

# A WILDLANDS ADVOCATE



THE ALBERTA WILDERNESS ASSOCIATION JOURNAL

MARCH 2019

Thinking About New Normals



# C O N T E N T S

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In Bodo Hills you will find lush fescue grassland, aspen woodlands, a variety of wetlands, and alkali springs. The area is representative of our Parkland Natural Region and the Northern Fescue Natural Subregion and is 348.5 km<sup>2</sup>. The terrain is hummocky with knob and kettle landforms that make good habitat for terrestrial birds and grassland plant species.

Most of the land in Alberta that once had these qualities has been cultivated or cleared. Bodo Hills is environmentally significant as it is one of the two largest blocks of aspen parkland/northern fescue grassland in the world.

AWA believes the establishment of a Heritage Range-land in Bodo Hills would help maintain the stewardship that grazing provides whilst increasing protection of Alberta's Central Parkland and Northern Fescue Natural Subregions. Such a designation for this area is part of AWA's recommendations to the North Saskatchewan Regional Plan. PHOTO: © C. OLSON



### Featured Art

This issue we are going back into AWA's past to feature the art of Joane Cardinal-Schubert (1942-2009). If you have visited Hillhurst Cottage School you may recall the striking posters adorning one wall on the main floor. Those posters feature Cardinal-Schubert's artwork. As editor, I have always wanted to showcase her art because she often used the beauty and power of her work to speak out politically – on behalf of First Nations, the land, wildlife. When Clint Buehler eulogized her passing in 2009, he said this about this distinguished member of the Kanai First Nation: "Her painting and installation practice is prominent for its incisive evocation of contemporary First Nations experiences and examination of the imposition of EuroAmerican religious, educational and governmental systems upon Aboriginal people." Cardinal-Schubert lent her creative talents to campaigns AWA participated in such as the movement to stop construction of the Oldman River dam and was a strong advocate for Aboriginal causes.

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### 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, please call 403 283-2025 or contribute online at [AlbertaWilderness.ca](http://AlbertaWilderness.ca)

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# Normal Politics? Not in Alberta This Spring

By the time this issue of *Wild Lands Advocate* lands in your mailbox Alberta will have a new provincial government. I hope you will have taken the time to find your polling station and cast your ballot. Even more, I hope you spent some time looking carefully at the substance of this spring's political fare before you exercised your franchise. I don't think enough people do that – I think that's a sad feature of the version of democratic politics we seem to be comfortable with.

What's even sadder is the prevailing tone of contemporary electoral politics, a tone likely to infect the governing that will take place in Alberta over the next four years. A generation ago, political competition paid much more respect to values such as civility, compromise, and empathy than is the case now. If we are going to better address what this planet and our fellow inhabitants

will throw at us over the coming decades, we need to demand from ourselves and from our politicians that we rekindle those values. We need more civility in politics. We need more ethical behaviour. We need more empathy for those we disagree with.

These values – civility, compromise, empathy – are at the heart of what Bernard Crick, a British political theorist and social democrat, called “normal politics.” He used this phrase to describe the type of politics he thought we should aspire to. As an aspiration that isn't common in many democratic political systems today, it's an idealistic vision of political life. Reduced to its essence “normal politics” is the antithesis of much of what I witnessed during this past provincial electoral season. “Normal politics,” Crick wrote, “breaks down or is impossible to create when rival groups pursue policies which they say admit of no compromise and which are believed to be totally exclusive and contradictory...” Crick's vision of the normal was animated by the importance of compromise, of empathy, of a “willingness to resolve disputes by discussion.”

