

Contents

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FEATURES

1 10 Years Into the Buffalo Treaty

5 Beaver Lake Cree Nation's Challenge of Alberta's Land-Use

8 When Conservation Collides with 23 Worry for Wolverines Legislation

10 A Reminder to Embrace Environmental Jov

Approvals Moves Forward

13 Forestry With a Difference

17 The Mighty Great Gray Owl

18 The Oilsands and Biodiversity

WILDERNESS WATCH

21 The Loss of an Ecosystem

22 Bad Bills Make Worse Acts

24 Where's the Science?

DEPARTMENTS

27 In Memoriam: Karsten Heuer

28 Personal Essay: Maintaining

the Beauty of Banff

Cover Photo: A juvenile Big Horn Sheep In Waterton Lakes National Park. Dee Webb had been enjoying watching them climb around the rocks effortlessly as this one struck the perfect pose. Dee is a wildlife photographer whose deep-rooted connection to nature began in the remote wilderness of Australia, where her family often cared for orphaned and injured animals. Her love for nature runs deep, and



she sees wildlife photography as a form of therapy — a way to stay grounded and connected to the world around her. Known for her ethical and mindful approach, Dee believes in the power of presence during wildlife encounters. To her, the joy of the experience comes first, with the photograph as a cherished gift afterward. Dee is passionate about inspiring other photographers, encouraging them to create lives filled with passion, purpose, growth and learning. Dee's journey in photography took off four years ago, as she approached it like a degree, learning and growing each day. Now, she works as a guide in Wildlife Photography Guide in Waterton, Alberta, spends part of the year guiding in Costa Rica, and serves as assistant coordinator for Women in Wildlife Photography. This role allows her to share her passion globally, including leading a Women in Wildlife tour to Australia in 2026, along with plans for Iceland and beyond.

Editorial Note: Dear readers.

You may have noticed that our magazine has been changing! As we settle into in-house design, we thank you for your patience and for the feedback that some of you have provided so far. Like most things we do at Alberta Wilderness Association, we can't do it without our supporters. AWA is about to celebrate its 60th anniversary, so



keep your eyes peeled for our announcements on what's to come in the new year!

– 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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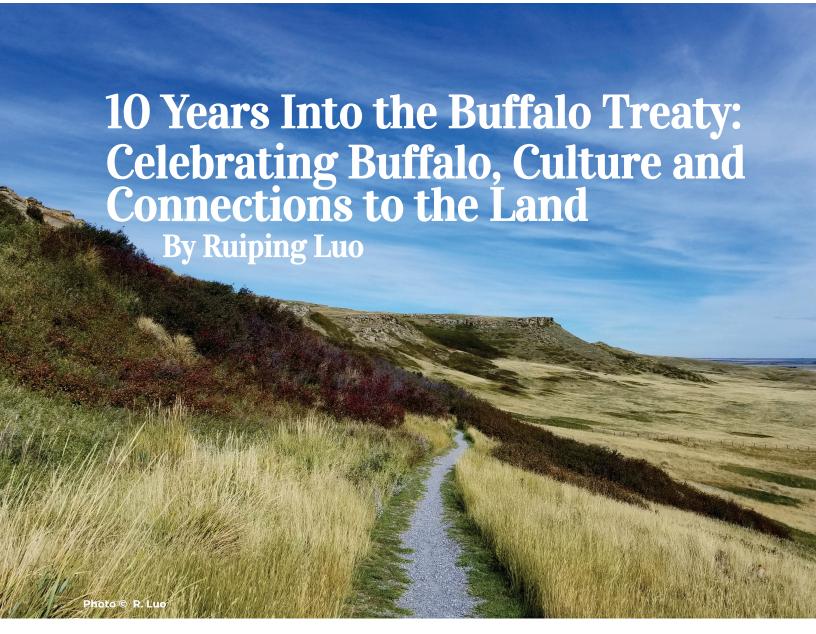


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hen the Buffalo Treaty was first signed in 2014, I wonder if anyone understood just how far the agreement would reach. Ten years later, the Treaty has been ratified by nations from across North America and supported by many more individuals and organizations; the extent of this impact was evident at the 10th anniversary celebration, where hundreds gathered to commemorate the event.

The warm September air, the leaves just starting to turn golden, was a perfect time to appreciate the prairies, once home to millions of bison (buffalo). Wind rushed past rustling grasses and across rolling hills, whistling over exposed cliffs and teasing wisps of clouds in a vivid blue sky. Listening carefully, I could just hear the chirps of songbirds preparing for the winter, and up on the ledge, a red fox, perhaps also looking for birds, slunk among grey rocks encrusted with lichen.

Come closer, we were told during the event, sitting beneath the arbour on Blackfoot territory, come sit, come touch the earth. Because this gathering was not only about the Treaty, nor the return of the bison, but about the spiritual and cultural connections they embodied.

Welcoming back the bison

On Sept. 24, 2014, eight Indigenous nations from both Canada and the United States gathered together on the Blackfeet Reservation in Montana to sign the Buffalo Treaty. It was the first time in over a century that an international Treaty had been signed between sovereign Indigenous nations without involving the countries' respective governments.

The Treaty is described as "A Treaty of Cooperation, Renewal and Restoration." It is an agreement to welcome bison back to North America, but also to acknowledge the cultural,





spiritual and material connections of First Nations to these animals, and to revitalize these relationships and these lands for future generations. Since the Treaty was signed, several more nations have added their support. Many of the signatory nations have accepted bison back on to their lands, so that bison can once more be seen roaming parts of the continent.

Each year, a gathering is held in celebration of the Buffalo Treaty, where signatories and supporters convene, continuing dialogues on buffalo. This year, on the 10th anniversary of the first Treaty signing, over 50 nations and 1,700 people attended, coming together to renew relationships and endorse the return of bison.

Opening ceremonies

I reached Lethbridge just as the first hints of pink crept into the sky. Between Calgary and Lethbridge, there had been a brief detour to Head-Smashed-In Buffalo Jump, one of several sites where tours had been organized for the Buffalo Treaty guests. Along with Head-Smashed-In Buffalo Jump, a UNESCO World Heritage Site speaking to the traditional buffalo hunts, visitors were invited to Writing-on-Stone Provincial Park (Áísínai'pi), a sacred site where carvings and paintings made by the First Nations

inhabitants can still be seen. Events also took place at Blackfoot Crossing, the historical site where Treaty 7 was signed, and at the bison paddock in Waterton Lakes National Park, showcasing just a few of the connections Indigenous peoples have to Alberta.

The theme of this year's gathering was renewal. It was about continuing and building on the work that had already been done, and it was about looking to the future. It was also about legacy, about the knowledge, traditions and the world that would be left to the children. It was with this theme that Dr. Leroy Little Bear — one of several speakers who opened the event — asked for nations to renew their commitment to the Buffalo Treaty.

Red Crow Community College, where the first day of the event took place, was bursting with activity. In the atrium, lines of people waited to register and to pick up information on the event. To the right, booths had been set up, offering cloth, jewellery, arts and more. Knots of people formed, as old friends and those who had only met online had stopped to chat.

Beyond them, in the recently completed gymnasium, the presentations were beginning. Over the next few hours, we heard from key players in the Buffalo Treaty, representatives from various nations, and individuals speaking to their experiences with bison. Stories and songs were shared. The speakers talked about their relationships with bison, about rediscovering their culture and about wisdom passed down from their elders. They talked also about resiliency, about surviving abuse and trauma and retaining their identity. They spoke of keeping their culture alive, rebuilding the connections they lost and about thinking of future generations.

Mostly, the speakers stressed that buffalo could not be separated from their ceremonies, traditions, cultures and beliefs.

Following the theme, two documentary films were included in the schedule that explored Indigenous relationships to buffalo. The first, *Singing Back the Buffalo* by Cree filmmaker Dr. Tasha Hubbard, focuses on the impact of bison and their return through an Indigenous lens. The second, *Iniskim — Return of the Buffalo*, was a somewhat lighter story about puppetry and becoming buffalo.

We had returned to Lethbridge for the last film, and as the credits rolled, the drumming and singing

started. We followed the music through the polished corridors of the University of Lethbridge campus and outside, where, glowing brightly, we found the buffalo. The lantern puppets shone brightly against the night sky, prancing around the grassy field and lighting up the ring of human dancers that had assembled around them. It was an extraordinary experience to end the night on.

Buffalo Dialogues

We reconvened in Red Crow Park, under a clear blue sky. Outside the arbour — a large open area surrounded by seats and shaded by a circular wooden frame — large tipis had already been set up in preparation for the buffalo dialogues.

The Buffalo Dialogues have been occurring since before the Treaty was first signed. These are places for people to share knowledge and stories, and to have discussions. Participants were asked to be respectful, to leave their walls outside, and to speak freely. This year, smaller groups gathered in various tipis, each focusing on a different part of the Buffalo Treaty.

Inside one tipi, where the topic revolved around conservation, a ring of chairs had been set up, and a smaller ring of blankets provided additional seats for visitors. Both rings soon filled with people. We began with a smudging ceremony, to allow the smoke to cleanse our thoughts and speech, we were told. Then a dialogue guide, responsible for directing the conversation, introduced us to the talking stone; only the holder of the talking stone — in this case, appropriately, a carved bison — was permitted to speak.

The point of this conversation, we were told, was not to have an agenda. It was not to leave with clear action items and next steps. The point of the conversation was, simply, to listen.

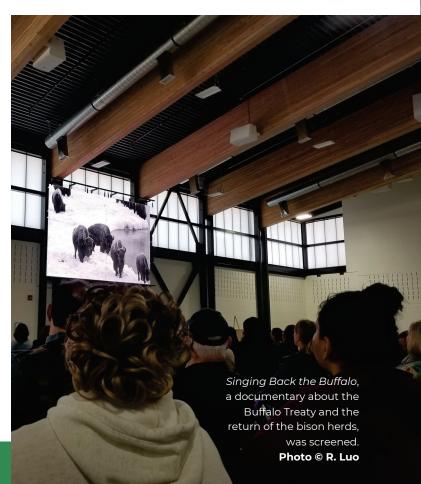
Many different perspectives were shared in the following hours. We spoke of the culture and the history of the animal, about the separation in science between people and nature, about the need to integrate culture. We heard stories of their return and the changes in how bison are treated. There remained divides, between Indigenous and western science, between the management of bison as wild or domestic livestock, in the safe introduction of the species, and in what conservation means to different people. In both the discussion and in conservation, the categorization of people and ideas remained a barrier, and at times, the dialogue became more difficult, touching on sensitive topics related to

history or deeply held beliefs. Although some of these disagreements were acknowledged, they were not resolved. Still, throughout the dialogue, there was general optimism for the future of bison conservation in North America.

