIC found a species to be at risk.

This loophole is having catastrophic impacts on wildlife at risk. Between 2011 and 2015 the Harper government made zero decisions to protect species even though there were 82 needing protection.²³ Right now there are over 170 species at risk that receive no legal protection from being killed, harmed or having their habitat destroyed. The graph below shows which types of species are falling victim to this loophole.

FALLING THROUGH THE LOOPHOLES



Percentage of at-risk species with no federal SARA status or legal protection (Source: "Species at Risk Public Registry." Government of Canada. Aug. 1, 2018. https://bit.ly/2MhWLBb)

PART 2

SIGNING OFF ON EXTINCTION

f protecting a species at risk gets in the way of social and economic benefits, then the government can decide not to list and protect the species. For example, the endangered Cultus Lake sockeye salmon do not have any legal protection because it would cost the fishing industry money.24 This is the same case with the bocaccio, an endangered species of rockfish.25

Not only do social and economic impacts influence whether a species will be listed or not, they also influence what is done to recover a species. Recovery actions that

are necessary to save a species frequently get ignored due to economic concerns from industry. Yet, polls show that 80 per cent of Canadians agree with the need to limit industrial activity in order to protect vulnerable species.26

While it's important

to understand the social and economic costs of saving a species, we must also recognize the costs of extinction.

SARA must be improved so that listing a species at risk is science-based and not influenced by industry concerns. Action planning should prioritize the benefits of saving the species, including both intrinsic values and the benefits to the ecosystem. If it did this, we would have a law that accurately reflected public values and was effective at recovering species at risk, creating a win-win for wildlife and communities.



Photo: Blandings turtle (Don Johnston)

PART 3

READ THE FINE PRINT

ven species that are legally protected aren't necessarily recovering. From 2002 to 2014 federally protected at-risk species still experienced population declines of 28 per cent — and it's pretty easy to understand why.27 SARA only applies to federal land.

Across the country, only four per cent of the forested land is federally controlled, meaning SARA doesn't automatically apply to the majority of our wild forests.28 So unless a species at risk is in a national park, military base, post office or an airport, prohibitions against harm to it or its habitat are not automatically enforced.29 What an interesting thought that the endangered spotted owl technically receives more protection if it takes up residence in a post office rather than a provincial forest.







 $Photos: Mormon\ metalmark\ (Jared\ Hobbs),\ spotted\ owl\ pair\ (Isabelle\ Groc),\ polar\ bear\ (Don\ Johnston).$

PART 4

PROVINCES AND TERRITORIES — THE WEAK LINK

Then it comes to dealing with species at risk on provincial or territorial land, SARA hands over responsibility to the provinces and territories. In many cases like that of the boreal caribou, they have almost entirely failed to protect caribou habitat on their land in favour of industrial development.3031

When provinces and territories fail to effectively protect a species, the federal government has the option to issue a "safety net order" which enforces protection of the species and its residence on provincial or territorial land. Sounds great right? Although it looks good on paper, **the federal** government has never used a safety net order.32

Boreal caribou show how the gap between federal enforcement and provincial action fuels population decline. In 2012, the federal government gave the provinces and territories five years to create action plans to protect boreal caribou. Not surprisingly, this deadline passed in



mountain caribou (Robert McCaw).

2017 and all of them failed to write their plans while caribou habitat destruction accelerated. Provinces and territories commonly use the excuse that they can't take action until more research is done. But caribou have been listed as at risk since 2003 and researched for years prior to that, so provinces have had plenty of time to study caribou and make action plans.

At this point, caribou are being "studied to extinction." If we want to save boreal caribou, the federal minister of environment and climate change needs to step up and enforce mandatory habitat protection.

LET'S GET SERIOUS ABOUT PROTECTING WILDLIFE

ederal officials need to do their job and enforce SARA. So far, Minister of Environment and Climate Change Catherine McKenna has taken steps in the right direction. She's announced that southern mountain caribou are facing "imminent threats" to recovery and southern resident killer whales are facing "imminent threats" to survival. This acknowledgment must lead to the next big step — issuing emergency protection orders for these and other species facing similar threats.

Provinces and territories have gotten away with harming species at risk for far too long. They are responsible for protecting and recovering species at risk on their land and SARA assumes these jurisdictions have the necessary laws to do so. Yet the Yukon, Nunavut, P.E.I., Saskatchewan and Alberta don't have stand-alone species at risk



Photo: Black tailed prairie dog (Don Johnston).

laws and B.C. has only just started the process of writing one.33 Even jurisdictions with their own species at risk laws aren't doing good enough. For example, the Ontario **Endangered Species**

Act exempts forestry companies from following parts of the law, allowing projects which may result in killing, harming, capturing or damaging the habitat of a species at risk.34 Every province and territory in Canada must have their own strong and enforceable piece of legislation that actually protects a species at risk and their habitat and enforces recovery measures.

It's time to value life-giving biodiversity. Extractive industries in Canada have had a heyday in past decades. The Alberta tar sands more than doubled production of bitumen from 2003 to 2014.35 In B.C. there's been a boom in the number of trees we cut down, just to send them overseas as unprocessed raw

> logs. From 2009 to 2010 the monthly average of raw log exports increased by 200 per cent.36

We extract resources at an alarming rate, as if they are never-ending and there are no repercussions. Well, they will run out and



there are repercussions — we're already feeling them. As biodiversity in Canada decreases, our ability to continue with life as we know it is threatened. Our current addiction to unsustainable resource extraction threatens the supply of our basic needs: clean air, water and soil that we simply cannot live without.

The federal government's timeline for action doesn't address the severity of the issue. Half of all Canadian species are headed towards extinction. To save them we need to strengthen SARA, close the loopholes and enforce the legislation. Provinces without species at risk laws must create them, provinces with laws must enforce them and communities must continue to pressure governments to protect biodiversity. If we can do this, we will save Canada's wildlife. We're at the fork in the road. We need to act together and walk down the right path — to avoid a lonely landscape.

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Editing: Alex Hsuan Tsui, Eric Reder. Art Director: Sue Fox. Graphic Design: Perry Sky Jack

permission when credit is given.

Published by

Wilderness Committee, Vol.37, No.5, 2018.

Wilderness Committee — National Office

46 E. 6th Avenue, Vancouver, BC V5T 1J4 2 604-683-8220 or 1-800-661-9453 € 604-683-8229

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TAKE ACTION

PROTECT CANADA'S SPECIES AT RISK

Please contact the minister of environment and climate change Canada telling them to:

- Enforce the Species at Risk Act and help prevent wildlife species from disappearing
- Hold provinces accountable for critical habitat protection
- Issue emergency protection orders for all species facing an imminent threat to their survival or recovery



Photo: Burrowing owl (Don Johnston).

Ministry of Environment and Climate Change Canada

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