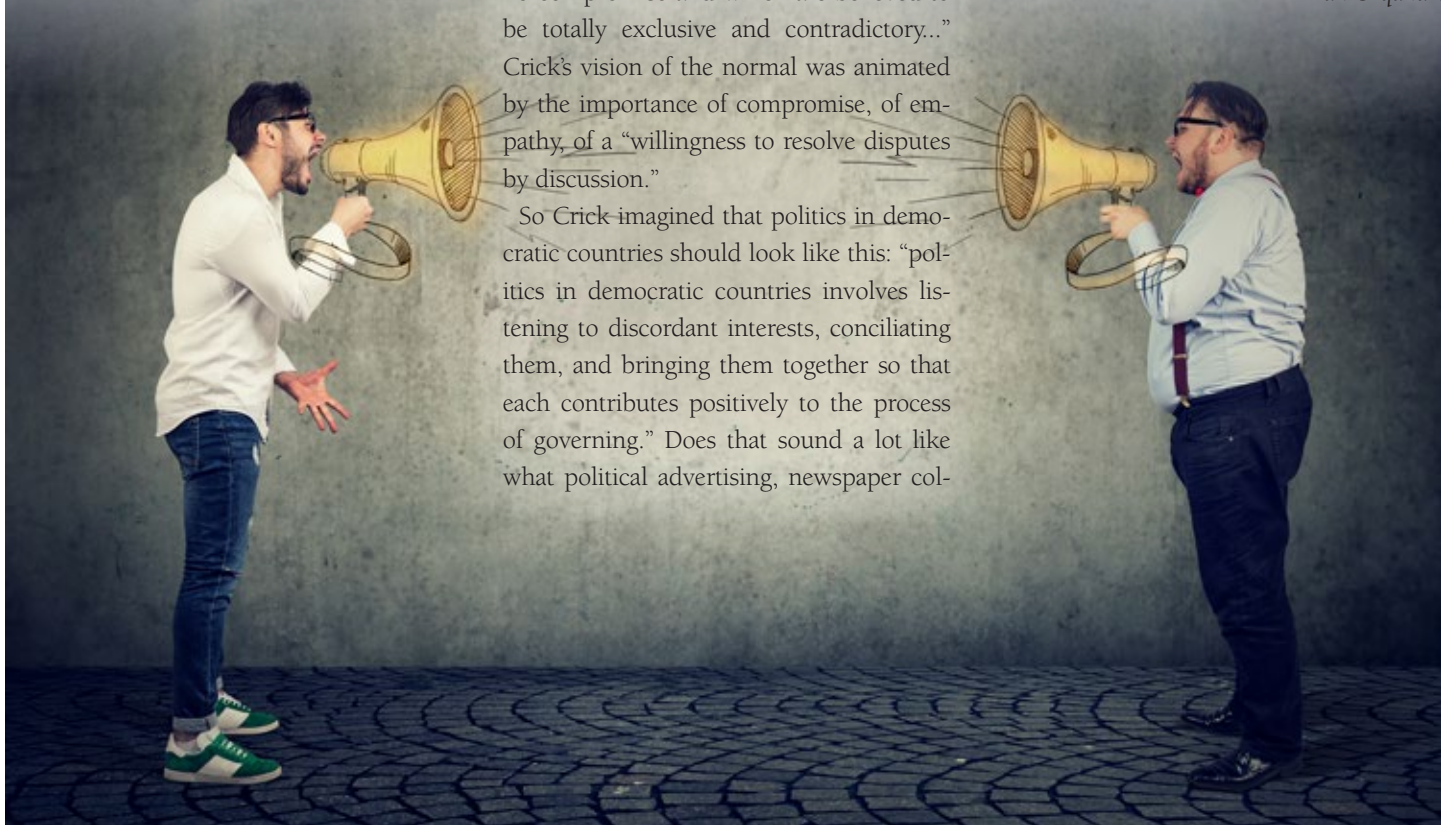
So Crick imagined that politics in democratic countries should look like this: “politics in democratic countries involves listening to discordant interests, conciliating them, and bringing them together so that each contributes positively to the process of governing.” Does that sound a lot like what political advertising, newspaper col-

umnists, radio talk show hosts, and social media served you during the campaign? I didn't think so.

The substance of the times we live in are challenging, troubling. This is so whether you're concerned about balancing the budget here in Alberta or trying to reduce greenhouse gas emissions globally. But, I'd argue they are at least as troubling because the tone of our politics has become less and less hospitable to the values of normal politics. We need to find better ways to “do” politics.

As AWA welcomes a new government to power on April 16th we'll do so by encouraging parties from all sides of the political spectrum to recognize the value of wilderness, stay away from “winner take all” approaches, and avoid demonizing those we disagree with. We look forward to your help in furthering that agenda.

- Ian Urquhart





# Climate Change:

## Finding Hope in the Face of Adversity

**Joanna Skrajny, AWA Conservation Specialist**



**M**y relationship with the news is akin to staring at a burning garbage fire: what I see is foul, it's dangerous, but I can't look away. As a result, I'm flooded by a barrage of news and each day of the barrage seems worse than the previous. And let's be honest, there are lots of reasons why we should be troubled or depressed by the news.

In October, the Intergovernmental Panel on Climate Change released a report stating that human activities have already caused 1.0 °C of warming and that we have less than 12 years to try to limit warming to 1.5 degrees. If we can achieve no more than 1.5 degrees of warming instead of 2 degrees (which is the more likely outcome), the report predicts we can realize some important goals. We would avoid the thawing of at least 1.5 million km<sup>2</sup> of permafrost, significantly decrease the probability of an ice-free Arctic Ocean, and reduce risks to our food systems and economies.