Signing the Treaty

On the last day of celebrations, under the warm morning light, the signing of the Buffalo Treaty commenced. Representatives from 30 Indigenous nations from across North America had come to affirm or reaffirm their commitment, many presenting speeches and bearing gifts, rallying around the principles of the Buffalo Treaty. In their wake were others that pledged their support towards the Treaty and bison reintroductions. This year, AWA joined the supporters of the Buffalo Treaty.

The 10th Anniversary of the Buffalo Treaty was a renewal of the Treaty and of the spirit and inspiration that has already returned hundreds of buffalo to North America. During these days of celebration, alliances were formed and strengthened, experiences shared, and a commitment to restoring bison restated. These relationships and understandings will be vital to face the challenges still ahead, as we continue to return this resilient species to their place on the lands of North America.





BY CAROLYN CAMPBELL

eaver Lake Cree Nation continues to progress in an epic struggle for its rights. In 2008, it filed a legal claim. It asserts that land-use authorizations by the Crown (Albertan and Canadian governments) have so impaired the ability of Beaver Lake Cree Nation members to carry out their way of life, that the Crown has unjustifiably breached Beaver Lake Cree Nation's rights as a signatory to Treaty 6.

Though Beaver Lake Cree Nation's traditional territory is in both current-day Alberta and Saskatchewan, their claim is about unjustified Treaty infringement in the Alberta core traditional territory. This is a roughly rectangular area of northeast Alberta, covering 39,000 square kilometres, about the size of Switzerland. It extends from the Saskatchewan border westward to the Athabasca River, and from Smoky Lake's latitude about 20 townships north to the House and Christina Rivers.

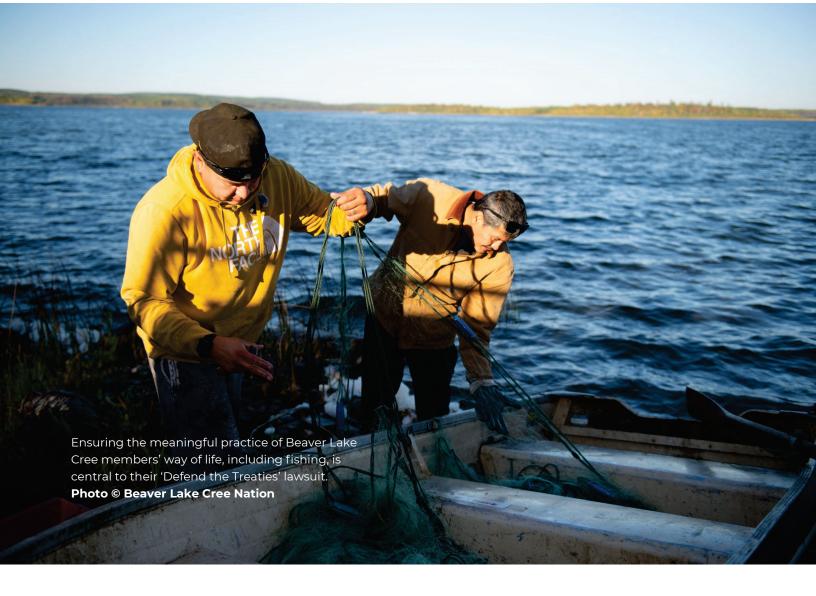
The boreal forests and wetlands of this territory

overlap large portions of what is now Alberta's south Athabasca and Cold Lake oil sands regions. That's why Beaver Lake's lawsuit was nicknamed the "Tar Sands Trial" initially — now, it's more commonly called the "Defend the Treaties" case. Beaver Lake Cree Nation estimates a staggering 88 percent of its Alberta core traditional territory lands have been taken up by oil and gas infrastructure. That includes 35,000 oil and gas sites. There are also extensive pipelines, seismic lines and road networks, plus the entire Alberta side of the Cold Lake Air Weapons Range.

The overall, transformative claim

Treaty 6 was signed in 1876 by the ancestors of today's Beaver Lake Cree Nation members. They have documented the commitments made by Canada's treaty negotiator Morris in that process, including:

"I see the Queen's counsellors taking the Indian by the hand saying we are brothers. We will lift you up, we will teach you, if you will learn, the cunning of the



white man. All along that road I see Indians gathering, I see gardens growing and houses building. I see them receiving money from the Queen's commissioners to purchase clothing for their children. At the same time I see them enjoying their hunting and fishing as before. I see them retaining their old mode of living with the Queen's gift in addition."

Beaver Lake Cree Nation is documenting how developments authorized by Alberta and Canada since then have transformed and destroyed the lands their members have relied upon to carry out their way of life. As a result, they can no longer meaningfully practice their way of life as promised. This infringement of Treaty rights cannot be justified. By failing to manage the cumulative effects of development on Beaver Lake Cree Nation's way of life, Alberta and Canada have breached the Treaty. The Nation seeks equitable compensation for damages. They also seek processes that include and respect them in development decisions in their territory. In this way, they will ensure they can continue to meaningfully practice their way of life.

As noted by Beaver Lake Cree Nation member Crystal Lameman — who is a proud mother as well as the Nation's government relations advisor and Treaty coordinator — this claim is about the Nation's right to share authority in land decisions, as stewards of the land. It is not about pitting economics or industry against First Nations' authority and consent. It is about "an intentional Treaty relationship, grounded in a coexistence of peace and sharing. And it's about our right to say yes or no and for that right and response to be honoured."

As Crystal has observed, in her updates on the Nation's long journey to seek justice, a victory for Beaver Lake Cree would be a win for all of us, as treaty people, and for all who breathe air and drink water. It would help us move towards "economics and industries that are grounded in environmental protection and the protection of a liveable planet not only for us here now but most importantly for those generations that are yet to come, regardless if they're walking, crawling, swimming or flying."

Struggles to move the claim forward

When it was filed in 2008, the lawsuit was the first to base a rights infringement on the cumulative effects of Crown authorizations upon a way of life. In response, Alberta and Canada filed numerous arguments against the very legitimacy of the claim. These challenges took until 2013 to decide, when the Alberta Court of Appeal ruled that the cumulative effects claim was valid to be tried in court.

After 10 years of defending the case in pretrial challenges, and partway through its massive, expensive effort to assemble all its evidence for trial, Beaver Lake Cree Nation took another unusual step. In 2018 it asked the courts for an Advanced Cost Order. Such an order would require Alberta and Canada to pay part of the Nation's costs of bringing the case to trial. To get this order, BLCN had to prove the merit and public importance of the case; it did so in a 2019 court ruling. However, it also had to prove it could not carry the legal costs on its own. That issue, its financial capacity, was appealed first by the Crown and then by Beaver Lake Cree Nation, right up to the Supreme Court. In 2022, the Supreme Court ruled that Beaver Lake Cree Nation's financial resources were indeed too limited, given their other pressing needs, to expect them to exhaust all their funds on this trial. The Supreme Court also set out a new test for determining advanced costs, which may assist other Indigenous rights claims.

After the Supreme Court decision, the Canadian government negotiated a \$2.6 million one-time payment with Beaver Lake Cree Nation. The Alberta government chose to return to a trial court for a cost ruling. Finally, on August 30, 2024, Alberta was ordered to pay \$1.5 million per year towards the Nation's legal costs until the case is decided. Beaver Lake Cree Nation was also ordered to pay \$150,000 per year, and to bear any litigation costs above the annual payments ordered.

Meanwhile, Alberta and Canada asked for a significant limitation to the case's scope. They argued that land-use authorizations should only be considered up to 2008, the year the claim was filed. However, on August 22, 2024, the court sided with Beaver Lake Cree Nation, ruling that their claim includes past and future damages for Crown actions up to the time of the trial. Alberta and Canada could not avoid accountability for the impacts of substantial developments they've continued to authorize since 2008. This could include authorizing further extensive pipelines and facilities for carbon capture installations, proposed by oil sands

companies. Now this case is expected to come to trial in 2026.

Hopeful signs from a Treaty 8 decision

In June 2021, BC's Supreme Court ruled in favour of Blueberry River First Nations, in the *Yahey versus British Columbia* case. It was filed after Beaver Lake Cree's claim, but came to trial earlier. The Blueberry claim is on Treaty 8 lands in northeast B.C.'s Fort St. John area. Although it's about Treaty 8, B.C. government actions and B.C. land-use planning, its logic may influence a Beaver Lake Cree Nation outcome. Treaty 8 also extends across most of northern Alberta, so Blueberry could also support Alberta Treaty 8 First Nations to uphold their rights.

In her Blueberry decision, Justice Burke found "The province cannot take up so much land such that Blueberry can no longer meaningfully exercise its rights to hunt, trap and fish in a manner consistent with its way of life. The province's power to take up lands must be exercised in a way that upholds the promises and protections in the Treaty ... [B.C.] has not, to date, shown that it has an appropriate, enforceable way of taking into account Blueberry's treaty rights or assessing the cumulative impacts of development on the meaningful exercise of these rights, or that it has developed ways to ensure that Blueberry can continue to exercise these rights in a manner consistent with its way of life. The province's discretionary decision-making processes do not adequately consider cumulative effects and the impact on treaty rights..."

Because of the court's orders in Blueberry, by January 2023, B.C. had negotiated implementation agreements with Blueberry River First Nations and other nearby Treaty 8 Nations. There will be "collaborative management" of wildlife populations and habitat, working towards "co-management." Some areas immediately received permanent protection from new petroleum and natural gas activities and forestry, other areas have interim rules to reduce new disturbance. Meanwhile, multiple watershed-level land-use plans will be developed within the next three years to assess and manage cumulative effects. This relationship will unfold imperfectly, yet it helps us see how a successful Beaver Lake Cree Nation claim could affect Alberta land use and wildlife management.

