



Wild Lands Advocate

BY ALBERTA WILDERNESS ASSOCIATION
FALL 2024

TAKING A STAND:

How speaking up against
bad policies *can*
make a difference.



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Contents

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FEATURES

- 1 The Long Fight: A Note About Alberta's Grizzlies
- 3 Bully For the Blackbirds
- 4 Canada's Big Biodiversity Promise
- 8 All Bark and No Bite: Climate Finance in Canada
- 11 Wetlands for a Sustainable Environment

13 Species Protection (Part 3)

19 Trapped Still

WILDERNESS WATCH

- 22 Water musings
- 23 Homes in the grasslands
- 24 Ecologically-conscious planning

DEPARTMENTS

- 26 Save the Dates!
- 28 Featured Art
- 29 An Adventure in McKinnon Flats

Cover Photo: Though they may look close to the photographer, these grizzly bear cubs were photographed from a vehicle with a 500mm telephoto lens with a 1.4x teleconverter. That translates to a 700mm lens, almost double the power of a regular set of binoculars. The photographer, John Marriott, is a Canadian wildlife conservation photographer, a Canon ambassador and co-founder of Exposed Wildlife Conservancy. John has been an active advocate for Alberta's grizzly bears and many other wildlife over the years. Most recently, he played a huge role in opposition to the Alberta government's reintroduction of the grizzly bear hunt.

Editorial Note: Dear readers, Thanks for picking up the magazine! In this edition, we wanted to highlight how speaking out for change really can make a difference. We start out with a note about grizzly bears in Alberta, which as you likely have heard, are now being subject to a hunt if they are considered "problematic." We also have features about Canada's promise to help bolster biodiversity; how Canada is not as inclined to give up oil and gas as some may think; a guest writing about the fish we've trapped on the land over the years, another guest post about how wetlands might help mitigate some of the effects of climate change, and so much more. You'll also find featured art and a note about our annual lecture and AGM. Enjoy!

– Amy Tucker, Outreach + Communications Specialist, and Wild Lands Advocate Editor.



ALBERTA WILDERNESS ASSOCIATION

*Defending Wild Alberta through
awareness and action*

Dedicated to the conservation of wilderness and the completion of a protected areas network, Alberta Wilderness Association is a voice for the environment. Since 1965, AWA has inspired communities to care for Alberta's wild spaces through awareness and action. With a provincial office and library in Calgary, AWA has active members, volunteers, and sponsors throughout Alberta and beyond. AWA is a non-profit, federally registered, charitable society. Donations and financial support are greatly appreciated.

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See the contact details below to subscribe.

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The Long Fight: A Note from AWA About Alberta's Grizzlies

Photo © J. Marriott

About 200 years ago, it was estimated there were 6,000 to 9,000 grizzly bears roaming Alberta. Settlers noticed. In 1871, Isaac Cowie of the Hudson Bay Company took 750 grizzly skins from the Cypress Hills area in just one year.

By the 1950s, the grizzly population was declining due to inadequate regulation of hunting, and indiscriminate anti-rabies poisoning. Yet, over the years, the grizzly bear hunt continued (though the fall hunt was eliminated in 1971).

The spring grizzly hunt was finally suspended in 2006 after the grizzly population in Alberta dwindled to fewer than 700 bears on provincial lands in 2004. This was in no small part due to the efforts of AWA supporters who spoke out in large numbers against the unsustainable hunt. Grizzly populations have since been recovering, but human-caused mortality remains the leading cause of grizzly bear death. In 2021, Alberta Environment and Parks stated that the province had between 856 and 973 grizzly bears.

And now we are here again: a hunt on threatened grizzly bears is being allowed in Alberta if the bears are deemed "problematic."

Devon Earl, a former Alberta Wilderness Association conservation specialist of three years, helped raise the alarm about the issue in July, with the help of John Marriott, a photographer and cofounder of Exposed Wildlife Conservancy. The public response has been incredible. Already, over 1,000 people and counting have written to the minister to express their opposition using our letter-writing template or by writing their own letters via email and CC'ing us in them.

While the Alberta government's news release about its decision states that 'This is not a bear hunt,' Devon pointed out that the Ministerial Order tells a different story.

For one thing, the order states grizzly bears that are "involved in a human-bear conflict" or "in an area of concern" may be authorized to be hunted.

These areas of concern don't seem to be clearly defined, and we fear that the term could apply to anywhere bears and people overlap. Further, conflicts between people and bears must be dealt with by trained professionals, not trophy hunters. Euthanizing a bear should be a last resort only used when a bear poses an imminent safety risk.

The changes to the *Wildlife Amendment Regulation* were done without public consultation or legislative review by Forestry and Parks Minister Todd Loewen and published on June 29 in the *Alberta Gazette*. AWA worries that human-bear conflicts will be viewed as an opportunity to hunt bears.

“Hunting is not an acceptable management approach for a threatened species,” says Devon. “Grizzly bears have a very slow reproductive rate, and trophy hunting could undo all the recovery of the last decade.”

We also feel it’s important to note that the province’s only human-wildlife conflict specialist retired in 2022 and has not been replaced. Alberta should focus on hiring large carnivore conflict biologists (which is called for in the 2020 *Grizzly Bear Recovery Plan*).

“This decision seems short-sighted, intended to appease Minister Loewen’s ties to the guide-outfitting and trophy hunting industries and lacks any public integrity. Why wasn’t the public consulted on this?” John said.

“Why weren’t grizzly bear researchers involved in this decision? The science on grizzly bears very clearly does not show a beneficial link between hunting and conflict resolution, so why are we risking grizzly bear recovery for a few hunters to have trophy rugs on their walls?”

As AWA has previously written in the *Wild Lands Advocate* about this issue, before the legislation was changed, “If Alberta is already failing to maintain healthy populations of wildlife on the landscape, how can we justify exploring new hunting opportunities?” 🍃



Photo © J. Marriott



Bully for the Blackbirds: Inspiration From Nature

BY LORNE FITCH

Ravens are among the big dogs of the bird world. Photo © C. Olson

Weighing in at a few ounces, red-winged blackbirds are mostly heart and all courage. In defending their nests from predatory attacks they punch well above their weight class. Ravens and crows (corvids) are the big dogs of the bird world, occupying top positions, loud and bullying, filled with their own importance and stature, aggressive and predatory.

The big black birds remind me of human equivalents — economic mandarins — especially of the resource extraction persuasion and their government supporters and industry apologists. Always looking for a killing, at the expense of others.

Red-winged blackbirds are always on the defensive through the nesting period, guarding their nestlings. When a crow or raven enters their airspace it is all hands on deck (or in the air) scrambling to attack. Then it's akin to a First World War, close combat aerial dogfight. Blackbirds easily outmanoeuvre the larger, less agile corvids.

It's a combination of dive-bombing, darting in from the side, coming up underneath the corvid and sometimes a frontal attack, either as single birds or in formations of up to five blackbirds. These little fighters will sometimes momentarily land on the backs of the big birds and peck at their necks and heads.

This has to be very distracting to a big bird homing in on what looked like an easy meal. They wheel, stall, weave and eventually fly off with a rearguard of blackbirds shepherding them away. At a distant perch, the corvids will vocally vent their displeasure at being ousted by such small, insignificant birds.

It seems that the blackbird strategy of nagging, pestering, bluffing and otherwise annoying corvid predators works. Standing up (and flying up) to much larger threats is more effective than acquiescing. It may not produce a win all the time but it means there is always a cost to predatory tactics.

There is a lesson here, for us little people fighting

conservation battles. We can (and should) punch above our weight since our opinions, perspectives and recommendations have support from many Albertans. Constant, unremitting questioning of development proposals, pestering and nagging for impact assessments, commenting on and disclosing deficiencies, seeking the evidence to challenge the economic flimflam, holding government regulators to account and demanding accountability of politicians are all what red-winged blackbirds might recommend.

Like guarding a nest, there are a trio of tactics to be

Standing up (and flying up) to much larger threats is more effective than acquiescing.

employed in conservation — constant vigilance, constant engagement and constant pressure. Heat and light applied to political and economic rhetoric. But it takes more than squawking on social media. Conservation requires action, such as letter writing (including to newspapers), bumper stickers, yard signs, peaceful protests and citizen science. When those things fail, there are legal options and resolutions. And don't forget the ballot box as a solution to failures of government to work for the public good instead of corporate favour.

Bully for the red-winged blackbirds. We can learn from nature how to protect it from predatory attacks.

Rise up! 🍀



Lorne Fitch is a professional biologist, a retired Fish and Wildlife biologist and a past adjunct professor with the University of Calgary.

A long-billed curlew bird is shown in flight, its wings spread wide, against a clear, light blue sky. The bird's long, thin beak is a prominent feature. The text is overlaid on the right side of the image.