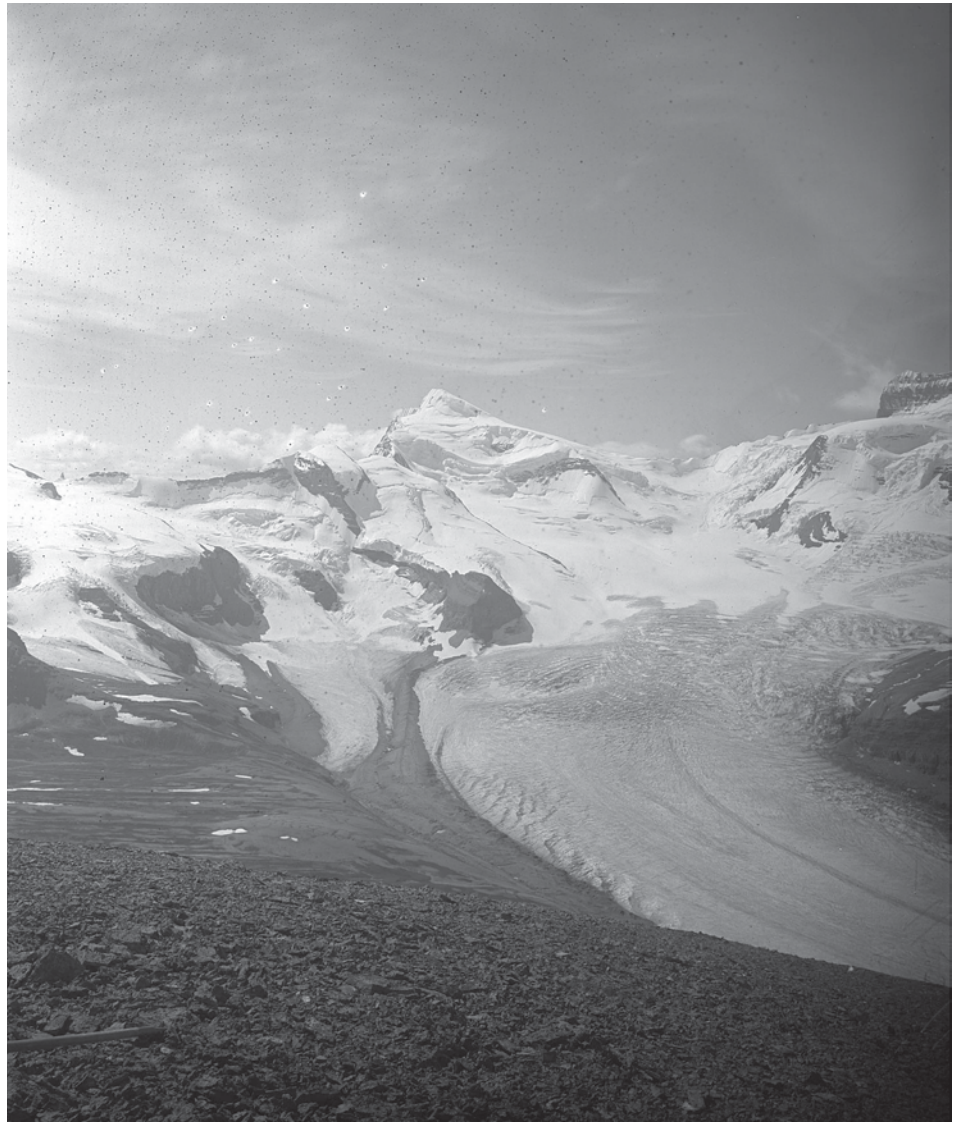
In order to reach our goal of limiting warming, we have to act swiftly and unhesitatingly. The report has outlined what needs to occur in order to achieve 1.5 degrees. Those measures include:

- Rapid and profound transition to renewable and sustainable biomass along with rapid deployment of carbon capture systems, with a zero-emission energy supply by 2050.
- Switching from fossil fuels to electricity for transportation and residential use.
- Considerable shifts in investment patterns away from fossil fuels and into renewable energy.

So in 12 years, or from another perspec-

tive, only 3 election cycles, we have to make profound changes to our societies as we know them in order to protect them and life on earth. Having survived a single election cycle in my advocacy work, I've seen just how little gets accomplished in that time.

It has, quite frankly, made me both skeptical and terrified – skeptical of our ability to “turn this ship around” and terrified of what awaits us if we don't succeed. Britain's Met Office (with responsibilities for weather forecasting and climate change) estimates



*Glacier retreats are often used to underline the seriousness of climate change. These two photos illustrate the extent to which the Robson Glacier retreated over 100 years. The black and white photo was taken by A.O. Wheeler in 1911; the same scene was rephotographed from the same location by the Mountain*

a 10 percent probability of reaching 1.5°C warming in four years, by 2023.

According to the U.S. National Oceanic and Atmospheric Administration, the four hottest years on record were 2016, 2015, 2017, and 2018. They are listed this way to show that, of these years, 2016 was the hottest and 2018 the “coolest.” From widespread forest fires, to heat waves and floods, it’s clear to many that we are already shouldering the costs of climate change to human life and our economies.

Additional threats, from habitat loss to pollution and introduced species, also have caused significant impacts on our ecosystems. It’s estimated that over 40 percent of our insect species are threatened with extinction. Anecdotally, it’s clear to me that

widespread die-offs of insects already are occurring; summer air that used to be filled with the thrumming of bugs is much more quiet now.