After 16 years of unwavering efforts, Beaver Lake Cree Nation's rights claim is moving towards trial. A decision can't come soon enough to transform land use relationships with Indigenous rights holders here in Alberta, and beyond.

When Conservation Collides with Legislation

BY PHILLIP MEINTZER

question that frequently arises in my work with AWA is: How can we — "we" meaning those of us in the environmental movement — adequately protect wildlife, its habitat, or entire ecosystems if conservation is treated as subordinate to other activities on the landscape?

To put it another way, what is the point of developing species recovery plans, wildlife management plans, biodiversity strategies, or similar conservation tools, if those tools are incompatible with other legislation and/or policies such as regional land-use plans or natural resource rights?

Given the limited capacity of environmental organizations and Indigenous communities, I worry that the processes that exist to develop these conservation tools may be a waste of time and resources if the end result isn't prioritized over existing land uses. Why bother putting together a wildlife management plan, if it's going to be overruled by an oil company's "right" to develop subsurface minerals or a forestry company's "right" to harvest timber?

I think that one of the major hurdles that governments face with implementing conservation plans or similar tools is that they are worried about lawsuits from industry that may result from lost revenue if a company can't exploit a particular resource that they feel entitled to.

For example, in 2020, the Alberta Court of Appeal overturned a 2018 decision from the Alberta Energy Regulator (AER) to approve Prosper Petroleum Ltd.'s proposed Rigel oil sands project. The Court of Appeal's decision was justified on the basis that Fort McKay First Nation was not adequately consulted in the AER's approval decision, and because the development of the Moose Lake Access Management Plan (a type of land-use plan) was not yet complete.

However, in response to the 2020 decision from the Court of Appeal, in February 2021, Prosper Petroleum then brought a \$400 million lawsuit against the Government of Alberta because Prosper: "had no reason to think there was going to be any problem with developing a project in this area..." Prosper Petroleum had purchased mineral rights for the project back in 2012, and they were suing the government because other land uses conflicted with their mineral rights.

While the Prosper Petroleum decision and lawsuit

were primarily driven by conflicts between industry's claim to natural resources against Indigenous Rights, the situation helps to demonstrate the immense hurdle that the environmental movement faces if conservation plans (or similar tools) are going to prevent industry from exploiting what they feel is rightfully theirs.

While I can't speak to specifics because of confidentiality agreements, I have faced similar hurdles in my own work as part of government processes to protect wildlife in Alberta. On one committee, we did a group exercise where

One major hurdle that governments face with implementing conservation plans is that they are worried about lawsuits from industry.

participants were presented with several maps showing wildlife habitat and contrasting it against different landscape characteristics. These maps included features such as topography, elevation, priority habitat, and population range based on western science and Indigenous Traditional Knowledge.

Of the many maps we reviewed, one showed the distribution of subsurface mineral (i.e., oil and gas) leases in the area, with many of those leases falling within and/or near the range of the specific wildlife population we are trying to protect. Another map was shared by a representative from the forestry industry, showing all the planned timber harvest within or near the population's range over the next few decades. For a species of wildlife that the Alberta government says it's committed to protecting, they are still permitting a substantial amount of disturbance within its habitat.

In Alberta, land-use plans have been developed to coordinate activities at a regional scale. To date, only two land-use plans have been established: 1) The Lower Athabasca Regional Plan (LARP) and 2) The South Saskatchewan Regional Plan (SSRP). Looking at LARP specifically, the purpose is to identify strategic directions for the Lower Athabasca region for 10 years from 2012 to 2022. The regional vision



outlined in LARP states:

"The Lower Athabasca Region is a vibrant and dynamic region of Alberta. People, industry and government partner to support development of the region and its oil sands reserves. Economic opportunities abound in forestry, minerals, agriculture, infrastructure development, the service industry and tourism. The region's air, water, land and biodiversity support healthy ecosystems and world class conservation areas. Growing communities are supported by infrastructure and people can enjoy a wide array of recreation and cultural opportunities."

The way that LARP's vision is written makes it seem like the primary goal of the regional plan is the development of the oilsands, then other industries, with environmental concerns included as merely an afterthought. In fact, an independent review of LARP conducted in 2015 found that the cumulative effects of industrial development in the region were negatively impacting the Constitutional Rights of First Nations and their traditional land uses only three years after its implementation.

In addition, the Alberta government has failed to develop a biodiversity management framework for the region that it committed to when LARP was first established in 2012. The framework was supposed to include evidence-based limits, short-term and medium-term objectives, specific timelines and adequate enforcement to ensure Alberta meets its goals.

LARP's lack of environmental protections and infringement of Indigenous Rights are just more examples of how existing legislation puts industry ahead of conservation. If governments (at any level) are going to take environmental protection seriously, then the tools or plans that we develop need to be given priority over existing land uses and potential conflicts with industry.

A potential solution to the problem of conflicting

land uses — although controversial — could be the use of expropriation, also known as eminent domain. Expropriation is the process where a state or authority repossesses property from a private owner for public use or benefit such as conservation. For example, expropriation could be used to repossess any/all natural resource rights that were sold to private companies in an area if the government wanted to protect wildlife and its habitat within that area.

The act of expropriation is nothing new for settler-colonial governments who use this process to acquire land for the construction of roads and other public infrastructure, and Canada wouldn't exist as a country without the expropriation of land stolen from Indigenous Peoples. In an effort to right past wrongs, maybe we even use expropriation to return some of this land and its resources to Indigenous Peoples for their stewardship to help us meet our environmental goals together.

The main difference in what I'm suggesting is that our governments could expropriate resource rights from private companies, which would allow the government to prioritize other land uses without conflict with private interests. I recognize that doing so would take tremendous courage from our political leaders, especially in a world where private property is treated as sacred, GDP is prioritized over all other collective goals, and where simple health precautions during a global pandemic were branded as authoritarian.

Either way, if we can see that our existing conservation policies are insufficient for protecting Alberta's wilderness and/or wildlife, then maybe we need to implement new policies that override a system that has so far heavily catered to the needs of industry at the expense of our ecosystems and a sustainable future.

A Reminder to *Embrace*Environmental Joy

BY KENNEDY HALVORSON

n my community, we have the concept of "queer joy." It describes finding moments of happiness, acceptance, power, and celebration — just moments of love in spite of adversity, as a balm to oppression and as a reminder to hope. It can be an energizing sentiment for challenging times.

And, challenging times sometimes seem statusquo in environmental work. So, I'm borrowing the concept and proposing an antidote; it's time to encourage and embrace *environmental joy* in Alberta. Far from an exhaustive list, here's some of the good work that inspired my resolve this year.

Connection

Roads, railways, seismic lines, and other linear disturbances are extensive in Alberta, and come with serious environmental ramifications. As they criss-cross and fragment habitat, they confuse and expose wildlife, alter ecosystem interactions, and increase the likelihood of collisions. Structures that mitigate their impacts like overpasses and underpasses are one tool in conservation for restoring connectivity. These structures in Banff National Park have famously reduced collisions on the Trans Canada by 80 percent, facilitating on average over 9,000 safe wildlife crossings every year.

Already observed in use by eager elk and deer, the soon-to-be completed Bow Valley Gap Wildlife Overpass on Highway I represents the first wildlife overpass in Alberta constructed outside of a national park. This animal-friendly infrastructure helps to maintain a regionally important wildlife corridor, allowing grizzlies, wolves, cougars, and more to freely pass without risking their safety (and ours) traversing the highway. It's an important, long -sought achievement;

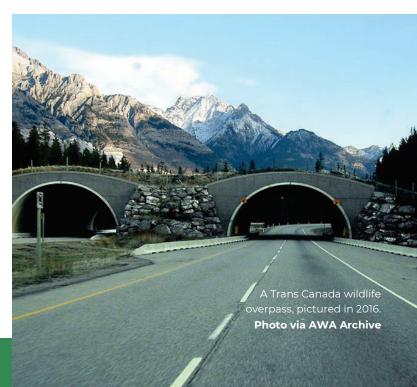
"It took 10 years to convince Alberta that a wildlife overpass east of Canmore was the right investment. That overpass wasn't even complete before they announced they'd be building a handful more. Taking something alien, making it possible, and then making it normal is how big ideas become everyday operations, and we're seeing that with wildlife crossing infrastructure in Alberta right now," said Adam Linnard, landscape

program manager with the Yellowstone to Yukon Initiative

As a part of the Animal-Vehicle Collision Safety Program, Albertans can expect to see more overpasses, underpasses, and associated wildlife exclusion fencing, concentrated in key areas throughout the province to provide safe passage for our furry friends. Especially important are three overpasses planned between Crowsnest Pass and Burmis along Highway 3, that will create safe routes across what has previously been a massive and deadly barrier for wildlife movement, both locally and within the larger Yellowstone to Yukon corridor. As Adam puts it, this infrastructure is "advancing the dream of strong, interconnected animal populations at the big scale — the continental scale — that they need."

Investigation

Underappreciated and lacking protections, it has been heartening to hear pollinators will be the focus of multiple long-term monitoring efforts across the province. While they're better off in terms of interest and resources than most other invertebrates, pollinators still have a long way to go in captivating the public interest and capturing hearts the way bears or caribou do. Conservation is



made trickier considering key metrics like population abundance, distribution, even presence are harder to determine when it's an animal the size of one, two, maybe three peas.

Funding from Environment and Climate Change Canada was earmarked this year to facilitate surveys, restore habitat, and raise awareness for Alberta's at-risk bee's species. Over the next five years the Oldman Watershed Council and Alberta Native Bee Council will be working on various projects across the province to help conserve the gypsy cuckoo bumble bee, the yellow -banded bumble bee, the western bumble bee, Suckley's cuckoo bumble bee, and the macropis cuckoo bee.