Canada's Big Biodiversity Promise

BY RUIPING LUO

*How Canada
responds to the
biodiversity crisis
will have global
consequences.*

Long-billed curlews were listed as a Special Concern species in 2002 by the
Committee on the Status of Endangered Wildlife in Canada.

Photo © C. Wallis

Nearly two years ago, Canada, alongside 195 other countries, signed the *Kunming-Montreal Global Biodiversity Framework*, an international agreement under the *Convention on Biological Diversity*. It set goals and targets aimed at reversing biodiversity decline.

To fulfill international commitments, Canada has produced the *2030 National Biodiversity Strategy*, a plan for how Canada will meet the goals of the Kunming-Montreal framework and protect our nation's biodiversity. More excitingly, the *Nature Accountability Bill* has been introduced into Parliament. If passed, the bill would hold the federal government accountable for reporting progress and meeting its commitments.

The *Biodiversity Strategy and Nature Accountability Bill* represent an improvement, but is it enough to protect and recover Canada's biodiversity?

The Biodiversity Crisis

Canada, as with the rest of the world, is facing a biodiversity crisis. Globally, natural ecosystems have declined by nearly 50 percent, and roughly a quarter of known species are at risk of extinction. Canada is not doing much better — less than 30 percent of land habitats are still considered wild, and among species assessed at the national level, one in five were at risk, with 135 species already presumed or likely extirpated.

As biodiversity is lost, we are also losing the functionality of ecosystems and many of the services we rely on, from soil formation to filtering of air and water. Ecosystem services worldwide are worth an estimated \$125 trillion US dollars (over \$170 trillion Canadian dollars), according to the World Wildlife Fund's Living Planet Index 2018. With the loss of biodiversity, we risk losing the health of our soils, our water and our air. The declining health of our environment will affect our ability to grow or raise food, our access to clean water and our physical and mental health.

Still, Canada is one of the world's last strongholds for biodiversity. We hold the second-largest area of wilderness in the world and have over 50,000 species across the country. How Canada responds to the biodiversity crisis will have global consequences.

Some of the greatest threats to biodiversity include habitat loss and pollution. Every year, more native prairie, old growth forests, peatlands, and other essential ecosystems are lost to development (like expanding cities and roads), resource extraction (such as mining and drilling operations) and land conversion (for farming and irrigation). Pollution, whether toxic chemical spills or deliberate use of pesticides and fertilizers, can harm even more land and species. Protecting the remaining high biodiversity areas is fundamental to reducing biodiversity decline; we cannot

afford to lose any more critical habitat.

The biodiversity crisis also cannot be entirely separated from climate change. Climate change is shifting temperatures and weather patterns, bringing more extreme weather and natural disasters such as floods, droughts, fires and storms. These changes are threatening the survival of many species, impacting migration and range as plants and animals are forced to adapt to the new environment. Invasive species can take advantage of and add to the effects of climate change, causing more stress on the ecosystem.

Historically, progress has been disappointing. Of 19 national biodiversity targets adopted for 2020, Canada met less than half (8 of 19), and partially met or made progress towards just over a third (7 of 19). Meanwhile, over 800 species have been assessed to be at-risk, and of these species, many have declined by over 50 percent in the past few decades. Urgent action is needed to protect our nation's biodiversity.

National Biodiversity Strategy

Canada's *2030 National Biodiversity Strategy* sets out an ambitious plan that aligns with the goals of the *Kunming-Montreal Global Biodiversity Framework*. The strategy does well in recognizing Indigenous leadership and a need for diverse voices, and in emphasizing a need for collaboration across all sectors and levels of government. It is vital that inclusion and collaboration is included throughout planning, as well as implementation, reclamation and broader policy decisions.

Another strength of the new strategy is in prioritizing protection of representative and well-connected high biodiversity areas. This is essential, since healthy, biodiverse ecosystems can take hundreds or thousands of years to develop, and restoration is costly, time-consuming, and not guaranteed to succeed. Protected areas must be representative of Canada's ecosystems; currently, a majority of Canada's — and Alberta's — protected areas are in the less populated north, so the northern landscapes are well-represented. This system leaves the southern ecosystems, such as the prairies, vulnerable to exploitation. As these less-protected ecosystems are already some of the most degraded, expanding protected areas must focus on the under-represented south.

Canada also promised to phase out incentives that are harmful to biodiversity, including "inefficient fossil fuel subsidies." Since fossil fuels contribute heavily to both biodiversity loss and climate change — one of the leading threats to biodiversity — reducing fossil fuel use is crucial. In 2022, the International Monetary Fund found Canada had given \$2 billion in explicit fossil fuel subsidies. Another \$36 billion was estimated in implicit costs. However, previous efforts to reduce incentives have been largely ineffective,

leaving loopholes that continue to funnel money into the pockets of major oil and gas corporations. These incentives make it cheaper to burn oil and gas, encouraging fossil fuel development and slowing the transition to clean energy.

Similarly, there are promises for reducing pollution, including from pesticides, fertilizers, plastics and chemicals. Pollution is one of the five greatest causes of biodiversity decline, especially for aquatic species, and can destabilize ecosystems. An estimated 80 percent of endangered species in America were threatened by pesticide use, according to the United States Environmental Protection Agency, and hundreds of thousands of birds are estimated to die from oil spills off Canada's coasts each year. Yet, Canada is often lagging on pollution regulation. For instance, while neonicotinoids have been banned in Europe since 2018, the pesticide is still used extensively in Canada. Responses and reporting for chemical spills are often slow, and unable to prevent extensive ecosystem damage. To be effective, we need stronger regulations and monitoring around pollutants, especially for chemicals proven to be highly toxic and damaging for threatened species.

Restoration is another important aspect discussed in the strategy. While protecting biodiverse lands is more effective, rebuilding of degraded lands is also needed, especially in ecosystems that have already been heavily lost or damaged, and where the remaining habitat cannot support the species that rely on them. However, restoration should not be used to justify development and destruction of native habitats. The *National Biodiversity Strategy* approaches

restoration by promising investment, but also using existing regulatory and policy frameworks to mitigate degradation. These frameworks often allow offsets — where habitat is restored, enhanced or created in exchange for destroying productive, healthy ecosystems. Most of them have proven largely ineffective at protecting endangered ecosystems. For restoration to be effective, we need to be building healthier and more productive habitat, not using it as a platitude for continued habitat destruction.

Finally, the value of our natural environment should focus on more than profit. Sustainable use should be about the sustainability of the entire ecosystem, not only about how much we can harvest; this means leaving enough for other species too. For example, setting aside water in rivers for fish and other aquatic species to survive, or leaving enough trees to sustain the plants and animals that rely on those forests. Similarly, socio-economic benefits of ecosystems are often overlooked. Beyond their role in tourism and recreation and their importance in sustaining Canada's economy (i.e. through forestry, fishing, agriculture, etc.), having a healthy environment provides us with clean air and water, regulates temperature, reduces flood and drought, produces healthy soil and supports pollinators and other important wildlife. It is also central to Indigenous cultures and supports physical and mental health for all peoples. It is time we acknowledged the inherent value of ecosystems; beyond just the material resources these lands provide.



A heard of elk graze near Two Jack Campground at dusk.
Photo © A. Arevalo



The Sagebrush Flats in southern Alberta.
Photo © C. Olson

Nature Accountability Bill

The *Nature Accountability Bill* was introduced to promote accountability and track progress. Under the proposed bill, Canada's Minister of Environment would be required to establish a *National Biodiversity Strategy*, reporting measures taken or proposed to reach global biodiversity targets. The minister must also submit reports detailing Canada's progress on meeting targets and form an advisory committee. These actions should be undertaken using the best available science and respecting the rights and knowledge of Indigenous Peoples.

If passed, Canada would be one of the few countries in the world to require nature accountability. The federal environment minister would be required to keep working

Sustainable use should be about the entire ecosystem, not only about how much we can harvest.

towards long-term biodiversity goals.

However, the proposed bill would act only at a federal level. In Canada, most land management is under provincial jurisdiction, so the cooperation of the provinces is vital to large-scale environmental protection. The *Nature Accountability Bill* will not be enough without the cooperation of the provinces.

Alberta's stance on biodiversity

At the time of writing, Alberta has still not agreed to

the *Kunming-Montreal Global Biodiversity Framework*, nor has the province made commitments towards halting and reversing biodiversity loss. In contrast, Alberta has repeatedly challenged the *National Biodiversity Strategy and Nature Accountability Bill*, and has moved to encourage industrial development, including oil and gas expansion, at the cost of preserving biodiversity.