Governments have been acting like toddlers through their refusals to take strong action. Canada’s climate policies, for one, are rated by the Climate Action Tracker as being “highly insufficient.” This means that, if every country followed our approach, the world would see between 3-4°C of warming. In my mind, calling it “highly insufficient” is generous. Experts generally agree that at 3-4°C, we likely will be bordering on societal and ecosystem collapse.

## Facing the Facts

So what do you do in the face of what sometimes feels like an insurmountable problem, one that has only magnified over a generation of ineffective action? I don’t recommend you do what I sometimes find myself doing – carrying around an existential dread with me that is paralyzing.

Here’s where the generations that got us into this mess should look to youth, specifically to Greta Thunberg, a 16 year old Swede who is no longer willing to take any of the old guard’s excuses. Her motto? “I want you to panic.” Her mission has been to mobilize students to demand action from our governments. Thousands of school children have been taking to the streets, in school strikes dubbed as “Fridays for the Future”. In November 2018, 15,000 students took to the streets in Australia. Switzerland saw 23,000 strike on January 18 – that protest grew to 65,000 on February 2. The signs expressing the messages of these protests are both powerful and damning. “The climate is changing, why aren’t we?;” “I’m sure the dinosaurs thought they had time too;” “Our House is on Fire;” “The Emperor has no Clothes;” those are just some of my personal favourites.

So far government responses have been both patronizing and dismissive. Lies and smear campaigns have been launched against Greta and other strike organizers. Governments are asking children to return to school and leave the worrying about climate change to them. But as one protest sign so perfectly replied: “I’ll do my homework when you do yours.”

This movement gives me hope on the climate change front. In my years at school in Alberta, I remember being taught only a handful of times about climate change. We actually debated whether or not it was happening and in many ways, this rhetoric and uncertainty has strong roots in Alberta. In 2018 Canada’s Ecofiscal Commission retained Abacus Data to poll Canadians on climate change. It’s shocking to see that only 54 percent of Albertans, the smallest percentage in any province/region, responded that global warming is caused



*Legacy Project in 2011. The Robson Glacier clearly has lost a great deal of its mass over the last century.*  
PHOTO: Images courtesy of the Mountain Legacy Project under the Creative Commons license.



mostly by “human and industrial activity such as burning fossil fuels.” Forty-six per cent of Albertans who conceded that global warming is taking place attributed the warming primarily to “natural patterns in the earth’s environment.”

A recent United Conservative Party conference expanded on their 2018 Policy Declaration to “eliminate all political indoctrination from the curriculum.” Climate change and reconciliation with Indigenous Peoples, among other subjects, were considered to be examples of “political indoctrination.” Since climate change is both a scientifically established fact and a very real threat to the futures of schoolchildren, wouldn’t a better example of political indoctrination be not teaching about it in schools? I hope that Alberta’s youth follow the example of Thunberg and her fellow activists: don’t take any more nonsense from authority figures. It’s high time we do our youth justice by actually taking climate change seriously.

The biggest “elephant in the room” is, of course, our neighbours to south. The Trump Administration’s reversals of climate change initiatives spurred the Climate Action Tracker to award the United States with the lowest possible ranking for climate action, “critically insufficient.” This means U.S. commitments are not at all consistent with holding us to even 2°C; if all countries were to follow the US targets, we’d exceed 4°C.

But, even in the U.S. there are signs of hope. The Sunrise Movement, self-described as “ordinary young people who are scared about what the climate crisis means for the people and places we love” has been taking America by storm. Their proposed Green New Deal, while yet to be fleshed out, already has committed to five goals:

- achieve net-zero greenhouse gas emissions through a fair and just transition for all communities and workers;
- create millions of good, high-wage jobs; and ensure prosperity and economic security for all people of the United States;

- invest in the infrastructure and industry of the United States to sustainably meet the challenges of the 21st century;
- secure clean air and water, climate and community resilience, healthy food, access to nature, and a sustainable environment for all;
- promote justice and equity by stopping current, preventing future, and repairing the historic oppression of frontline and vulnerable communities.

One of the most compelling pieces of the proposal is that it tackles the human and societal aspects of climate change. While life – whether in the forms of rats, cockroaches, or bacteria – likely will survive long after we’re gone, the fabrics of human society depend on us getting this right. 🌱

## Featured Artist Joane Cardinal-Schubert

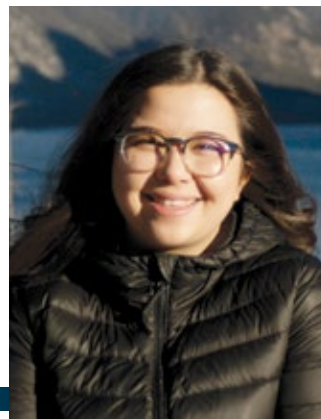


*Grassy Lakes.*  
This reinterpretation  
of pictographs at  
Grassy Lakes is  
mixed media on  
paper, 20 ¾ x 28 ¾ in.  
Courtesy of a  
private collection

# Missed Connections:

## A mutual love for wilderness lost in the political jungle

By Grace Wark, AWA Conservation Specialist



You: Love the outdoors, the re-imagined Great Frontier, and spending starlit weekend nights by the campfire.