These efforts will join that of the Métis Nation of Alberta (MNA), which is midway through a similar monitoring project to determine the presence, plant preferences, and nesting habitat of bee species at their Indigenous Protected and Conserved Area (IPCA) east of Edmonton. In the seven surveys the MNA has completed to date, they've already had encouraging results.

"It's important to our citizens that we take care of the land, and those who live on it. Finding out that our first Indigenous Protected and Conserved Area was home to two at-risk bumble bees inspired us to take further action," said Tiffani Harrison, conservation coordinator with the Otipemisiwak Métis Government.

"With the opportunity to engage more with these crucial pollinators through this project, I am hoping we will learn more about what bumble bees can be found here, and how we can further support them"

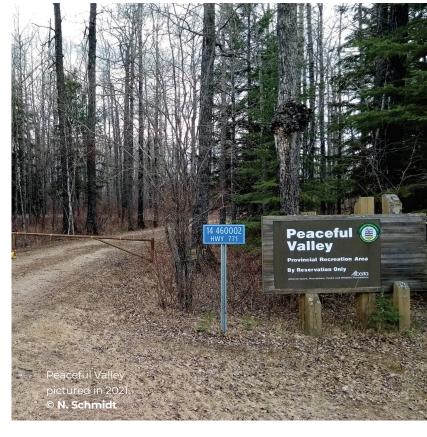
It is my hope that their continued work, and others like it, will provide sufficient data and evidence to support the legislated protection of pollinators, who are foundational to our ecosystems.

Protection

Canada has committed to 30 by 30, a global initiative that encourages each country to conserve 30 percent of their land and waters by 2030. This effort was undertaken to combat biodiversity loss, mitigate climate change, and ensure the stability of ecosystem services — and while scientists recommend larger commitments, any ecosystem receiving greater protections is a start.

At the beginning of 2024, Alberta had conserved just over 15 percent of its land mass. Just under half of this is protected through provincial measures, with the majority conserved on federal lands like national parks. Existing protected areas are not ecologically representative of the province's biodiversity, with the Grasslands, Foothills, and Parklands Natural Regions still severely underconserved

This year, Alberta added 14 square kilometres to its provincial park system with the establishment of



Kleskun Hills Provincial Park and La Biche River Provincial Recreation Area, and the expansion of Lois Hole Centennial Provincial Park, and Bleriot Ferry and Peaceful Valley Provincial Recreation Areas. The establishment of Kleskun Hills northeast of Grande Prairie, the largest of these new parks, will help protect rare and important native grasslands found within its boundaries, increasing the percent of Parkland conserved in the province by 0.1 percent .

Private land conservation is increasingly becoming an important tool to fill government gaps, particularly in natural regions where crown land is limited. For instance, while the government protects just under 1,300 square kilometres within the grasslands, through direct purchases and conservation easements, by 2022 land trusts had facilitated the conservation of an additional 771 square kilometres.

This year, organizations like the Nature Conservancy of Canada have continued to add to the total area conserved, particularly in these under -protected regions. Their ambitious commendable Prairie Grassland Action Plan aims to protect 5,000 square kilometres of native grasslands across the country by 2030, and they've closed in on that goal in 2024. Another 50 square kilometres was conserved in Alberta by the environmental non-profit, concentrated largely in Southern Alberta. Here's hoping for their continued success, especially in places like Sagebrush Flats, which would secure the protection of critical habitat for the precipitously endangered greater sage-grouse.

Restoration

The re-establishment of plains bison back into their natural ranges is a long-term goal for many, including AWA. Their absence on the landscape has been sorely felt by both the animal species and human communities who rely on them. The widespread return of plains bison would be restorative, as their interactions with the landscape help create ideal habitat conditions for other prairie species like the burrowing owl, swift fox, and pronghorn antelope. It would also reflect an act of real reconciliation and demonstrate that settler governments are committed to more than just words.

From an environmental perspective, the Banff herd is a promising start. The 16 bison originally translocated from Elk Island National Park have grown to almost 140 strong. Resilient, hardy, and adaptive, our resident bison afficionado told me the only limit to their continued success is human boundaries.

"From everything I've learned, bison are wellsuited to the North American landscape. The question isn't whether they will survive, it's where are we going to let them return?" said Ruiping Luo, conservation specialist at Alberta Wilderness Association

The Banff population will be restricted within the national park unless the provincial and federal governments can agree to some form of transboundary management that permits their range to expand onto provincial lands. In the meantime, their numbers will continue to grow to the thresholds permitted by Parks Canada, and in that, another opportunity for joy is found. This year marks the first time in more than a century and a half that Indigenous Nations have been able to hunt bison on their traditional territories within the boundaries of Banff. It is an achievement in itself that the herd is robust enough to sustain a hunt. Culturally and ceremonially, any bison harvested

during the hunt represents an important step in supporting Indigenous stewardship and sovereignty on the land.

Resistance

I want to be clear; environmental joy is not acquiescence.

Making space for these moments environmental joy only reveals more progress yet to be made — it makes plain that these little victories must continue to build to something bigger. It is not enough to restore connectivity for species on either side of Highways 1 or 3; we need safe, sufficient, and protected wildlife corridors for all species within the province. Reintroducing bison to Banff National Park is a single step of restoring the ecological network; now we must ask, where else are bison still missing? What other species are still absent? And why stop at expanding data and knowledge on at-risk bee species, what about all the insects, all species we rely on? Plus, what's the point of monitoring if we don't implement actions to restore populations and prevent declines in the first place? Sure, plenty of new public and privately protected areas are great. Onto the next 100,000plus square kilometres.

Environmental joy, much like queer joy, is at its core an act of resistance. It's a refusal to allow ignorance, indifference, or brutality absolute rule. It is making the active effort to resist becoming jaded or complacent to how things are by choosing to reflect on what has changed. It's a recognition of the need to stop, acknowledge, and celebrate hard -won battles. It's a commitment to keep fighting.

And it's hard. Choosing joy is hard. Which makes it all the more important, all the more necessary. It's a choice I believe we need to make more than ever.



Forestry With a Difference: A Comparison Between Germany and Alberta

BY CHRISTIN SPATZ

he second largest country on the earth, with a diversity of landscapes and nature, wide areas with nothing but forests or open grassland and individual large metropolises, this is Canada. A country with a population of 41.6 M residents on nearly 10 million square kilometres. The forest makes up 36.7 percent of the country and is mostly public land. In Germany, forests cover 32 percent of the land base and are mostly private. Germany, in the middle of Europe, is only about half as large as Alberta, but has twice the population of Canada.

Despite the many differences, forestry plays an important role in both countries. Because Canada is so big and diverse, this article concentrates on comparing the province of Alberta and Germany.

A glimpse into the past

To understand why forest management in Germany and Canada, especially Alberta, is so different, we must look back in time.

Canada's history of forestry, compared to German forestry, is still young. Although the Indigenous population already managed Canadian forests since time immemorial, the forestry that we know now in Canada started with colonialism in the early 17th century. Forests were lost through harvest or cleared for agriculture and residential sites. Expanded railways and bridges during industrialization in the 18th century led to a further loss of forests. Fires caused by engines also negatively impacted forests. A change was needed.

The forestry profession that had already developed in Europe during this time was difficult to transfer to the expansive lands in Canada and the different social setting. Despite the missing support of the public, the first forestry school in Canada was established in Toronto in 1907. Further schools followed until 1921. From 1900 to 1940 harvesting mainly happened in the Maritimes, Ontario, Quebec and British Columbia. That changed after the two World Wars when wood products like construction timber or paper became more important.

Provinces such as Alberta and Saskatchewan, where industrial forestry was not yet established, became focused on timber production. Fire, diseases and insect outbreaks led to an increased awareness by the population of the environment starting in the 1960s. Even though some

differences like the development of national parks were made, forest harvesting as it is done in most parts of Canada is still alarming, because of the heavy damage to ecosystems.

When the first settlements were established in Germany, it was covered in a mixture of deciduous tree species. During that time the European Beech (Fagus sylvatica) became the main tree species in Germany. In the early Middle Ages, 8th to 13th centuries, large parts of Germany were cleared of forests.

Only areas that were unusable for agriculture or habitation remained as woodland. But still, these areas were influenced by humans. In addition to using forests for grazing, the production of firewood played a particularly important role. Various forms of management were developed for this purpose, resulting in a mosaic-like forest structure. In addition, leaf litter was used for stables. All these different uses led to a bald landscape, soil impoverishment, and acidification. which still influences forests in Germany. During this time, the English oak (Quercus robur), Sessile oak (Quercus petraea) and other deciduous tree species like the European Hornbeam (Carpinus betulus) got promoted by the type of management and were able to regrow naturally.

As a reaction to deforestation, forestry educational institutions developed beginning of the 19th century, and laws were enacted or revised. For example, grazing in the forests was prohibited. Areas were reforested with Norway spruce (Picea abies) and Scots pine (Pinus sylvestris), which are domestic and fast-growing tree species in Germany. At that time, they were also planted in unsuitable areas, which caused unstable forests. In the 20th century the two World Wars led to a further decrease of forest cover in Germany, because of destruction, higher utilization and war reparations. As a solution, a different kind of Poplar (Populus) and the imported Douglas fir (Pseudotsuga menziesii) were seeded and planted. One result of this is labile and plantation-like forest stands.

Today extreme storm events, drought, and insect outbreaks, which increased due to climate change, are the biggest challenges for forestry in Germany. Different ways to protect forests and nature



Sustainable forest management has become more important in recent years, and preventing deforestation is an essential goal for the environmentally conscious public. While the primary focus of forest management is set on a sustainable yield in Alberta, Germany considers the aspects of recreation and environmental protection that forests provide as more important. To reach their goals Alberta and Germany have developed different laws and practices, like selective harvest, cutting only chosen trees or clear-cutting, harvesting areas of several hectares at once.

Some roads, built for clearcutting, are not supposed to be permanent in Alberta. After the harvesting, timber companies must reclaim and reforest the roads, if they are not used long-term, though in reality this doesn't always happen. A general rule while planning is to minimize the damage to the area by roads. Machines, such as the harvester, are allowed to drive over the complete clearcut area.