Of over 800 species determined to be at-risk in Canada, 115 are found in Alberta, and many of these populations are declining. At least five species have already been lost from Alberta's landscape, and more are on the verge of extirpation or extinction. Human activity covers 31 percent of the province, according to the Alberta Biodiversity Monitoring Institute (ABMI), with much of the remaining lands heavily fragmented and degraded. This human footprint expanded 15 percent (28,292 km²) between 2000 and 2021, an area nearly 35 times the size of Calgary. Yet, Alberta has not increased protection; 14.8 percent of Alberta was protected in 2018, expanding to a meagre 15.4 percent in 2021. With industrial, urban and agricultural development continuing to encroach on the remnant habitat of rapidly declining species, protecting the remaining land is crucial, or we risk losing even more of Alberta's unique and vital species.

The 2030 *National Biodiversity Strategy* sets some ambitious targets for Canada, but ambition is needed if we want a chance to halt and reverse the biodiversity decline. There remain many barriers to implementing the strategy, one of the most significant being the reticence of provinces, such as Alberta, to cooperate. Biodiversity loss impacts us all, not only in the loss of species, but also in the loss of environmental condition, ecosystem services and human health. We need action to stop biodiversity loss now, from Canada and from Alberta. 🍃

All Bark and No Bite: Climate Finance in Canada

BY PHILLIP MEINTZER



Scenes from the highway near Fort McMurray.

Photo © P. Meintzer

Some Canadians seem to believe the federal government is intent on “killing” Alberta’s oil and gas industry. But a series of recent reports show that those claims are far from the truth.

It’s not just Alberta’s Energy Regulator — a public entity that is supposed to weigh the benefits versus harm of energy projects before approving them — that seems to be held captive by corporate interests in the oil patch. Canada’s federal government continues to pour public money into the fossil fuel industry despite promises to eliminate this kind of spending. Findings from an April 2024 report by Oil Change International and Friends of the Earth, show that Canada remains a global leader in financing the oil and gas industry.

From 2020 to 2022, the G20 countries — including Canada — provided at least \$142 billion (USD) in public finance for fossil fuel companies or projects. That’s at least \$47 billion (USD) in new funding per year, with most of that money going towards natural gas projects.

The report also found that the top three fossil fuel financiers between 2020 and 2022 were Canada (\$10.9 billion per year), Korea (\$10 billion per year), and Japan (\$6.9 billion per year), with the worst offenders coming from a group of financial institutions known as Export Credit Agencies (ECAs).

ECAs, like Export Development Canada, a federal

crown corporation, help facilitate international exports for domestic companies. The report shows that ECAs accounted for 65 percent of all known fossil fuel financing activities within the study period.

The report notes that its numbers are likely underestimated because government reporting is limited and inconsistent, so the actual values are likely higher. Their analysis shows that a handful of countries, like Canada, are blocking a just and equitable transition to more sustainable forms of energy by continuing their financial support for the fossil fuel industry. This is money that could be used to accelerate a clean energy transition but instead keeps us locked into the fossil energy system that’s driving climate change.

Another recent report, released in March 2024 by Environmental Defence Canada, tracked how much financial support the federal government (and crown corporations) gave to fossil fuel companies in 2023. The report included grants, tax breaks, loans, and loan guarantees to come up with the totals.

The analysis found that in 2023 alone, Canada provided at least \$18.55 billion (CAD) in financial support to fossil fuel and petrochemical companies. This total included \$8 billion in loan guarantees for the Trans Mountain expansion pipeline (better known as TMX), \$7.4 billion in public financing through Export Development Canada, over \$1.3 billion for carbon capture projects, and approximately \$1.8 billion in

assorted tax breaks.

These findings show that over the last four years, the federal government gave the oil and gas sector at least \$65 billion. The authors note this money could have funded every major wind and solar project developed across Canada from 2019 to 2021 twelve times over. It also represents 10 times what the federal government has invested in climate change adaptation since 2015.

In July 2023, the federal government announced that Canada was the only G20 country to phase out inefficient fossil fuel subsidies two years ahead of the 2025 deadline. But despite that claim, Canada still gave at least \$18.55 billion to the fossil fuel industry that same year. That's \$18.55 billion of taxpayer money that was gifted to fossil fuel companies to boost their profits when it could have been spent on renewables or much-needed public services. As the harmful impacts of the climate crisis continue to worsen, Canada continues to pour more fuel on the fire.

Using the Government of Canada's Social Cost of Greenhouse Gas Emissions (SC-GHG) tool, Environmental Defence also measured the cost to society from the pollution produced by Canada's oil and gas companies in 2023. Estimates from the SC-GHG include costs for climate damages such as changes to agricultural productivity, human health effects, property damage from increased flood risk, and impacts on the ecosystem. The analysis found that the social cost of Canadian oil and gas pollution in 2023 alone was approximately \$52 billion.

Last December, during the 2023 United Nations Climate Change Conference (COP28) in Dubai, Canada proudly pledged \$16 billion toward a new global fund to address losses and damages from climate change. This fund is intended to support the most vulnerable countries and communities in the over-exploited global south who are on the front lines of the most harmful impacts of climate change, and which are predominantly driven by emissions from countries in the global north, such as Canada and the United States.

But a paltry \$16 billion pledge towards losses and damages is laughable when you're also giving \$10.9 billion per year (on average) to the industry directly responsible for the emissions creating those very damages. It's almost disrespectful when the estimated societal cost for a single year of Canada's oil and gas emissions is \$52 billion, more than three thousand times the amount that Canada pledged to the fund. Canada is not the climate leader it wants the world to think it is.

In 2022, the top four oil companies in Canada

(Cenovus, Imperial Oil, Suncor, and Canadian Natural Resources) posted combined profits of \$33.7 billion. And again, in 2023, these same four companies recorded profits of over \$25 billion. These two years were the most profitable in the history of Canada's oil and gas industry. These private companies don't need our tax dollars to survive. If anything, we should be taxing them more to help fund the transition to renewable energy and pay for public services that are constantly subject to smaller operating budgets.

Fossil fuel corporations aren't alone in profiting at the expense of a habitable planet. Banks who finance their operations, like the Royal Bank of Canada (RBC), are benefiting from it.

According to the 2024 edition of the annual *Banking on Climate Chaos Report*, RBC was the

Nearly one in five board directors at Canada's big five banks sit on the boards of fossil fuel companies as well.

world's leading financier of oil sands companies in 2023 at \$523 million.

The report includes RBC alongside large American banks like JPMorgan Chase as "The Dirty Dozen" banks with the worst record for financing fossil fuels since the Paris Agreement was signed in 2015. Overall, RBC invested more than \$28 billion into fossil fuels in 2023, bringing its total to \$256.45 billion over the last eight years.

To put this in an Alberta context, RBC is the largest institutional shareholder of Suncor Energy Inc., the same oil sands company that is planning to expand its Fort Hills mining operation into the beautiful, ecologically significant McClelland Lake Wetland Complex starting next year. Since 2016, RBC has invested around \$2.8 billion into Suncor, with more than \$500 million of those funds provided in 2023 alone.

Oil sands mining projects, like Suncor's Fort Hills mine expansion, are not possible without massive financial support from banks in the form of loans and investments. And through these investments, RBC is helping to enable the ongoing destruction of

ecosystems in northern Alberta. Suncor might be doing the digging at McClelland, but RBC is making it possible. Yet, this is hardly surprising. *Canada's National Observer* found that nearly one in five board directors at Canada's big five banks sit on the boards of fossil fuel companies as well.

Given the outsized role that Canadian banks play in funding climate change, the CEOs of Canada's big five banks were recently summoned to testify in front of a federal parliamentary committee back in June. This was an opportunity for federal decision-makers to question those in charge of Canada's banks and may lead to stronger regulations that align banking practices with our international climate goals. That is, if our legislators dare to hold the banks accountable. But if Canada's track record with the fossil fuel sector is anything to go by, it seems unlikely that the federal government will be bold enough to demand our fair share of this immense wealth.

A *Globe and Mail* article from April 15, 2024, reported that federal officials dropped a plan for a surtax on oil and gas producers after "strong opposition from oil patch executives." This was at the same time the Canadian Association of Petroleum Producers (a Calgary-based industry lobby group), reported record returns in the fossil fuel industry this year.