Me: Fond of quiet, misty mornings, amateur outdoor photography, and fall hikes across the foothills.

Personals>Missed Connections:  
“A mutual love for wilderness lost in the political jungle”



**W**ith quite a bit in common, you would think that we would be fast friends, inextricably tied by our mutual love for fresh mountain air, big skies, and wide open spaces. However, it isn't quite so clear cut.

Our shared affinity for nature isn't uncommon; many of us have similar childhood memories of piling into the backseat of the family car and being whisked away to some far off dirt road, backpacks full of granola bars, extra socks and juice boxes. This is where our shared love story begins: camping under the stars, kayaking on a still lake, or enjoying a spectacular view on a mountain hike.

Love for wild spaces is common ground for many Albertans. The Government of Alberta's 2013 Recreation survey noted the importance of physical and outdoor activities to Albertans. Parks and outdoor spaces were the locations most of the participants preferred as the setting for their recreation. So many of us take pride in our Eastern Slopes, our rolling foothills, and our vast prairies. These landscapes are a part of our heritage; our affection for them helps to define who

we are; we boast about them to our out-of-town family and friends, and rush to greet them on the long weekends.

Where differences start to emerge is when we turn to how to manage those spaces. Our mutual love of wilderness begins to disintegrate when we put that perspective in the context of varying political, cultural, or economic priorities. While we all seem to share the common thread of love for wilderness, the priorities we assign to these other dimensions of our lives lead us down different pathways.

### What do you mean “wilderness”?

Scholars Bruce Braun and Noel Castree have explored the idea that nature or wilderness can be interpreted in many ways; those interpretations will impact our human-nature interactions differently. In their book *Remaking Reality* (2005), they posit that while nature is a physical space for interaction, we create social structures around it based on our personal values, socio-economic imperatives, and cultural backgrounds. In environmentally uncertain

and politically divisive times like these, understanding these social structures can help us to understand where we diverge on the political spectrum and to discover where we share common ground when it comes to wilderness conservation.

In the context of Alberta, I've found there are a few dominant camps in how we approach wilderness; they vary in how much intrusiveness they accept with respect to human interaction with the landscape. Starting in the late-nineteenth and early-twentieth centuries, the North American wilderness paradigm underwent a dramatic shift. Where wilderness spaces were historically seen as vast, barren wastelands to be tamed and conquered, they were suddenly being depicted as unspoiled, almost-holy places for exploration and refuge. From the reflections of great naturalists like Henry David Thoreau and John Muir to the creation of National Parks, the twentieth century popularized a more romantic notion of wilderness as being powerful, pristine, and often people-free.

This wilderness legacy still animates modern-day conservation, often expressed as a call for the complete vacancy of public lands and protected areas to sustain sensitive ecosystems. However, contrary to popular belief, this aspiration seldom, if ever, has been realized. While conservation has a complex history of human expulsion from protected areas, people have always been and will continue to be part of the landscape. Modern day initiatives align more with scaling back harmful activities while giving greater consideration to individual and community interactions with wilderness spaces.





*Our cultural footprint on the landscape is undeniable. After a two-hour hike into the Crowsnest Pass, I stopped to enjoy a cloud cresting over a mountain peak. What felt like a moment of reflection in a far-distant, unoccupied wild space, was actually not so far removed from humanity. Not shown in the image are the hiking trails on the mountainside, the cutblocks on the parallel slope or the network of roads that allowed us access to the area. PHOTO: © G. WARK*

More than before, conservation initiatives are exploring the relationship between nature and culture. Questions like the following are more likely to be posed today than they would have been a generation or more ago: What degree of recreation should be allowed on the landscape to help garner public support for protected areas? What role do protected areas play in enabling treaty rights and traditional land uses? And which cultural elements or practices can the landscape sustain? These questions in turn generate larger curiosities about the role we play in our wilderness and the degree to which fostering love for wilderness is a cultural experience.

At this point in time, certain social and cultural activities have become so embedded into Alberta's landscapes that we now associate them with particular spaces. To focus on recreational groups, there are many well-known sites and trails either stewarded or associated with particular activities.

We have groups like the Great Divide Trail Association (GDTA), long-time stewards of 1,100 kilometres of hiking trails, straddling the Alberta-British Columbia border. The members of this association frequently take to the trails to remove trees, install signs, and ensure maps are up-to-date; they provide an important voluntary service to facilitate a shared wilderness experience. At the same time, other regions have become well-known hotspots for motorized recreation. Off-road culture has become hugely popular in Alberta. In recent years, areas like McLean Creek or Waiparous have become footholds for off highway vehicle users, connecting through community meetups, rallies and backcountry camping.