In contrast, Germany has permanent road nets that usually cover two percent of a hectare. The permanence is not only limited to roads but also to skid trails. These are trails normally 20 to 40 metres apart, on which heavy machines are allowed to drive into the forest stand. With this method the long-time compression caused by driving with heavy machines is limited, and the soil functions, such as water and toxic element filtration, are still intact in the remaining area.

Weather conditions and using suitable equipment are considered by both countries. But Alberta has the advantage that the soil freezes in winter which it doesn't in most parts of Germany. In this frozen state, the soil is less susceptible to erosion. Furthermore, the right-of-way limits the access for on-highway vehicles to forest roads, which exists in both countries and reduces wildlife disturbance.

Another interesting example of the differing practices by Alberta and Germany is how water is protected by law. Alberta limits water crossings of forestry roads and has rules to prevent soil or other substances from getting into the water. For running waters that are fish habitat, a schedule of when crossing is allowed must be created with the help of an expert to prevent disturbance of fish populations. Wetlands should be avoided while harvesting and a forest buffer between 10 to 100 meters is created, depending on the type of water body. However, these rules have been criticized by environmental organizations and academics as not being strict enough to protect water.

In Germany, preventing soil compaction is one way to protect the water cycles in forests. In addition, areas with groundwater, water storage and water cycle regulation are protected by law. Certain activities that impact the functions of water protection areas are forbidden by law such as the use of chemical substances or clearcuts.



Harvesting impacts not only natural circulation processes but also wildlife and biodiversity.

Clearcuts have a big impact on the flora and fauna of forests. To reduce the negative impact, timber companies in Alberta must provide structure retention that has to cover three to five percent of the clearcut area. Structure retentions are single trees and small patches which should increase natural regrowth and offer a retreat for wildlife. Additionally, the access management for forestry companies should be based on protected areas for sensitive wildlife, like Key Wildlife and Biodiversity Zones, caribou ranges and grizzly bear access management areas. Considering those zones while planning is intended to reduce wildlife disturbance.

According to the nature protection law in Germany, forestry should aim to manage forests without clearcutting and create a natural forest with local tree species. Areas with important habitats are protected by law and are associated with obligatory tasks for the owner, such as a traditional management plan. Selective harvest is allowed, as long as it does not destroy the ecological functions of the forest.

One of the biggest differences between Alberta and Germany is how clearcuts are used and allowed.

In Alberta, timber dispositions like Forest Management Agreements (FMAs) grant specific rights to timber harvest companies, that allow them to plan and carry out clearcut operations within their FMA area. The plans by the companies need government approval and should consider the already listed regulations. Like Alberta, authorization is needed if an area bigger than one hectare is to be clearcut in Germany. As in Alberta, the areas must be reforested after the harvest.

One of the biggest differences is how clearcuts

are defined. In the German federal state Baden-Württemberg, for example, an area is already a clearcut if the percentage of trees left standing is under 40 percent of the maximum possible number of trees. Also, the reason for clearcuts is different. While Alberta use clearcuts for extracting wood, Germany uses clearcuts to stop insect outbreaks, increase natural regrowth or to speed up the conversion of forest into more suitable ones. Forests that protect water, habitats and steep slopes are not allowed to be clearcut for economic reasons in Germany.

Clearcutting is not the only way!

In Alberta clearcutting is the most common way of harvesting. An advantage of a clearcut site for timber companies is that it is a fast and easy harvest. But in addition to destroying ecosystems and important habitats, clearcuts also increase the risk of soil erosion, landslides and the decomposition of organic substances, which releases a lot of carbon to the atmosphere. They disturb the water cycle and can change the quality of water bodies if the buffer around them isn't providing sufficient protection.

How could Alberta's forest management improve, and could it learn something from Germany? The silvicultural methods used in Germany are broadly diversified and create a variety of forest stands. Traditional methods are used to create both light and warmth in a forest with a high number of deciduous trees. In the past, the goal was to produce firewood, but now the focus is on protecting endangered species, adapted to these kinds of forests.

Another traditional method, typical for small private forest stands, creates a dark and structure-rich forest. Different structures in age, species and height can be achieved with selective harvesting. With this diversity, the forest stand is more stable.

A method that was the norm in the beginning of the 20th century is forest stands that are like a plantation. They were created from bare areas that were replanted in rows with a single tree species, mainly Norway spruce (Picea abies). This led to same aged, unstructured, and unstable forests. In addition to the named methods, others have been developed with the focus on natural regrowth.

One possibility is to cut older trees in such a way that holes are created in the upper stand through which light can reach the ground. This enables young trees to grow. This process is repeated until the holes are big enough, so that new trees can become established. The last adult trees can then be harvested. This type of harvesting leads to a forest area consisting of plants of different heights and ages.

Depending on the tree species, the harvest of all adult trees is complete after 10 to 30 years. The duration, intensity of intervention and spatial distribution can transform a previously single-layered stand into a structurally rich forest. Another method used in Germany for regrowth is instead of cutting an area of several hectares completely, the adult trees are harvested in smaller sections starting from one side.

On the bare areas, young trees have enough light to grow. If sufficient regrowth has been established the next section can be cut. With this method, the negative impacts of clearcuts can be reduced and easy and consistent wood production is still possible. But forest areas managed like this

are still unstructured and harvests are not concentrated in a short period.

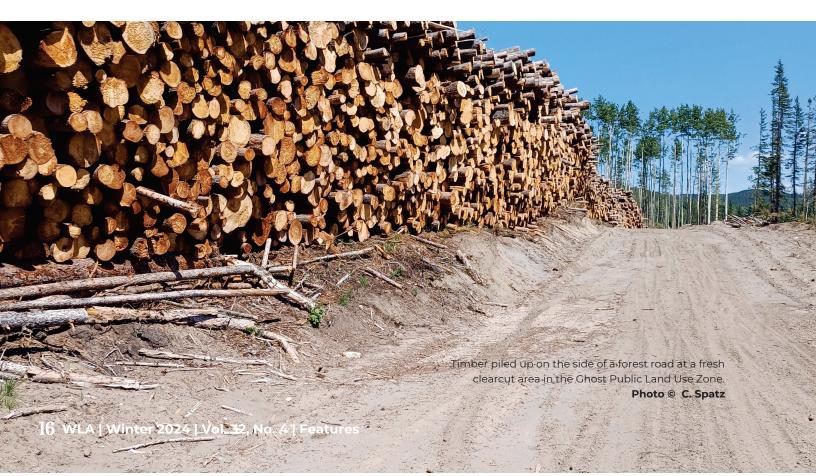
What is the forest worth?

It cannot be denied that from an economic point of view, clearcutting as it is practiced in Alberta is one of the most efficient forms of timber production. But the question is: What is worth more? Forest products, or a forest that provides important habitats, produces oxygen and protects our drinking water?

Even though Germany must improve its forest management, it is clearly a step ahead of Alberta. One reason for this is Germany's experience with the loss of intact forests. Furthermore, the German population shows a strong interest in how forests are managed and data about forestry is more transparent. Alberta, with some primary forests left, should learn from other countries' mistakes. Alternatives for clearcuts do exist.

The Alberta government and forestry companies only need to be willing to change and to be ready for compromises in harvesting methods and legal adjustments, for the betterment of the environment.

Christin Spatz was Alberta Wilderness Association's summer intern student. Christin shadowed AWA' staff and joined us on many adventures. She lives and studies in Germany.





In the Discovery Channel version of the Great Gray Owl, you'd see the predatory bird swooping soundlessly through an opening in a mountain forest. It would dip low, and glide on broad wings, spanning four to five feet, searching for its favourite dining option — voles, a small rodent.

You would see its gray plumage, with flecks of white and brown. As it closes on its prey, you might be stunned to see this owl's furry feet look more like a kitten's paws than predatory birds' talons. Its round, pale yellow eyes, set in a round face with concentric circles — almost like tree rings — would shine back at you.

But in reality, and to the dismay of many birders, many people will never actually see one of these owls in real life. This is because the bird is elusive: we don't have much information about their numbers in the wild, and thus they are considered "data deficient" by the federal government.

They don't tend to go where people are and you also won't likely see them flock overhead as the leaves turn or the trees bud. These birds aren't known to migrate far; they typically breed and winter in the same area within Canada. The federal government says the bird has a general nesting period that starts sometime between mid-March and mid-April and ends around late June to early July, depending on the region. Their populations can change dramatically depending on the cyclic population of voles, according to federal data.

Though in Canada, Great Grays tend to live in dense, wet evergreen forests of the far north, also known as taiga, your best bet to see them is when they travel south in search of food during an irruptive year, where small mammal population numbers are low in the north. Otherwise, these owls will hunt in northern meadows, bogs, or other open areas with the odd few trees. Forest harvest is the largest human impact on their populations, as the removal of perch and nest trees reduces breeding habitat quality.

Strength of the Gray

At first glance, Great Grays appear large for an owl — between the size of a crow and Canada goose — but they only weigh between 1.5 to 3.75 pounds. Other owls such as Snowy owls and Great

Horned Owls are typically heavier.

That said, Great Gray Owls are powerful. Despite weighing less than a cantaloupe, they have been known to break through hard packed snow while on the hunt for prey. According to Cornell Lab's All About Birds website, one Great Gray broke through snow that was hard enough to support a 176-pound human. They average a lifespan of about seven years in the wild. However, the oldest recorded Great Gray Owl lived in Alberta and was nearly 19 years old when it was found in 2013, after being hit by a car.

A symbol of wildness

The Great Gray Owl has been a symbol for Alberta Wilderness Association (AWA) for nearly the entire history of the organization.

Since 1965, AWA has been advocating for the protection of wilderness and wildlife in the province. We fight for habitat protection across the land, from the northern forests where Great Gray Owls live to the mountain slopes and the windswept prairies. We fight against clearcutting and logging of boreal forest, one of the greatest threats to Great Gray Owls, as well as oil and gas development and mining which are fragmenting our lands. We argue for the conservation of sensitive ecosystems which, once lost, are difficult to regain. And, through our work, we aim to help Albertans understand the value of wild spaces and wildlife, like the beautiful and elusive Great Gray.