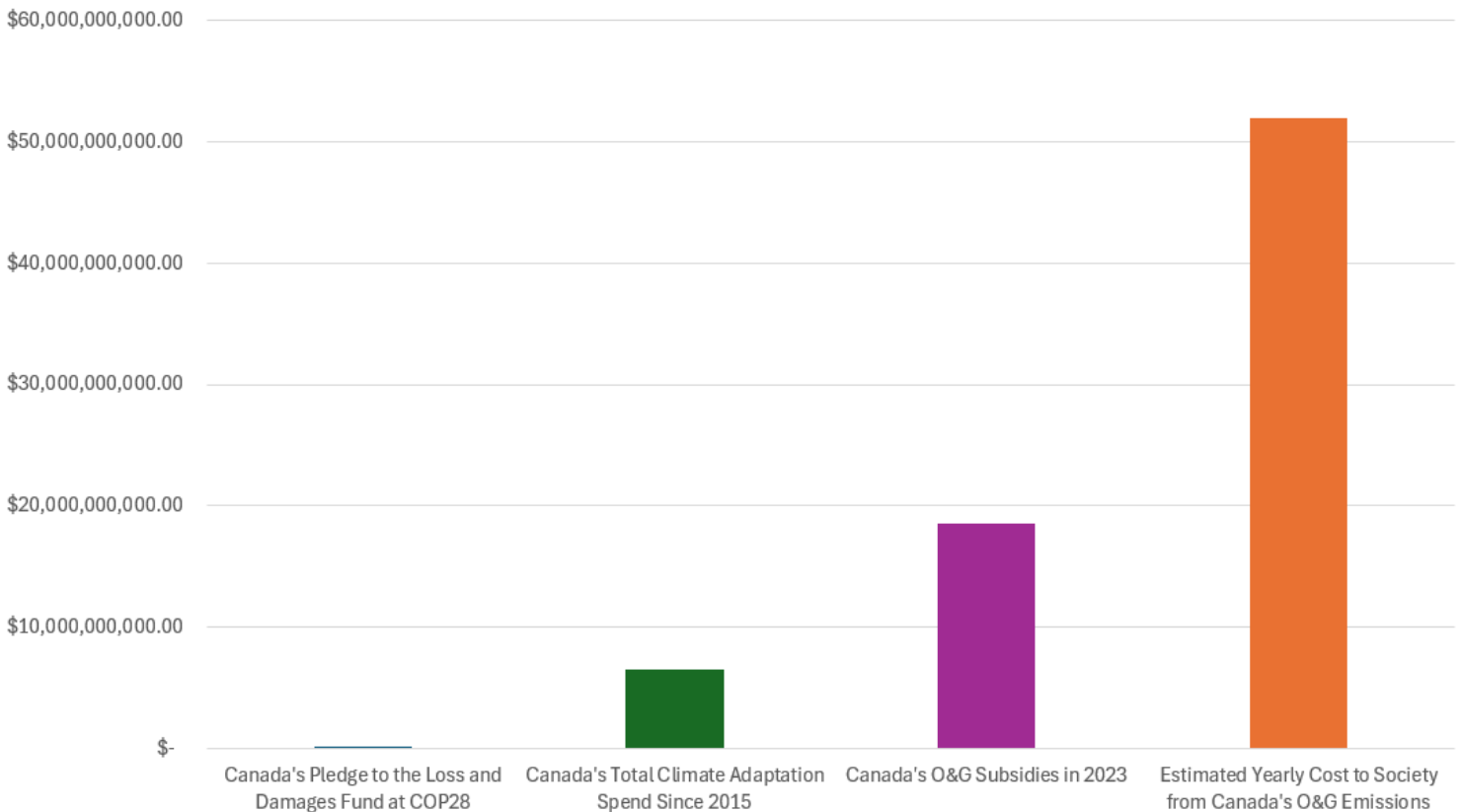
It seems that Canada is held captive by the fossil

fuel industry as it continues to prioritize corporate profitability at the expense of Canadian taxpayers, our public services, healthy ecosystems, and those most at risk of the harmful impacts of climate change such as Indigenous Peoples and communities in the global south.

University of Manitoba professor David Camfield, in his 2023 book *Future on Fire: Capitalism and the Politics of Climate Change* states that: "Trudeau is a master of the art of appearing to be serious about addressing climate change while implementing policies that promote fossil fuel extraction. The Liberal government's climate plan, which combined 'weak emissions targets, promised investment in clean technologies, and a market-based carbon price,' was one that oil and gas firms and the rest of corporate Canada could accept, no matter what Trudeau's Conservative opponents said." The federal government's continued subsidizing of the fossil fuel industry only further exemplifies their contradictory approach to climate policy.

Promises are meaningless without tangible action to back them up. Despite Canada's many international commitments, the evidence shows that our federal government is still prioritizing profitability in the oil patch over meaningful action on climate change.

To those who think Canada's government is anti-oil and gas, I suggest you think again. 🍁



Wetlands for a Sustainable Environment

BY RADHIKA THEKKE KURUVATH

Photo © P. Meintzer

Alberta may soon face more flooding in the coming years. That's because each time the global temperature rises by half a degree Celsius, it's followed by a rise in heat waves, wildfires, drought, change in sea level and heavy precipitation. The Canadian government's climate models project that national annual precipitation could increase by 24 percent by the end of the century. Extreme precipitation events that used to occur once in 20 years are expected to occur once in 10 years by 2050 and once in five years by the end of this century, according to research from 2023.

So how does Alberta protect itself from flooding? The answer may lie partly in a natural solution — wetlands. That is, as long as we don't keep destroying them, and we restore the ones that have been drained or degraded.

In Alberta, wetlands cover 143,628 square kilometres, or 21.7 percent of the province, according to the Wetland Atlas of Alberta. These areas are of immense ecological value, home to birds and sensitive species. They act as an important filtration system that helps to remove impurities and recharge groundwater. Wetlands help to retain water during flooding and slow the speed of water, which in turn helps the ground absorb water. In the upland wetland areas this water serves as a valuable source of reservoir through seepages and springs in the event of drought. In addition, wetlands help in carbon sequestration, increased wildlife habitat and biodiversity. If Alberta works to restore and maintain our current wetlands, we may also be helping mitigate flooding in the province.

Take the award-winning project in Parkland County. In recent years, the county encountered extreme weather events like flooding of roadways, agricultural land and private properties, disruption of water treatment from high runoff due to large storms and drought conditions. Faced by these challenges and extreme climate events, the municipality decided to assess the role of wetlands to help mitigate the effects of these extreme weather events.

The county calculated the expense involved in preserving and improving wetlands. One goal was to reduce the total suspended solids (TSS) in water which causes increased water temperature and decreased oxygen. A cost of \$170,303 annually was estimated to reduce TSS in waterways by five percent (3,000 tonnes) through building wetland and riparian buffers. Benefits include improved water and ecosystem quality, increased wildlife and pollinator habitat and carbon sequestration, according to the Green Municipal Fund. A quarter of the county's annual budget is spent on road maintenance and construction. By restoring wetlands and riparian zones the speed of overland flow is reduced by 13 to 55 percent which reduces pressure on roads, their maintenance and repairs and lowers capacity requirements for drainage ditches and culverts. The cost of restoring wetlands was estimated for three sites in the county. The cost ranged from \$150,000 to \$260,000 per site (as per a 2023 CBC news article) which is the same as reconstructing and repairing roads. But in the long run wetland restoration can prevent further damages to roads and multiple repairs during flooding and can root out the cause of the damage in future.

Draining wetlands for canola cultivation

Development in Alberta has had a major impact on the province's wetlands. From oil and gas extraction, to building of homes and business, and of course transforming natural lands to agricultural lands, many wetlands have been drained and destroyed. In the case of agriculture, one study sought to find out whether the cost for producers to drain wetlands for food production was worth it from a cost perspective.

The study was conducted in Camrose County, another central Alberta region, in the spring of 2019. The study team selected three producers who are involved in canola production. Canola was selected as it is the most profitable cash crop in Canada and because wetlands are often drained for canola crop production. The area was mapped over the course of the summer using drones, first in June (before canola



The unique McClelland Lake wetlands in northern Alberta are at risk of being destroyed by an oil and gas project.

Photo © A. Tucker

emergence), then in August (before flowering), followed by September (during harvest). Current and historic aerial photographs of the area were taken to identify visible drainage ditches in the field. A 3D model of the terrain was created to give an idea of high and lows of the terrain and also map the low lying areas to identify wetland basins. The areas with ditches were identified as drained and those without ditches were considered as intact. The operational cost for each producer was determined, along with revenue and input cost and was combined to create a spatially explicit profit-loss map using data collected from agricultural precision equipment for each basin. This raster data was overlaid with a wetland boundary map to calculate the profit/loss of each basin.

According to the producers, \$100 per acre is the benchmark for the canola in the region (any profit greater than \$100 is considered as a good financial return). The results showed that the cost to drain the basins far exceeded the profit that resulted in the canola yields. For the intact basins, the profit was above the benchmark value.

Drained wetlands:

- 55% of basins yielded a financial loss.
- 70% of basins produced less than the benchmark of \$100/acre.