These are examples of the social activities and practices that we've built around and into our wilderness spaces, and from those social aspects we can begin to make inferences about wilderness priorities.

## **The politics of wilderness**

In the wake of the Bighorn Country proposal, the relationship between politics and wilderness conservation has been at the top of my mind. I've noticed that those voicing their opinion on the proposal often share values with their oppositional counterparts. What most want for the area are safe spaces to recreate, robust trail networks, useable facilities, and conservation officers to ensure illegal activities don't take place. While these are likely outcomes of the proposal, emotion and politics have taken hold in such a way that the Bighorn has become a provincial battleground, rife with misinformation and misunderstanding.

A set of common concerns often accompany proposals to protect landscapes and limit what we can do on those landscapes. One comes from traditional understandings of the "good economy" – a fear that well-es-



tablished industries such as forestry or oil/gas will be driven off the land. This fear was prevalent in the Bighorn debate despite the fact that established industries wouldn't be affected. Misinformation about the Bighorn proposal's impact on industry was used politically to create the perception of economic loss, to create anxiety among locals.

Another concern is about recreation. How will land management decisions impact the what, where, and how associated with my time in nature? Naturally, communities establish connections with their local wilderness spaces and often assume ownership over their favourite mountain meadows and secret camping spots. These are the spaces that make our wilderness adventures special, and it can be frightening when we feel the activities we associate with those spaces, instilled with memories and emotions, are threatened by change.

For example, when I was growing up my parents often took us to Nose Hill Park. There, I had a favourite glacial erratic on the east side of the park. I knew every line and foothold of that lumpy, grey rock; I could tell you which graffiti tags were new and where the ideal spot was to sit if you wanted a view of the city skyline. While city parks are seen as more developed spaces than your public lands and provincial parks, we still had conflicting feelings when a paved trail network was proposed for the park. Would the pathway go near *our* favourite spot? Would it help erode what made that erratic so special? I didn't like having to wait when another party of people arrived at the erratic first, making us circle back for our turn to climb, so the thought of a paved trail network bringing in more traffic definitely wasn't welcome. At the same time, this place wasn't ours alone. Could these paths make the park more accessible? Would they help reduce the erosion of our other favourite footpaths? It became difficult to discern the benefits a paved pathway within the park might offer because we had created a personal connection with the space. It was difficult not to react emotionally.

This is where better combinations of knowledge and process may improve our

understanding. While the above concerns are often addressed within proposals using mechanisms like transition periods, diversified economies or alternative areas to sustain recreation, breaching the emotional barrier isn't easy. When government decisions become personal, it's hard not to let emotion colour how we process information. And this difficulty may be used by those, on all sides of an issue, in order to try to establish the political support and legitimacy they seek. The challenge is for governments to marry sound science and accurate information with processes that provide sufficient time for consultation and try to establish consensus. This seems to be required if governments want to quell fears in some quarters over protecting wild spaces.

This challenge isn't made easier given the lack of accountability in the often fast-paced and sensationalized world of digital media today. We've come to rely on social media platforms as our primary sources of information. Where information sharing was previously carried out through news sources and word of mouth, information has now become as instant as it is disposable. I myself am guilty of skimming across headlines during my morning coffee; quick to react before I've had time to digest, or question/interrogate, what I've read. On our respective social media platforms, we also tend to surround ourselves with similar people, leaving fewer opportunities to think critically about the information sources we're seeing on our feeds. We'll naturally follow news sources that report on our areas of interest, align with our political views and side with our perspective on issues, skewing how information is presented and adding an additional layer of bias. "Group think" isn't a new phenomenon but the way many use social media may be increasing its presence.

## Challenges and opportunities

If we hope to generate a broader consensus on the need to protect landscapes, we need to remind ourselves what we have in common with our "opponents" and what are the challenges and opportunities in managing our wilderness spaces.

Overall I'm positive that the opportunities are still abundant. Our government is arguably more open than it has ever been before, taking strides to become more transparent and engaging a variety of groups in land-use decisions. There is still progress to be made, but compared to a generation ago there's a far greater expectation for transparent and accountable governments and they're slowly moving to improve on those fronts.

The greatest opportunity lies in trying to find the missing link in public acceptance for our wild spaces. Rather than playing to a particular group of people, governments should seek to distill the passion that we see among many user groups to achieve progress in managing our wild spaces. This may seem like a daunting task. It likely is and I certainly don't have all the answers to how we perform it well. But, I think we could do far worse than follow the advice offered by William Cronon, one of my favourite environmental historians. Cronon suggests that we take time to remember our position, as people, in wilderness, and by doing so circle back to our shared respect and admiration for the spaces we love.

"Learning to honor the wild—learning to remember and acknowledge the autonomy of the other—means striving for critical self-consciousness in all of our actions. It means the deep reflection and respect must accompany each act of use, and means too that we must always consider the possibility of non-use."