The owl was once used as a logo on AWA's earlier newsletters before the 1990s. The logo evolved over time, and eventually by December 1997 it took its current shape. As AWA progressed and created its own annual awards night, the owl was named "Ernie." The name never stuck; however, AWA continues to present the Great Gray Owl award each November to outstanding devotion and effort by volunteers. Like the Great Gray Owl, with unending patience and dedication to purpose, these individuals work in quiet wisdom to conserve wilderness habitat and wild creatures.

The Great Gray embodies wildness, power and beauty. As AWA heads into its 60th year, the Great Gray Owl will continue to represent our fierce defence of wild places.

The Oilsands and Biodiversity

BY PHILLIP MEINTZER

wo new publications from Alberta's Oil Sands Monitoring (OSM) Program show that oil sands mining hurts wetland biodiversity and that peatlands are important for maintaining healthy landscapes.

The first paper, published in March 2024, titled: Wetlands as integral parts of surface water-groundwater interactions in the Athabasca Oil Sands Area: Review and Synthesis, summarizes our current understanding of the role of wetlands in the boreal region, specifically on the interaction between groundwater and surface water.

A key finding of this study is that peatlands reduce water loss, which helps maintain the water table and facilitate the lateral movement of water. This means that peatlands serve as an important water conservation mechanism that supports the surrounding region including adjacent uplands, downstream watersheds, and maintains overall landscape integrity.

The second paper, titled: Wetland Water Quality in the Athabasca Oil Sands Region and its Relationship to Aquatic Invertebrate Communities: Pilot Phase Monitoring Results, was published on Aug. 1, 2024, in the scientific journal Wetlands and

Ecology Management, and was co-authored by Stephanie J. Connor, Justin R. Hanisch, and Danielle Cobbaert

For this study, the researchers compared differences in both water quality and the composition of benthic invertebrates (i.e., small aquatic animals that live near the bottom of a water column) between nineteen wetland sites that were nearer and further afield from surface mining operations over five years.

The authors found that "nearfield" wetland sites located closer to the industrial centre of the oilsands had a lower beta diversity (a measure of biodiversity) than wetlands further away. The authors attribute the difference to higher specific conductance (a measure of dissolved ions), which was observed at sites that were closer to land disturbances or mining operations.

Benthic invertebrates play an important role in freshwater ecosystems. These species perform numerous functions, such as (but not limited to) decomposing detritus (i.e., dead organic matter), releasing previously bound nutrients into the water column for use by other organisms, controlling populations for prey species and providing food for



species higher up the food chain. This means that any changes to invertebrate communities may have unintended consequences for the entire ecosystem.

When considered together, these findings raise significant new concerns with the planned expansion of Suncor's Fort Hills oil sands mine into the McClelland Lake Wetland Complex (MLWC). As part of its approval conditions, Suncor was permitted to mine half of the wetland complex so long as "the ecological diversity and functionality of the unmined portion is maintained."

The authors found that wetland sites closer to the industrial centre of the oilsands had a lower diversity.

However, this new research demonstrates that as surface mining encroaches on wetlands, it hurts the diversity of invertebrate communities, which means that mining in half of the MLWC risks putting the entire ecosystem (including the unmined half) at risk.

At the same time, destroying peatlands within the wetland complex from the expansion of Suncor's mine also risks compromising landscape integrity and the health of the downstream watershed. This not only impacts the unmined half of the wetland complex, but downstream ecosystems like those within Wood Buffalo National Park and Indigenous communities like Fort Chipewyan that rely on the Athabasca River.

As mentioned previously, both studies are a product of the oil sands monitoring program, which was established to assess the cumulative environmental effects caused by oil sands development. For those unfamiliar with the monitoring program, its purpose is to determine whether changes are occurring in the natural environment and whether those changes are specifically due to oil sands development.

Unfortunately, the program isn't living up to its commitments. At the time of writing, it has been more than five years since the program last published an annual report in September 2019. That's more than half a decade since the program



last provided an update on the findings of monitoring to both decision-makers and the public.

The dissemination of these reports is crucial for understanding the cumulative impacts of oil sands development, and delays mean that monitoring results cannot be acted on promptly. Without annual reports, it's up to organizations like AWA and other environmental NGOs to search for these publications and communicate the findings to the public.

It seems ridiculous that the government of Alberta and the Alberta Energy Regulator can justify approving new or expanded oil sands mines while the public is kept in the dark about the impacts of existing development. What's the point of monitoring if the results are withheld, and industry gets to continue operating as if no harm is being done? But as both these studies show, wetlands — and specifically peatlands like those at McClelland — should be off limits to oil sands mining, for the protection of biodiversity and the maintenance of healthy landscapes.



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 <u>www.albertawilderness.ca/</u>
<u>newsletter-signup</u> or you can scan the code below with your smart device.



Wilderness Watch

The loss of an ecosystem: an update of the perilous plight of the sage-grouse

Alberta's greater sage-grouse numbers are desperately low, with a count of only twenty males in the spring of 2024, and an estimate of between 40 to 60 individuals left in the province.

These are not the numbers of a recovering population, despite over a decade of efforts and millions of dollars in funding towards breeding and translocation programs. At best, these programs are keeping the sage-grouse on the land, improving their chances of recovery. At worst, they are taking valuable resources away from the most important action in protecting sage-grouse: habitat conservation.

"Had they put that money into land acquisition and habitat acquisition and habitat protection and ... all those things that would benefit the habitat," Dr. Mark Boyce, Professor of ecology and conservation at the University of Alberta, told me. "They would have done so much more."

Not that the importance of habitat has been imposed entirely ignored. The federally Emergency Protection Order was effective at stopping new oil development, preventing further habitat loss. The Government of Alberta has made progress on predator control, eliminating old, abandoned farmsteads that ravens and greathorned owls use, and reducing attacks on sage-

But these actions have not been enough. Sage -grouse prefer diverse, heterogenous landscapes with little human disturbance, a rapidly disappearing land type. Even without new development, thousands of oil wells are still scattered across the region, and hundreds of kilometres of roads, fences and powerlines





fragment the landscape. Worse, designated critical habitat and the protection of the Emergency Protection Order, developments continue, leaving the area of available habitat smaller and smaller. Alberta's sage-grouse range has already declined by over 90 percent, and a 2007 study by Aldridge and Boyce found only five to 10 percent of their core range to be an attractive and high-quality nesting environment, severely limiting sage-grouse survival and recovery.

"We need to do everything we can to protect what habitat we have and to improve habitat," Dr. Boyce emphasized. This includes removing fences, oil wells, powerlines, roads, and raptor perches, and working to reclaim the degraded lands. Importantly, it also means not allowing any more oil and gas, mining, helium or other industries into the remaining habitat.

Losing sage-grouse would be tragic, and it would be more than just the loss of an iconic species. Canada's sage-grouse are unique, differing from their relatives in the south; they are adapted to silver sagebrush habitat, instead of big sagebrush like most of the United States population. More broadly, the loss of sage-grouse is an indication of ecosystem health and shows how we are affecting the environment. Sagegrouse could only be the first of many species that we could lose.

We still have a chance. If we act now — if we funnel our resources into protecting and restoring this vulnerable habitat — we can keep sagegrouse from disappearing, but only if we are willing to prioritize habitat conservation over industry.

Because, as Dr. Boyce put it, "It's the habitat, stupid."

-Ruiping Luo

Wilderness Watch

Bad bills make worse acts

Bad acts were abundant this year, but the start of November was especially brutal with the introduction of Bills 34 and 35. Overhauling Alberta's Freedom of Information and Protection of Privacy (FOIP) Act, Bill 34 would make requests for information under this law — already an intensive, lengthy, and miserable process with anyone familiar — somehow even worse.

By the time this is published, AWA along with many other groups, will have waited more than three years for the release of documents related to irrigation development. With the changes introduced to FOIP by the Alberta government, the wait could be even longer, or worse, we may not get the requested information we need at all.

The purpose of FOIP is to ensure the public has access to the information produced or held by a public body. Paid with public money, it only makes sense that the government's work should be transparent and easily accessible. In practice, one quickly finds that many promised reports, results of public consultations, and general government ongoings are nowhere to be found.

This is where FOIP comes in — anybody can request to access government-held information. Whether the government abides by that request is a whole other story. Typically, you must be very specific and already know essentially what you're looking for, i.e. who the emails are between, when they were sent, what was the topic of conversation, etc., because the government does not want to send you any more than they have to. The process is iterative, drawn-out, and infuriating, and often when you finally receive the FOIP-ed documents, you're welcomed by lines and lines of blacked-out information.

Now imagine an even more unpleasant process. Notable changes introduced in November (in bold) include:

7(2)(c) A request must provide enough detail to enable the public body to locate and identify the record within a reasonable timeframe with reasonable effort

29(1)(a) The head of a public body may refuse to disclose information to an applicant if the disclosure could be reasonably expected to reveal advice, proposals, recommendations, analyses or policy options developed by or for a public body or a member of the Executive council, including background factual information and information provided for information purposes only

Without a strict, clear, and enforceable definition, the inclusion of 'reasonable' in section 7(2)(c) could allow public entities to dismiss any

FOIP request they want. Anything can become unreasonable if you don't want a decision to become public. Section 29 (1)(a) was already problematic. The people should know what advice is being provided to the heads of our public bodies because this is presumably how they are making their decisions. Why would information, particularly factual information "for information purposes only" ever need to be hidden? Expanding what can be refused to be disclosed only increases the secrecy in which government operates, which is never a good sign.

Other anxiety-inducing potential policy changes emerge in the form of Bill 35, the All-Seasons Resort Act.

Lately, the Alberta government has been keen to expand recreation and tourism opportunities on crown lands, which cover around 60 percent of the province. Back in 2020 when Alberta's Crown Lands Vision was announced, the government promised they would develop "a common-sense conservation plan" that would reduce "red tape" and "balance the economic development, conservation, and recreation." Do all the buzzwords set your teeth on edge too?