Intact wetlands:

- 30% of basins yielded a financial loss.
- 55% of basins produce less than the desired benchmark of \$100/acre.

In the present climate change reality, wetlands are needed to help mitigate or potentially prevent flooding, along with the road damage and repair expenses it can cause.

Moreover, draining wetlands for canola cultivation leads to financial loss. Any development that can lead to wetland loss should be given a second thought and sustainable development should take place for the betterment of future generations. 🌿



Radhika Thekke Kuruvath was an intern with Alberta Wilderness Association in April 2024. She recently completed a diploma in Environmental Technology from SAIT's School of Energy. She also has a master's degree in Geology from the Cochin University of Science and Technology in Kerala, India.

Legal Battles, Lost Opportunities, and the Long Road to Species Protection

Several environmental groups went to Ottawa in 2018 to take a stand for caribou.
Photo AWA Archive

BY NATHAN SCHMIDT



Endangered species are a prominent example of what happens when we fail to manage our environment adequately. Species like orcas and caribou capture public attention when their existence is threatened. Lesser-known species like western chorus frogs or sage-grouse also find themselves in the news cycle when their disappearance becomes imminent, prompting calls to action from non-governmental organizations (NGOs) and the public.

The *Species at Risk Act* (SARA) is the primary legislation in Canada used to identify and protect species threatened with extinction or extirpation. It is a set of guidelines and legal tools governments use to take steps — either restricting activities or ameliorating problems — to reverse species loss and stabilize remaining populations. Understanding these guidelines and leveraging these tools is crucial not only for governments, but also NGOs and individuals advocating to protect threatened species of all kinds.

SARA's guidelines can be considered legal rules ensuring its tools are used in accordance with other

Effective public advocacy is always necessary, but understanding the guidelines and tools in SARA is crucial for any chance of success.

laws, especially our *Constitution's* division of powers between the provinces and federal government. Available tools range from processes for identifying species and their critical habitat; creating voluntary conservation agreements between governments, individuals, or Indigenous groups; adding protective measures to federal land and in extreme circumstances provincial and private land; issuing emergency protection orders for critically low populations; and handing out penalties like fines or even jail time for harm to species, their residences, and critical habitat.

In practice, achieving these outcomes or even

reaching the point where the tools can be used is difficult. Like most problems associated with the SARA, this is rooted in issues of jurisdiction between levels of government and a lack of political will to prioritize conservation over other, often economic, priorities.

Difficulties applying the SARA persist even though we know which species and habitat need protection. This is thanks to the dedicated work of the Committee on the Status of Endangered Wildlife in Canada (COSEWIC), an independent advisory body composed of experts who provide reports and recommendations to the Minister of the Environment and Climate Change. In theory, the Minister and Governor in Council (the Cabinet of the government in power) use these materials to make decisions about listing a species under SARA to activate its protections.

However, mandatory steps like *Recovery Strategies* are vulnerable to chronic delay because they are ultimately political decisions left in the hands of elected officials causing critical habitat to be left unidentified and unprotected despite knowing for years, and even in some cases decades, that a species is quickly disappearing.

Situations like this are often the catalyst for concerned parties outside of government to become involved in the process. Effective public advocacy is always necessary, but with the complex rules and norms surrounding environmental protection, understanding the guidelines and tools in the SARA is crucial for any chance of success.

Alberta Wilderness Association (AWA) was involved as the named party in several legal challenges for the critically endangered sage-grouse found in southern Alberta and Saskatchewan. Years of government delay brought the species to the brink of extirpation in Canada, leading to over half a decade of legal proceedings in collaboration with other conservation groups led by lawyers from Ecojustice.

Over multiple court proceedings from 2009 to 2013, AWA and its partners asked the Federal Court of Canada and Federal Court of Appeal to find that the government had failed to identify critical habitat, that adequate information about the status of a pending emergency protection order (EPO) was being withheld, and that the government had to decide on an EPO for the sage-grouse and justify its decision.

AWA and its partners were successful in each proceeding, with certain caveats, and the government

eventually identified adequate critical habitat and issued an EPO in 2014, 11 years after the sage-grouse was first listed under the *SARA*.

In cases where the government has completed required protection plans, enforcement measures become available through the federal jurisdiction broadly referred to as the “criminal law” power. A unanimous 1997 Supreme Court of Canada decision in *R v Hydro-Quebec* found that the federal government has clear jurisdiction to use its constitutional criminal law power when enforcing environmental protections under otherwise constitutionally compliant legislation.

Some of *SARA*’s most effective tools rely on this power to enforce penalties and even jail time for the destruction of critical habitat and harm caused to identified species. The power to enforce *SARA*’s enforcement provisions is much different to the government-led actions of the protection processes. Enforcement is led by law enforcement agencies and Crown prosecutors who both have

considerable discretion in investigating and prosecuting environmental violations just as they do with criminal offences.

Two cases from Alberta demonstrate *SARA*’s effectiveness when it functions as intended. In *R v Lake Louise*, the Lake Louise Ski Resort was found guilty of destroying 38 whitebark pine trees during summer maintenance operations. The Court issued \$2.1 million in fines and directed 95 percent towards the Environmental Damages Fund, a Government of Canada program that funds environmental restoration. Lake Louise subsequently took steps to correct their processes to better comply with environmental laws.

R v French involved the destruction of a crossing on Racehorse Creek containing westslope cutthroat trout during a motocross competition. Brooks Motorcross Club and one of its officers were found guilty of violating *SARA* (and the *Fisheries Act*) for their role in planning the impugned activities. Together, they were ordered to pay \$70,000 in

Sage-grouse are an endangered species in Canada, and could soon be extirpated if more action isn’t taken. Photo © C. Olson



finer, with portions also going to the Environmental Damages Fund. The court further ordered them to publish a notice of their convictions in an approved publication to advise other members of the motorcross community of their penalty, to educate and warn others about activities that endanger protected wildlife and habitat.

Overall, the courts have demonstrated a strong understanding of the purpose of SARA and the scientific principles underlying the protection of species at risk. The body of case law involving SARA is consistent in its articulation of the importance of the preservation of Canada's ecological heritage — often featuring compelling writing about environmental protection.

The approach of our courts to species protection is promising but can't effectively support and enforce the long-term solutions needed for species at risk. Even in decisions strongly condemning government actions, remedies available to the courts are limited to the issues at hand, which are often narrower than the greater issue of creating accountability over the time necessary to restore a species to sustainable levels. Steps in the right direction resulting from legal decisions eventually become weighed down by political horse trading

and lobbying by powerful interest groups typically connected to industry resulting in further delay.

The EPO for sage-grouse is one example in a long list of partial victories. An EPO stops harmful activity in the area under its control but has no power to compel actions that encourage population growth and habitat restoration. Ruiping Luo, a conservation specialist with AWA, handles the sage-grouse file. Her regular updates in the *Advocate* show continued declines in population and inadequate measures to restore the 6 percent of the sage-grouse's traditional range where they still survive (which itself is not entirely covered by the EPO).

Writing in the Fall 2022, she noted Alberta counted only 22 males in the province, indicating a decline since the issuing of the order in 2014. Recovering sagebrush habitat is key to reversing this trend, something that the EPO cannot do. This falls instead to the provincial and federal governments to restore habitat on the lands they control and incentivize private landowners to do the same.

After years of inaction, it may once again fall to NGOs and concerned individuals to act where the government refuses. This cycle is not sustainable as



Despite being listed as 'threatened' under SARA since 2003, federal progress reports since 2018 show that Alberta has not effectively protected critical habitat for woodland caribou on provincial lands. Photo © P. Sutherland

it requires significant resources over years or even decades to challenge the government in court simply to force it to do what it is legally required to do. For the sage-grouse, it certainly isn't sustainable for their continued survival.

Lacklustre implementation of *SARA* also limits

Protecting wildlife and their habitat has become embroiled in partisanship and the perception it is a “left vs. right” issue.

the effectiveness of enforcement, which can only be used after species are listed and critical habitat is identified. The small number of written court decisions involving *SARA* prosecutions reflects this shortcoming — the two cases mentioned in this article represent the only two significant published decisions of *SARA* enforcement. This does not necessarily mean the enforcement provisions have only been used twice, as not all proceedings result in written or published decisions, but it is certainly indicative of how little these powers have been used over their 20-year history.

For those who care about species protection, seeing the failures of this complex, cumbersome system can make you feel powerless.

And like many political policies of the last decade, protecting wildlife and their habitat has become embroiled in partisanship and the perception it is a “left vs. right” issue. Historically though, protecting the environment was not subject to ideology and was thought of as a public good.