— William Cronon, 1995

The first step is to admit that we have more in common than we often care to admit, followed thereafter by reassessing how much we really know about each other and our relationship with wilderness spaces. In this way we can maybe make a few more connections as we work towards our mutual goal of *having* a wilderness to love. 🐾

# Bighorn Country – a Bizarre Fall and Winter

By Vivian Pharis, AWA Emeritus Board Member



**B**izarrely this past fall, the possibility of Bighorn Country was sprung upon us. It appeared as a complex plan covering a massive land area. After 50 years of working to see this grand and wondrous idea realized, at least for the approximately 4,000 square kilometres of alpine and subalpine that AWA calls the Bighorn Wildland, I should have felt relief and joy. I didn't.

Selfishly, I first thought of the loss that human "discovery" would bring to my favourite Eastern Slopes wilds where for decades, I had roamed freely by foot and horseback. But, I was also struck by the sheer size of the area slated to be parks and public land use zones – not least the huge chunk of highly industrialized and recreationally ransacked foothills lands to the east of the Trunk Road. I think, lumping the industry-free, pristine alpine/subalpine headwaters area with the much larger very compromised eastern lands would, if implemented, become a management nightmare. The origins and

the intended uses of the two regions are just too different to live together well in one plan. Trying to control the madness of the West Country would be controversial, and could possibly sink the whole, grand plan.

Still, the carrot of possibility is hard to resist and AWA did its best this winter to arouse public support for the government's plan. From January until the consultation window closed, I had the opportunity to phone about 300 Edmonton area AWA members to encourage their support for Bighorn Country. Most people were away, so I left a detailed message and went on to the next name on my list. I spoke to about 125 of the 300 people on my list. Of those I talked to, about 50 to 60 were well informed and some had completed the daunting government survey. Roughly another 50 knew something of the plan and area – their drinking water source or opposition to the government's proposal from motorized recreationists. Most of these people were thankful for being called and helped to participate. I was startled that

about 10 of the 300 knew nothing of the area or the plan and that a few had no interest in the proposal, even though the Bighorn is headwaters for their water. Of Edmonton AWA members, probably half held passionate views in favour of protection for the headwaters area and management controls for the larger area, and another quarter had enough concerns to write to government.

I participated in the first phone survey conducted by Minister Shannon Phillips and estimate that 90 percent of callers that night were in favor of establishing Bighorn Country. On February 8th Christyann Olson and I were invited to one of the plan's last "in house" meetings in Red Deer. About 10 civil servants who would implement the plan were there, three facilitators and about 40 members of the public. It was an eclectic crowd. It included a few conservationists, a contingent of Drayton Valley industry spokespersons, several trappers, and others from the area interested in recreational tourism. Despite good facilitation, the participants from Drayton Valley tried to dominate the session. But, once others began to speak the climate improved for the possibilities of Bighorn Country and what sort of management could proceed. Surprisingly, after 3 hours, the most outspoken Drayton Valley representative stood and said: "Drayton Valley still wants out of this plan, but of the meetings I've attended, this is the first time I've heard the other side of things. Some people have reasonable things to say."

I hoped then that we could find a compromise that will deliver the wildland protections AWA has so long advocated for in Bighorn Country. 🐾



PHOTO: © R. PHARIS



# Cheating Off Your Neighbour:

## How a B.C. Report Could Help Alberta Pass the Species at Risk Test

By Nissa Petterson, AWA Conservation Specialist



**G**lobal biodiversity is decreasing. Our growing recognition that biodiversity is inherently related to our own health and prosperity has increased pressure on nations to address this issue, to preserve biodiversity. Given the future of our species may depend as much on biodiversity as that of any other, conserving the natural structure and functioning of ecosystems should have a very high priority. Too often this is not the case.

Despite overwhelming evidence, Western/industrial societies generally prioritize using the land over its conservation. In Canada and Alberta, we often favour more investment in and development of fossil fuel energy over climate change strategies that reduce absolute emissions sharply. I don't think it's unfair to suggest that we often indulge wants rather than needs. This rationale is apparent in the framework of numerous policies and legislation for species at risk throughout Canada; a skeleton exists, but its teeth have been pulled for the benefit of economic growth.

Alberta, unlike a majority of provinces, doesn't have legislation dedicated to species at risk. Rather, the province tacked on the designation and protection of endangered species in Alberta to the *Wildlife Act* in 1996. However, the Act is far from effective as a conservation tool for protecting species at risk. The root of the problem? It is the absence of legal obligation and duty to protect those species. In light of those absences, as Fluker noted in 2012, the legislation is ineffective.