In our feedback, AWA has been clear that there's no balancing conservation with other needs when it comes to the environment. If the proposed recreation, tourism, and economy all rely on a healthy functioning environment to exist, then the needs of the environment must be prioritized in these plans. No one wants to hike or camp in a damaged landscape; no tourist wants to visit a degraded ecological destination. If red tape refers just to regulations meant to prevent developers from destroying ecosystems, Alberta could use a few more rolls. And finally, what exactly is common-sense conservation? Is common sense a synonym for rigorously researched and evidence-based? Or is it more feelings-based management?

Meanwhile, the All-Seasons Resort Act or Bill 35, is one facet of this vision (Alberta's next Plan for Parks and Nature Strategy are others), and the current information we have about it raises concerns. The bill intends to create yet another new ministry, with the sole responsibility of designating land, approving leases, and consolidating required permit approvals for the development of all-season resorts. Media around the bill revealed the leases could be issued to private entities for terms of up to 99 years, which is lengthy compared to other leases on public lands (mineral surface leases are 15, grazing leases are max 20).



When the announcement was made and before the text of the bill was available, AWA vocalized precautions on the basis of five main points:

- 1. Public lands are just that, public. We should be wary of anything that could privatize the benefits and access of nature away from the public.
- 2. Many public lands include critical species at risk habitat, wildlife corridors, and other environmentally significant areas unsuitable for tourism development.
- 3. Expanding protected areas must occur in tandem, particularly in underrepresented natural areas within Alberta's parks system like the Parklands, Grasslands, and Foothills.
- 4. All-season resort developments must be compatible and sustainable with the ecosystem they are situated in, with defined thresholds in place to determine and halt when use is exceeding capacity.
- 5. All-season resort development must not be top-down, as there are ample examples where tourism economies drive up costs and push out local livelihoods — the government should look to empower communities actively looking to develop their tourism sector.

Now that the text of the bill is public, our precautionary advice seems too optimistic. Section 4(a) includes a clause stating that,

"For greater certainty, an area of public land ... may be designated as an all-season resort area after the Lieutenant Governor in Council rescinds the designation of the land as a provincial park or provincial recreation area under the Provincial Parks Act, or as an ecological reserve, natural area or heritage rangeland under the Wilderness Areas, Ecological Reserves, Natural Areas and Heritage Rangelands Act."

The Act could allow the Lieutenant Governor in Council, on recommendation by the ministry, to rescind protected area designations so the lands can be used to develop all-season's resorts.

Land conservation is known to be one of the key tools to address the twin climate and biodiversity crises, creating areas protected from development where species take refuge and ecological services and functionality are retained. Canada has committed to the global strategy to have 30 percent of land protected by 2030. Scientists estimate we need more ambitious protections, closer to 40 to 50 percent. In Alberta, only 15 percent is protected, and just seven percent is protected through provincial measures. Considering all that, it should be inconceivable for a provincial government to install legislative mechanisms that could essentially unprotect lands. Yet, here is it, conceived.

Public access, whether to land or information, should not be limited; sometimes governments need that reminder they work for the public.

Note: Special thanks to University of Calgary ABlawg associates Drew Yewchuk and Nigel Bankes for always keeping the pulse of environmental policy changes!

-Kennedy Halvorson

Wilderness Watch

Where's the science?

This past year has been a blow to wildlife.

I'll start with female cougars. As per the quotas announced in November 2023, at the onset of 2023-2024's hunting season, just one could be hunted in each of Alberta's 32 Cougar Management Areas. Fast forward to March 20, 2024, when without notice, the quotas were updated and raised a staggering 125 percent, from 32 possible harvests to 72. When AWA requested information on how the sudden decision was made, the Minister of Forestry and Parks Todd Loewen said it was because some stakeholders thought that the cougar population was getting too high and this caused unwanted predation on caribou, bighorn sheep, and other big game species.

"As the species' range expands into new, mostly human-dominated landscapes, there are concerns for continued public safety regarding cougars," Loewen said

This set off immediate alarm bells for us. Cougars' natural range has always encompassed almost the whole of Alberta, including our most populated centres. They haven't expanded into our territory; humans are ever encroaching on theirs. Further, any predation by cougars is a natural part of the ecosystem — human hunters' inability to handle the competition is no excuse to turn the gun on these big cats.

While wildlife management in the province is purportedly committed to taking a science-based approach, research overwhelmingly disagrees with these increased quotas. There is no evidence that hunting cougars accomplishes any of the outcomes typically sought by wildlife managers. In fact, trophy hunting has been found to increase human-cougar conflicts. It threatens to throw the ecological network — dependant on the large predators' presence — out of balance, while also failing to reduce predation of livestock or keep human communities safer.

Then in June, an 18-year pause on hunting grizzly bears was resumed when Minister Loewen issued a ministerial order amending the Wildlife Act. The ministerial order permits the hunt of grizzly bears deemed to be involved in a loosely defined "human-bear conflict situations" by those with a "grizzly bear management authorization." Alarmingly, this authorization is not reserved for experts, like specially trained fish and wildlife officers who previously were tasked with this, but for anyone over 18 years old who has or can obtain a recreational hunting licence.

This recipe for disaster has no basis in science.

The removal of large predators like grizzlies, black bears, and wolves has been found time and time again to be both costly and ineffective at dealing with conflicts, and at times, even increasing the number of incidents, according to research. Hunting brown bears is also known to cause indirect, negative impacts on the larger population, including infanticide. It's well established that predators are needed to balance herbivore populations, as without natural predation pressure, species like deer are associated with their own unwanted impacts on human activities. The absence of large predators (think of the famous Yellowstone wolves' casestudy) creates an unexpected and undesirable cascade of trophic effects.

Current best practices in wildlife management research recommend coexistence models, where the root cause of conflicts is addressed by managing human-behaviours. In the case of bears, food availability is the number one source of conflict. Coexisting with bears means making human spaces unattractive and food-scarce, while restoring and protecting their habitats. If they have sufficient food in the wild, their incentive to wander into human landscapes is greatly reduced; bears don't want business with us either.

Even putting all this aside, grizzlies are designated as a threatened species. They have a provincial Recovery Plan. Their populations once ranged as far east as Manitoba, but the prairie population has long been extirpated due to settlement, land conversion, hunting, and various other human activities. The northwestern population is at risk of the same if it is not protected. Removal of any threatened species should be a last resort.

This year also ushered in unsubstantiated changes for mountain goats; they are now eligible to be hunted with a Minister's Special Licence. Compared to other ungulates, mountain goats are incredibly sensitive to harvest. Growth within the small and remotely located populations of mountain goats in the province is considered poor and Alberta's mountain goats already have a high risk of extinction without the additional stressor of hunting. This is a species that cannot withstand further exploitation.

Most recently, this fall came with changes for trapping fur-bearing species. Wolverines, fishers, lynx, and river otters became the latest victims of bad wildlife regulations. Previously, their trapping quotas were strictly limited. For wolverines, which are data deficient, meaning we don't have enough information to confirm their population, only one per trapline could be harvested. But in

the 2024-2025 season, all limits have been removed. The justification? To get more data on how many there are, particularly for wolverine populations.

Loewen told media that the previous quota system for these furbearers "was indefensible as it was not based on any real data or science." Yet, this change in policy to lift the quota doesn't seem to have been based on science either. Loewen told media that the policy change "came after extensive consultation with the Alberta Trapper's Association."

The precautionary principle in wildlife science is clear — if there is a potential threat to a species or its environment, even if not yet wellascertained or established, all measures should be taken to reduce harm. If the minister is keen to determine the population numbers of wolverines and the like, many non-lethal monitoring methods exist. Aerial surveys, fur and scat collection, remote audio and video sensors, eDNA sampling, you name it, there are numerous ways to establish species populations; you just need the funding, expertise, and political will. Live capture and recapture studies have also been used to estimate species density in a given area, but how data collected from lethal trapping would be extrapolated to determine population size is unclear. It's also

alarming that a minister would characterize consultation as extensive after speaking to a single, economically-motivated group.

A common current throughout these decisions this year is a lack of inclusive consultation or even notice to interested parties. These drastic departures from science-based management and past precedents occur seemingly out of nowhere. The public should be aware when changes to wildlife management are even being considered, let alone this far after the fact. Further, those who do seem to be privy are those who would directly benefit from expanded hunting and trapping opportunities. Biases are inherent and unavoidable, which is why it is so important to include multiple and differing perspectives to find balance in decision -making.

To use the minister's words, these new regulations are "indefensible." AWA has made it clear in our communications with Forestry and Parks, and you should too. Please consider writing your own letter to the minister and include these facts. Alberta's wildlife deserves more than feeling-based management.

-Kennedy Halvorson

Here's our science:

- The Elephant in the room: What can we learn from California regarding the use of sport hunting of pumas (Puma concolor) as a management tool?" Laundré, J.W., & Papouchis, C., 2020
- "Hunting as a management tool? Cougar-human conflict is positively related to trophy hunting" – Teichman et al., 2016
- "The ecology of human-caused mortality for a protected large carnivore" Bensen et al., 2023
- Dynamics of hunted and unhunted mountain goat Oreamnos americanus populations" -Voyer et al., 2003
- "Population Dynamics and Harvest Potential of Mountain Goat Herds in Alberta" Hamel et al.. 2010
- "Evaluating the efficacy of predator removal in a conflict-prone world" Lennox et al., 2018
- "Experimental test of the efficacy of hunting for controlling human-wildlife conflict" Northrup et al., 2023
- "The relative importance of direct and indirect effects of hunting mortality on the population dvnamics of brown bears" – Gosselin et al., 2015
- "Socioeconomic Benefits of Large Carnivore Recolonization Through Reduced Wildlife-Vehicle Collisions" – Gilbert et al., 2016
- "Wolves influence elk movements: behavior shapes a trophic cascade in Yellowstone National Park" – Fortin et al., 2005

Wilderness Watch



Worry for wolverines

Alberta Minister of Forestry and Parks Todd Loewen has quietly removed yet another restriction meant to protect a sensitive and struggling species. The change was made without public consultation or announcement. Alberta Wilderness Association learned this fall that the trapping limits imposed on furbearing animals in Registered Fur Management Areas was removed. This affects fisher, Canada lynx, river otter, and wolverine.