For example, much of the foundational American legislation for environmental protections came to life along bipartisan lines. *SARA*'s US equivalent, the *Endangered Species Act 1973* (the *ESA*), was enacted under President Richard Nixon and passed in the US House of Representatives 355 to 4. This happened 30 years before *SARA* and has been extremely effective in preventing biodiversity loss, with some studies estimating it has saved almost 250 species from extinction or extirpation. Despite

controversies along the way, the *ESA* continues to attract strong public support from Americans, with one study of multiple opinion polls estimating approval at around 80 percent of the population.

There is similarly broad public support for species protection in Canada. A 2017 poll from the science journal *Facets* found that 89 percent of respondents were “strongly committed to species conservation in principle” and 80 percent agreed we must “limit industrial development” for these purposes. More recent polls commissioned by CPAWS and the Nature Conservancy of Canada in 2022 found similar levels of support in Canada, including close to 80 percent for “Canada and the provinces and territories to speed up progress and make strong commitments to protecting nature.”

So why does it continue to be so difficult to effectively use the tools we have and hold our leaders accountable when most of us seem to agree? On a practical level, it comes down to the path of least resistance for governments as they seek to stay in power in an uncertain economy with increasingly scarce resources.

To change this trend, the relationship between advocacy, court decisions, and public pressure may be a key part of improving Canada's commitment to species at risk and their habitat. As the history of *SARA* shows, we have the tools to prevent extinction and extirpation, but we lack the will to make tough decisions.

Creating a culture where we expect governments to save species at risk just like we expect them to maintain a healthy economy or keep us safe could reverse trends of delay and inaction. Canadians care about species at risk and want governments to follow their legal obligations as the courts have told them time and time again. But when the hard decisions come across a minister's desk, public consensus is drowned out by more immediate priorities and powerful industry lobbying.

Recently, news outlets reported on the failure of the voluntary conservation agreement between Alberta and the federal government to reverse the loss of caribou, originally put in place to avoid the federal government stepping in to protect critical habitat. Perhaps this is the perfect opportunity to put public consensus to the test and see if our governments are willing to face the consequences of what happens when they fail to prevent the loss of an iconic species familiar to all Canadians, just so they save a few more quarters. 🍀



WILD HORIZONS

Photo © C. Olson

Are you signed up for our biweekly newsletter?

We send out the latest in conservation news (usually specific to Alberta) every other Wednesday via email. The updates are written by staff to give AWA members a general overview of what's going on in our files. By signing up, you won't have to wait for our quarterly journal to know what's going on and to take action.

We also post our latest adventures and events. Don't miss out! You can sign up on our website at www.albertawilderness.ca/newsletter-signup or you can scan the code below with your smart device.



Trapped Still

BY JIM McLENNAN

THE TROUT TRUST



The Oldman Reservoir, pictured in 1985.
Photo © C. Wallis

At the turn of the 20th century, residents of the soon-to-be province of Alberta were excited and optimistic about the province's future and their place in it. The railroad had come, courtesy of the CPR. Alberta's agricultural immigration boom was in progress, and farming and ranching were quickly becoming major drivers of the province's economy. But southern Alberta lacked one critical component for crop-based agriculture to succeed: water. Or, at least water easily accessed by the dry-land farmers.

Enter irrigation, a water delivery system. Prompted in part by severe drought in the early 1890s, the first large-scale irrigation project began, and in the summer of 1900 water from the St. Mary River began to flow northeastward into and through 185 kilometres (115 miles) of canals and ditches toward Lethbridge.

Native cutthroats, bull trout, mountain whitefish, and a few other species swam in Alberta's rivers at the time, but it soon became apparent that as well as taking water from the rivers, these canals were taking fish. Fish entered the canals simply because there was nothing to prevent them from doing so. And just as it was for the water, the trip was a one-way journey for those fish; they died when the canals dried up in the fall.

A 1910 report to the Dominion of Canada by the Alberta and Saskatchewan Fisheries Commission found "The subject of irrigation ditches came prominently before the commission, especially in southern Alberta, and there was abundant evidence to show that considerable damage had been done and is being done to the fisheries of these streams,

by the lack of proper (exclusion) screens."

That report seems to have carried good information and a wise suggestion. Keeping the fish out of the canals seems like a no-brainer. But in the category of "the more things change, the more they stay the same," the problem of fish loss to irrigation canals persists today. One hundred and fourteen years seems to be quite a long time, don't you think?

In the spring when the rivers are — or are supposed to be — flush-full with mountain snowmelt and spring rain, the gates to the diversion canals are opened, and water enters the canals from the rivers and flows to the thirsty cropland. So far, so good, except for the cruel irony that the hot dry summers that create the greatest demand for irrigation water are also the summers when the rivers have the least water to give.

In the fall, after the canola has bloomed and the barley has ripened, the gates are closed and the canals dry up. The water remaining in scattered deep spots eventually freezes, and the fish perish. The technical term for this is entrainment and it's an issue today in many Alberta rivers, including the Oldman, Waterton and Belly. However, the focus of the problem has settled on the Bow River, particularly at the Carseland Headworks Canal, which withdraws water from the Bow near the town of Carseland.

Trout Unlimited Canada (TUC) conducts a volunteer-led fish rescue there each fall, catching stranded fish and returning them to the river before the tap is turned off. Since 1998 the rescues have returned 329,000 fish to the river from this



Westslope Cutthroat Trout are among the fish in Alberta with declining populations. Photo © Cows & Fish Riparian Management Society

canal alone. But here's the thing: the fish rescues take place on only approximately five kilometres of the canal. The canal is 66 kilometres long. And here's the other thing: a second diversion on the Bow — the Western Headworks Canal in Calgary — produced 115,000 fish for the rescues. Not all of these fish are sport fish. The others are “forage fish” that the sport fish eat, but every fish is an important cog in an ecosystem that has been disrupted and damaged. The trout rescues have saved many fish, but TUC acknowledges that these numbers represent just the “tip of the iceberg” on the matter of entrainment.

It's been suggested that the number of fish entering an irrigation canal is likely proportional to the amount of water diverted into the canal. Given that canals sometimes carry more water than is left behind in the river from which they came, it's an ominous prospect. No one knows precisely how many fish have been lost to irrigation canals in Alberta through the years, but on the Bow River alone the number appears to be approaching one billion.

Entrainment is also an issue in other parts of the world and has been successfully addressed with fish-exclusion devices that use physical structures, light, and sound to keep fish from entering the canals.

Except for screens at the Women's Coulee diversion on the Highwood River, no fish exclusion devices have been built in Alberta.

So why has this problem been identified, acknowledged and ignored for 114 years? This question is especially troubling now, when other cumulative pressures on fish populations have increased. In 2020, Alberta Environment and Parks (AEP) initiated the Bow River Cumulative Effects Modelling Group. It identified three major contributors to a decline in the population of mature Bow River trout: reduced and unstable flows, incidental mortality from catch-and-release angling, and entrainment. Subsequent to this, in 2022, provincial biologist Mike Sullivan said, “We learned two things from over 20 years of fish population data: young fish are consistently abundant in the Bow, but we have experienced rapid and high losses of older fish ... we generally see declines in young fish with habitat or disease issues. Big fish loss is almost always a harvest or entrainment issue.”

In the four years since the Cumulative Effects Modelling Group released its “three great stressors” report, the only one that AEP has suggested addressing is catch-and-release mortality, possibly through severely restrictive regulations on sport fishers. Perhaps predictably, this notion did not sit well with a significant portion of the Bow River fishing community, prompting the formation of the Trout Trust. Made up of people from different parts of Alberta, the group is concerned about the future of wild trout in Alberta, with entrainment as its initial focus. The Trout Trust and the AWA have a cooperative relationship and will share knowledge and resources to hopefully bring the entrainment issue to its obvious and necessary conclusion, which is to have exclusion devices installed to prevent fish from entering irrigation canals. 🍀



Westslope Cutthroat Trout.
Photo © L. Wallis

Question & Answer

with the Trout Trust

Jim asked Don McGarvey, one of The Trout Trust's founders, some questions about entrainment and The Trout Trust. Don is also an Edmonton lawyer with long-standing interest in water law in Alberta.

Q Was it ever a legal requirement for exclusion devices to be installed in Alberta's irrigation canals?

Within the Fisheries Act, there was an explicit requirement to have fish guards where the minister deemed necessary. In November 2013, this section was repealed. However, section 34.4 says the minister may deem it necessary to install a fish screen or guard to prevent the passage of fish. With the issuance of water licences, the licence holder is to be provided with specifications for fish screens to prevent entrainment. The Alberta Energy Regulator has the power to enforce and ensure compliance with the specifications. The fact that fish continue to be caught in the canals means that either the specifications are not preventing the problem or AER is not fulfilling its enforcement mandate. Either way, the system is failing to prevent entrainment.

Q What is the relevance of the July 2024 Report of the Auditor General into surface water management?

The findings of the Auditor General can fairly be said to be a damning indictment on the failure of the Department of Environment and Protected Areas to effectively manage water resources in Alberta. The inability to understand and monitor water allocation and use means that a solution to entrainment from within the department, without strong urging from outside the department, is unlikely.

Q What is the strategy of The Trout Trust and AWA?

Our first job is to raise awareness of the public on the issue of entrainment, unifying that voice, and taking it directly to the decision makers — government, irrigation districts, and those who hold the water licences — with the end goal that fish entrainment is properly and consistently prevented with the installation of exclusion devices. We believe that the fish should remain in the rivers. And we're not opposed to more restrictive angling regulations, if warranted; we just don't believe this should be the only response simply because it's the easiest change to make when the obvious issue of entrainment is staring us in the face, waiting to be fixed.

Q What should concerned people do?

Join The Trout Trust, become an AWA member, send letters of support, write to your MLAs, and relentlessly talk about the issue. This way you'll help strengthen the organizations and help us solve this problem.

A hundred and fourteen years is too damn long.

Wilderness Watch

Water musings

“The department lacks effective processes to manage surface water allocation and use ... Public reporting on surface water and the outcomes of surface water management is lacking.”

That’s what the province’s Auditor General concluded in July, after reviewing the government’s planning, licensing, monitoring, and water reporting processes. It’s not a surprising assessment, but a disappointing confirmation nonetheless.

The trend is exemplified in the recently announced Approved Water Management Plan (AWMP) for the Milk River Basin. The strategy for the Milk River is the third of its kind, following the release of the South Saskatchewan River Basin AWMP in 2006, and the Battle River Sub-Basin AWMP in 2014. As one of the key legislative tools under the *Water Act*, these approved water management plans are binding. They identify relevant information and issues in a region that must be considered when making decisions about water. The plans also typically establish water conservation objectives for the basin, or the minimum flows that must stay in the river to preserve the health of the environment.

“Listing these species under SARA would be the first step in establishing protections.”

The first thing you may clock is the timeline — it is taking almost a decade on average to develop these plans. The second thing to catch is the scale; management plans can be created for both major basins and sub-basins. At the major basin scale, Alberta has five more to complete. If those were completed at the current pace, it would take until 2069 to have full coverage of Alberta watersheds.

As noted by the Auditor General, this is troublesome; while plans and conservation goals for basins are slowly being developed, licences are still being doled out for the rivers’ water. As was the case with the South Saskatchewan, basins can become overallocated and ecologically threatened in that time and the Milk River risks a similar fate.

The Milk, Alberta’s most south-easterly basin, is unique in a few ways. With headwaters originating in western Montana, it is the only major basin that drains southward, ultimately ending up in the Gulf of Mexico. It is the smallest of Alberta’s major basins, with an average annual discharge of 160 billion litres, and the only to have flows that are nearly double of what would occur naturally. This is due to the major diversion the Milk typically receives from the St. Mary

River via the USA’s St. Mary Canal.

The Milk and St. Mary Rivers are shared by Canada and the USA. Each country is entitled to half their collective flows, out of whichever river is more beneficial for their desired purposes. This means typically, Canada has agreed to take the majority of



Milk River Basin in southern Alberta. © C. Campbell

our share out of the St. Mary’s, while the USA pulls their majority from the Milk.

In the absence of measured flow needs for the aquatic environment, the Alberta government recommends leaving 85 percent of the water instream. However, Alberta alone consumes about 20 percent of the Milk’s flow, and as illustrated by the Auditor General’s report, does not have effective processes to determine how this could be impacting the environment. With the AWMP now in effect, the next step for the Milk will be to determine water conservation objectives, but because they do not apply retroactively, water already allocated cannot be clawed back.

The Milk’s AWMP also recommends developing a water shortage strategy in the event of low flow or drought conditions. However, further exemplifying Alberta’s water management issues, this recommendation comes too late. The Milk River Basin just received enough moisture to end its latest multi-year drought, only for low flows to return anyway because of a structural failure at the USA’s diversion point. On June 17, part of the St. Mary’s Canal burst, causing local flooding and erosion, substantially reducing the expected flows in the Milk, and extending water advisories for downstream communities.

While every new water management plan is a step in the right direction, AWA agrees with the Auditor General; Alberta must do better. Effective water conservation and management is needed now more than ever to weather future challenges.

-Kennedy Halvorson

Building high-value homes in the grasslands

In late June, the Heartland Ranch Nature Preserve in Colorado is a harsh landscape. Strong winds blow across the sunbaked ground, swirling dust and sand into the air. Cholla and prickly pear cacti stand beside brittle grasses, bushes fan their glossy green leaves into the sky, and a few resilient trees mark the now-dry river valley.

Even still, many species make their homes here. Between the rustling grasses, flowers blossom, adding splashes of pink and yellow and white. Insects swarm these blooms, feeding on the sweet nectar and, in turn, becoming food for the lizards scampering among the rocks and the birds plunging past. Elsewhere, a prairie dog stands guard, taking advantage of grasses grazed short by bison and cattle.

Positioned near the centre of the Great Plains of North America, the Heartland Ranch Nature Preserve, managed by the Southern Plains Land Trust (SPLT) to protect over 40,000 acres of prairie, was an exceptional place to host the Great Plains Conservation Network (GPCN) Annual Meeting.

GPCN is a collaboration of non-profit and tribal organizations and individuals working together to protect and restore North America's grasslands. With representatives from Canada, United States, and Mexico, the grasslands network helps to coordinate conservation efforts and share information across the Great Plains. The group focuses on large landscape conservation to achieve its mission of maintaining natural processes in the grasslands. Many focal species, including bison and prairie dogs, need large spaces to survive.

The network acts to connect those working on the

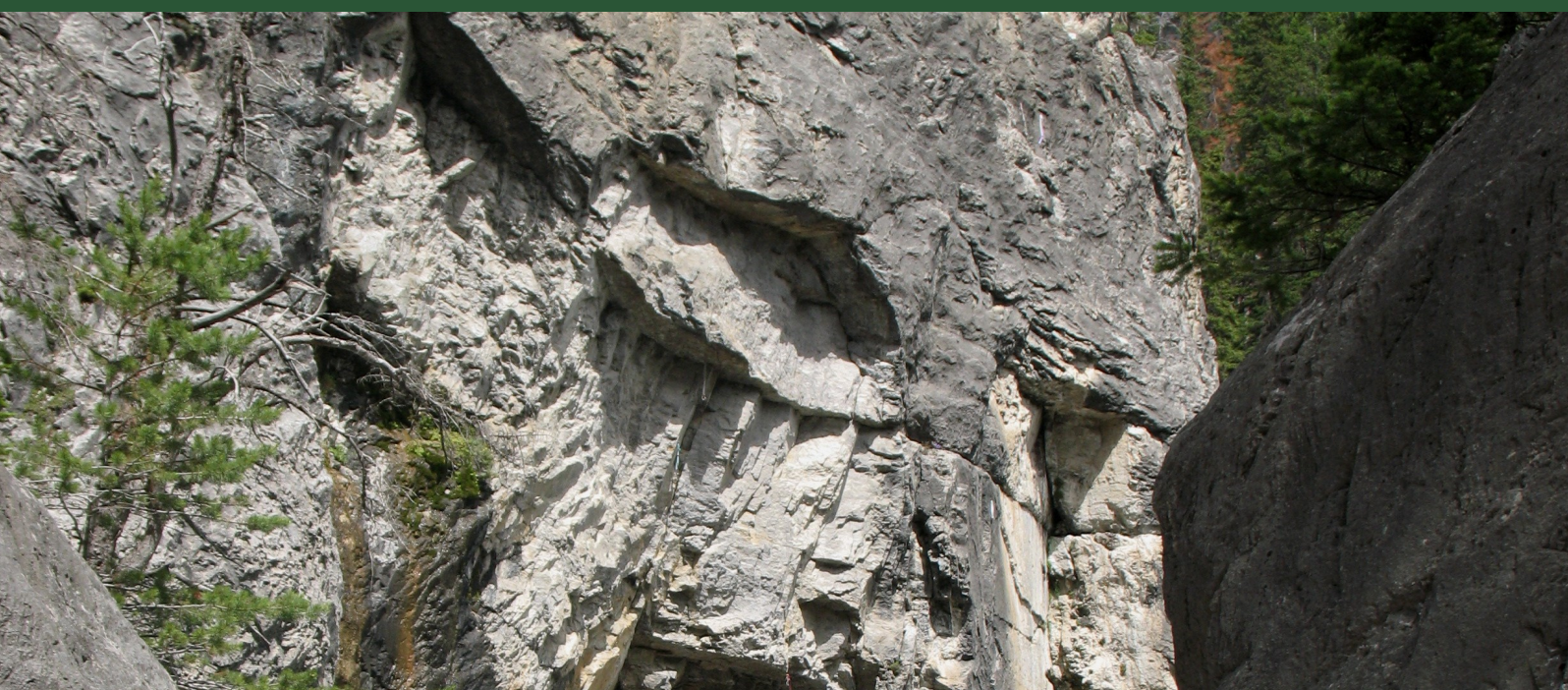
ground and by providing support. Over the past year, GPCN and its partner organizations have been busy assembling and improving *Homes on the Range*, a mapping project that works to identify and predict high-value habitats for black-tailed prairie dogs. Work is ongoing to expand this tool to include Canada and Mexico — the tool is currently concentrated on the United States — and to develop a similar tool for ideal bison habitat, to support bison reintroduction efforts. Accompanying the tool, a Black-footed Ferret Reintroduction Site Rapid Assessment Tool has been developed that helps determine the feasibility of ferret reintroduction to a site. These tools are meant to expedite and promote the reintroduction and management of focal species.