The impact to wolverine is particularly concerning, given that the species is declining. Trapping, one of the causes of their decline, was already considered unsustainable in British Columbia and Alberta.

This change is unacceptable. It is a regression on decades of sustainable management practices. There is no science behind it, and it was done without public consultation or even knowledge. This change could be devastating to these furbearing animals, especially wolverine. In Alberta, wolverines are considered a Data Deficient species, and it has been included on the list of species that may be at risk. Wolverines are elusive and found in low densities, making population estimates difficult, although declines have been reported in the southern ranges.

The last population estimate for Alberta, recorded in 2023, was less than 1,000 breeding individuals. In 2019, a study recommended trapping be reduced by 50 percent or more to allow for population recovery. Where wolverine trapping occurs, trapping is often the main cause of wolverine mortality. Previously, the Alberta Guide to Trapping Regulations limited wolverine harvest to one per trapper in each Registered Fur Trapping Management Area. Lifting this limit means there will be stronger hunting pressures on wolverine, and likely higher mortality. Wolverine are species, slow-growing population recovery is difficult, particularly as habitat loss and climate change are also threatening this species.

While wolverine is the most vulnerable of the species these new restrictions apply to, overhunting will impact all the affected species. River otters and Canada lynx, both affected by the new regulations, were nearly

eradicated from much of their range in the 1800-1900s due to hunting pressure. Data on fishers show they are already failing to meet reproduction targets and allow for sustainable trapping. Hunting and trapping limits were imposed to allow sustainable harvest, and the reversal of these limits could mean many species are once more hunted to extinction.

In a time when there is global attention on halting and reversing biodiversity loss, Alberta's policies are promoting further species loss. As with other hunting changes, these new regulations will increase hunting pressures and could devastate vulnerable populations. At this rate, the wilderness that many Albertans are so proud of could soon be empty.

-Ruiping Luo

In memoriam

Karsten Heuer, 1968-2024

November 5, 2024 saw the passing of Albertan environmental icon, explorer and all-around nice guy Karsten Heuer. For all of those who met Karsten, or followed his astonishing adventures, he will be terribly missed.

Born and raised in Calgary, Karsten studied at the University of Calgary before moving to Banff, where he became a wildlife biologist for Parks Canada. In more recent times, in this role he helped lead the reintroduction of wild bison to Banff National Park. But it was his work as an environmental adventurer that Karsten first became renowned.

In the early days of the Yellowstone to Yukon Conservation Initiative, wildlife connectivity was an issue that was increasingly being talked about, spurred on my new studies that were beginning to uncover the huge distances travelled by wildlife in the Rockies. A wolf radio collared in Kananaskis Country travelled south to the northern United States; another wandered from the United States to the southern Yukon. There was clearly a growing realisation of the need for conservation on a much bigger, landscape scale. But what did this actually look like on the ground?

Where most of us would be content to continue to wonder, Karsten decided to strap on his boots (and his skis) and go find out. In 1998, he embarked upon a 3,400-kilometre hike between Yellowstone National Park in Wyoming and Watson Lake in the Yukon. His 2002 book, Walking the Big Wild described his 18-month journey along the spine of the Rocky Mountains, assessing the connectedness of the beautiful ecosystems through which he passed. Overall, his vision was of a huge landscape that was still worth protecting.

If that wasn't intrepid enough, in his 2006 book Being Caribou, Karsten and his partner, filmmaker Leanne Allison set out to follow the migration of the Porcupine caribou herd from its Yukon winter range to its endangered Alaskan calving grounds in the Arctic National Wildlife Refuge. Leanne's film about their epic five-month journey (https://www.nfb.ca/film/being_caribou/)

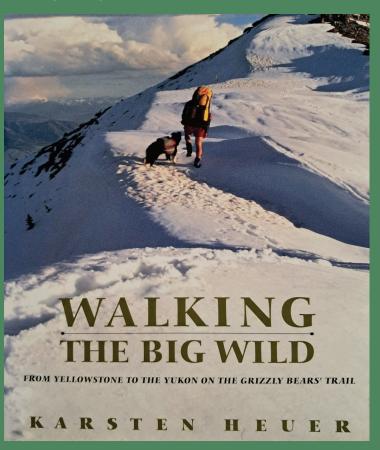
is an astonishing window into the determination of the pair of them to highlight just what was at stake if the Arctic Wildlife refuge were to be opened to oil and gas development.

Leanne's next film, Finding Farley describes their 2009 canoe trip across Canada, from the Rocky Mountains to the east coast, following in the footsteps of another Canadian literary giant, Farley Mowatt. Her film won the Grand Prize at the 2009 Banff Film Festival

Karsten was always generous with his time and was happy to give readings from his books to Alberta Wilderness Association audiences on several occasions.

Karsten's death was as uncompromising as his life: suffering from a rare and terminal neurological disease, he chose a medical-assisted death at his own time of choosing. It is hard to think of a better definition of a life well lived. Karsten touched the lives of more people than he ever realised, and his legacy will live on.

-Nigel Douglas



Personal Essay

Maintaining the beauty of Banff National Park

Banff, the town and the national park, is the heart of the Canadian Rockies. I've lived in the Town of Banff my whole life, and I've experienced firsthand many joys and challenges of living in a national park. First off, I want to say that living in Banff has caused me to take advantage of the amazing mountains, lakes, and wildlife in my home. The privilege of growing up here has been something that I have cherished since I've moved

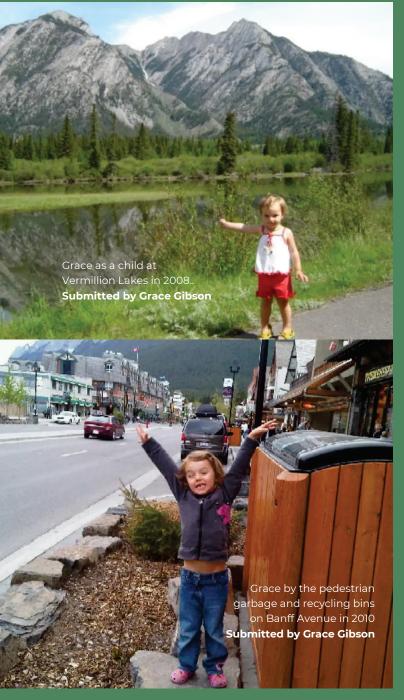
away to university. However, with any privilege comes responsibility, and that is why I feel that it is our responsibility to protect and cherish the environment and all of the inhabitants of that environment.

From a young age, living in Banff immersed me in nature. You learn invaluable lessons about the significance of your surroundings and the importance of wildlife. Only in a national park can a representative from Parks visit your Grade 3 class to sing songs about mountain goats moments like these leave a lasting impact. Banff is home not only to humans but also to elk, bears, squirrels, eagles, and so much more. Sharing our space with these animals has taught me how to act around them and to maintain a respectful distance. I've encountered bears on several occasions, and my instinct has always been to calmly give them space and walk away slowly, Remember, these animals were here long before generally harmless unless provoked. In fact, nine times out of ten, they are more frightened of us than we are of them. A simple tip: singing your heart out while hiking will keep bears away!

Another crucial lesson I've learned is never to feed the wildlife. The squirrels, birds, and gophers in Banff have become all too accustomed to humans, and this is not natural. Many times, I've often sat down to eat, only to have animals sit beside me, waiting for food. This behaviour poses significant risks: animals that eat human food may become obese, choke, or suffer from poisoning.

To fully enjoy the beauty of Banff, I would recommend camping. You can sit out by the lake under the northern lights that are draping over the mountains. It is truly unreal. However, like I have said, privilege comes with responsibilities. For instance, after using any opened food, it's best to store it in your car to minimize food scents and avoid attracting animals. Even if you are quickly just going to the outhouse. Keeping food in your tent works just as well, but it carries a higher risk of drawing animals closer. Overall, it does not take a lot of work, and doing small actions allows one to live happily and peacefully among animals.

Living in Banff I feel as though I have a deep connection to our earth. The earth is something that we have been blessed with, so when I walk Banff Avenue and see litter on the ground, it genuinely upsets me. There are so many important things that the community of Banff does that contribute to the health of our town. For example, my household follows a "leave no trace"



philosophy. Wherever you go and whatever you do after you leave, there should be no trace that you were there. This principle is especially important on hikes, where trash cans are often absent. Keeping your garbage with you prevents litter from washing into our rivers and lakes as the snow melts in spring, which can lead to pollution throughout Alberta. Banff has many initiatives that have been put in place to help with the health of our environment. Recently, Banff has put in place a single-use plastics bylaw, which has caused workplaces in Banff to only use paper products, which allows only biodegradable products into our garbage systems and soils.

There are also many other ways to be sustainable on your trips to Banff. The town has so many gift shops and is very consumerism-based, but I always try and will always recommend to go to local shops and support the many small businesses within Banff. As well, in the summer, there is a fantastic market on Wednesdays that is all small businesses. It is important to know that every small choice you make contributes to the health of the planet.

Visitors need to understand that Banff is not just a tourist destination; it is a thriving community. Banff's community revolves around tourism, and we understand that yes, you are on your vacation, but it is very important to respect everyone, especially our town. The community in Banff is very geared towards making sure

everybody feels included and understood. For example, if you come to Banff in the new year, there is an impressive pyrotechnic show, and most importantly, it is safe for all the animals and wildlife. This step keeps the people of the town happy and feeling like they have a sense of tradition while also catering to the importance of animals and their safety, and that is one of the reasons Banff is such a special place.

I have loved my time in Banff and all the experiences that it has had to offer me. Living in Banff is a constant reminder of nature, and it's important. By respecting wildlife, practising sustainable habits, and fostering strong community connections, I can enjoy, along with as many other people from all over the world, the amazing views, and we can all ensure to keep it gorgeous for future generations to come. It can be hard to balance between adventure and conservation, but I believe that every small action contributes to the larger goal of protecting the natural beauty that Banff holds. After all, spending time in Banff and living in Banff is not just about experiencing it; it's also about preserving it for years to come.

Grace Gibson is a student at the University of Alberta. Alberta Wilderness Association recently collaborated with the university as part of a Community Service Learning course.





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