The Great Plains of North America are on the brink of collapse, with over 60 percent already lost, and more lands degraded and fragmented. Grassland bird populations have declined by more than half, and many of the plants and animals reliant on the grassland ecosystem are disappearing. Stopping the decline is more important than ever, and for that to happen, we need to work together, across the entire ecosystem, and we need networks like GPCN to connect conservation efforts across borders.

Amidst the parched ground and hard grasses, there is a ribbon of blue — water, collected by a beaver's dam, feeding the lush plants nearby. Here, frogs swim and birds sing, gathering at the promise of moisture in an otherwise dry land. Not long ago, there were more of these havens, aided by beaver dams, wetlands and bison wallows that stored water on the semi-arid prairies. Many of these have been lost, but with enough work and patience, they can be restored. These lands, and the ongoing reintroduction and conservation work, are proof of that.

-Ruiping Luo

**Prickly cacti at the Heartland Ranch
Nature Preserve. Photo © R. Luo**



Ecologically-conscious planning? In this Alberta?



Grotto Canyon in Canmore.

© J. Hildebrand

It is not often that I find myself pleasantly surprised opening a government document. Truthfully, there are times where I'm lucky to find the word ecosystem even mentioned, let alone considered in a plan or policy. So, it's no exaggeration to say my read through the draft terms of reference for the Canmore Area Trails Strategy was refreshing, albeit mildly shocking. For example, here are a few sentences of the desired conditions the strategy seeks to achieve:

"Changes to the network occur with transparent process and with requisite authorizations. Unauthorized trail development does not occur."

Wait, commitment to accountability?

"Trail tourism use and visitation does not unacceptably impact residents' own enjoyment of the trails, trail amenities or their quality of life."

And consideration of locals?

"Trail users and their communities of interest are informed and aware of the area's ecological importance and key habitat requirements ... the potential impacts of their activities, [and] equipped and prepared to participate in their activities safely and responsibly."

Increased environmental education and preparedness?

“Comprehensive trail development, management, operations and maintenance accountabilities and responsibilities exist at a regional scale, are clearly articulated and are widely understood.”

Are they emphasizing regional planning?

“Trails are responsibly situated, sustainably designed and visitation is actively managed to minimize and mitigate disturbance and

This willingness to honestly represent the reality of recreational trails is encouraging, because it means they are already operating from an environmentally conscious perspective.

displacement of wildlife during sensitive seasons, preserve the continuity of wildlife corridors, maintain wildlife habitat and integrity of native plant communities, and avoid damage to fish habitat, watercourses, riparian areas, and wetlands.”

This is actual text within the strategy, which could be verbatim the input AWA would want to provide. And while it’s easy to promise sustainability and adherence to best management practices, what I find especially promising is the thoroughly examined challenges within the draft document.

The strategy notes that “trail users and trail use negatively impact the environment, wildlife and their habitats,” citing that they can contribute to reduced quality and quantity of ecosystems,

reduced numbers and viability of wildlife populations, altered species behaviours and increased mortality risk, more human-wildlife conflicts and invasive species introduction, among other issues.

This willingness to honestly represent the reality of recreational trails is encouraging, because it means they are already operating from an environmentally conscious perspective. Acknowledging the issues trails and trail use can cause is a promising first step in developing a robust strategy that protects the nature Albertans want to enjoy.

There are some great tid-bits buried in the background review as well. Research that will inform the strategy includes the finding that “the effect of high-use anthropogenic features (i.e., busy trails) displace and disturb wary carnivores for over two kilometres, an effect size that has been consistently understated in previous work.” This has major implications for managing recreation in natural landscapes and illustrates the importance of reconsidering trail density.

AWA is still wary that the strategy contains language for adding new trails in the area. We have emphasized to the province that the network is already extensive and significantly reduces connectivity in what is an essential wildlife corridor providing passage through the Rockies. The strategy must identify trails that can sustainably offer a diversity of high-quality recreation opportunities, while prioritizing the ecological integrity that attracts people to the area in the first place. AWA will continue work to help ensure this the Canmore Area Trails Strategy is developed and implemented to best protect the wilderness.

I’ll leave you with one last line that really struck me, and that’s the stated desire that “places for quiet contemplation in nature” persist. What a lovely thought.

-Kennedy Halvorson

Save the dates!

Each year, Alberta Wilderness Association hosts an annual lecture and awards event, followed by our annual general meeting the next day.



2024 ANNUAL GENERAL MEETING

NOV. 16, 2024 | 8 A.M.

455 12 STREET N.W., CALGARY





ANNUAL MARTHA KOSTUCH
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PRESENTED BY CLINT DOCKEN

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Featured Art | *Beneath the Prairie* by artist Neil Dawson.

At McKinnon Flats, the Bow River cuts down and reveals the past. Sketch from a great guided walk with AWA's Adventures for Wilderness program and a botanist looking at pollinators 4.5"x6.5" gouache on paper.

Notes from the Field: An Adventure in McKinnon Flats

By Kennedy Halvorson

"Is this a protected area?"

It's a good question. Driving south down your average, non-descript Alberta range road, McKinnon Flats emerges out of nowhere. Seemingly endless cropland suddenly splits, carved into a lush river valley by the mighty Bow. The area is beautiful and relatively unknown; artist and adventure co-lead Kay Fleming grew up nearby and relates that it's well-frequented by locals as a spot to hike, fish, float, and just generally relax. Saskatoon bushes also border the banks, and at this time of year, their berries are plentiful and ripe.

With ample snacks along the route, participants were led through cottonwood stands onto a prairie path. Researcher and reclamation biologist Justine Doll, the hike's other lead, pointed out various native plants as the group wound its way up to a bluff of hoodoos.

Petals of wild bergamot, better known as bee balm, were distributed for sampling – their flavour minty, spicy, and refreshing all at once. Along with the leaves, they can be brewed into a lovely tea. Stems of yarrow were collected and passed around for smelling; their small, white umbrella of flowers sweet and soapy, a scent that apparently is unpleasant for biting insects. As a natural insect repellent, Justine spoke of tucking the plant in open pockets and behind her ears to ward off mosquitoes and flies during field seasons.

While native plants were aplenty, the area was not without its share of invasive species. Introduced during colonization, many garden escapees were likely first planted because of their natural benefits — Justine pointed to the

yellow button-like flowers of common tansy, prized as an insecticide in Europe. In Alberta, it is classified as a noxious weed, as it outcompetes native species, disrupts ecosystem function, and is toxic to animals and humans. Eco-conscious gardeners seeking for the look and function of tansy would be better to plant native goldenrod species alongside yarrow. The added bonus? The pollinators love them.

Beetles, bee flies, and syrphid flies were soaking up the full sun at McKinnon Flats, easy to spot throughout the blooms. Based on their low abundance, the plus thirty-degree weather must've been as much of a challenge for the native bees and butterflies as it was for participants; frequent stops and water breaks were paramount on this adventure, and the caution well-worth the reward.

Justine and Kay led the participants to a breathtaking view. Backed by tall grasses and prickly pear cacti, hoodoo-lined cliffs overlooked the river valley, sparkling in the mid-day heat. Which prompted the question, is this a protected area? At the time, no one knew. AWA staff mused it could be a provincial recreation area, as anglers, swimmers, beachgoers, and other hikers were also all out enjoying the day, but the lack of Alberta Parks' signage suggested not.

McKinnon Flats is public land, owned collectively by all who reside in Alberta. It's a great example of why AWA advocates against the sale and privatization of public land; although it has no official designation as a protected area, it is rich in both biodiversity and recreation opportunities, providing a refuge for humans and wildlife alike.

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