As it currently stands, the *Act* requires the Minister of Alberta Environment and Parks

to create and maintain an advisory body, the Endangered Species Conservation Committee (ESCC). The Committee serves two purposes: 1) to make recommendations to the Minister on which species should be listed as endangered, and 2) to develop and integrate recovery plans for designated species. However, this system does not deliver enough of value to threatened and endangered species. The Minister is not obligated to accept the recommendations of the ESCC, nor is there any legal requirement for recovery strategies to be developed and implemented within a meaningful timeline. Additionally, there is no legislative obligation to identify and protect critical habitat for Alberta's species at risk.

Evidence that this noncompulsory system is ineffective is abundant. Consider the feeble progress made towards conserving Alberta's umbrella species. For example, populations of woodland caribou continue to dwindle in part because the province won't designate provincial lands as critical habitat. Furthermore, land managers have refused to follow expert opinion and cap the amount of surface disturbance from resource development within caribou ranges.

However, Alberta is not the only jurisdiction that has failed to implement effective legislation to manage species at risk on provincial lands. For decades, British Columbia has struggled to manage the most biodiverse landscape within our nation; current estimates by the B.C. Conservation Data Center (BCCDC) indicate that 1,807 wildlife species are in decline within the province. To date, provincial managers have relied on an ensemble of policies and legislation such as

the *Wildlife Act* (1996), the *Forest & Range Practices Act* (2002), and the *Oil and Gas Activities Act* (2008) to guide management strategies rather than creating and exercising legislation solely dedicated to species at risk. A significant difference between Alberta and B.C. may be that, in 2017, B.C. declared it would develop a specific law to manage endangered species.

In October 2018, a group of scientific and legal experts released a report, *Protecting biodiversity in British Columbia: Recommendations for an endangered species law in B.C.* Written by a species at risk expert panel, the report suggested that B.C. establish a framework that mirrors certain aspects of the *Species at Risk Act* (SARA) and Committee on the Status of Endangered Wildlife in Canada (COSEWIC). The suggested framework includes specific revisions that could assist in navigating major challenges in managing species at risk on B.C. provincial lands. While the solution to combating the decline of biodiversity is multifaceted and context-dependent, the report makes several recommendations to combat deficiencies with respect to transparency, effectiveness, and accountability; these deficiencies have hindered the effective management of species at risk within most provinces.

The report recommends a legislative structure and process similar to that of the federal *Species at Risk Act* (SARA). The primary recommendation is to create an independent Oversight Committee, similar to COSEWIC, that would be responsible for: 1) assessing and listing of species that require attention on a provincial level (in addition to adopting federal listed species), 2) coordinating



Three of Alberta's species at risk that could benefit from rethinking the government's approach to the fate of endangered species: Bull trout PHOTO: © R. BLANCHARD; Woodland caribou PHOTO: © C. CAMPBELL; Greater sage-grouse PHOTO: © C. OLSON.

multiple-species recovery strategies for when ranges/habitats overlap, 3) describing and coordinating the planning process for species at risk by integrating multiple stakeholder views, 4) nominating and establishing specific species Recovery Teams, and finally, 5) providing public progress reports and evaluation of the effectiveness of recovery strategies.

The report's proposed introduction of Recovery Teams would introduce an additional layer of expertise to help refine proposed actions and strategies recommended by the Oversight Committee. These teams would help develop a set of guidelines, which would: 1) incorporate recovery strategies with action plans that would be prioritized

based on the estimated effectiveness and costs, 2) set out clear and measurable objectives, 3) identify critical habitat and harmful activities towards species, and 4) establish standards to which subsequent monitoring and public updating must conform. These prioritized guidelines would then become a living document to be implemented and administered by the B.C. government.

What seems to me to be novel about this report's thrust is the increased reliance on non-governmental conservation experts to develop recovery strategies and action plans. The provincial government's role is narrowed to implementing these *externally* developed recovery strategies and action plans. This approach would prioritize conservation

arguments and may minimize political influences. It promises to foster an increase in transparency, predictability, efficiency, and accountability for the management of species at risk. This system is quite similar to what is in place with COSEWIC. However, it adds the condition that the *required* development of the recovery and action plans take place outside of the political realm.

Given the urgent need to take action, there are some other recommendations from the report that could be fast tracked and improve the rate of recovery for species at risk within provinces in the short term.

First, and perhaps most importantly, the report suggests adopting an automatic listing process for B.C. species that are listed



federally under SARA. This would be in addition to separately assessing and designating species that may require special attention within the province. The automatic listing approach circumvents duplication. It would eliminate the need for a second, provincial re-evaluation. Given COSEWIC's credibility, based in part on its use of the best available data and research techniques, a second, provincial re-evaluation doesn't strike me as a necessary or efficient use of time and resources. An automatic listing process would also allow for actions towards recovery to be implemented sooner as progress would no longer be delayed by awaiting provincial Ministerial decisions on listing and protecting a federally listed species. Many species within Alberta, such as woodland caribou and greater sage-grouse, could have benefited significantly under an automatic listing process, and might have altered the imperiled course they find themselves on today.

The report also suggests amalgamating the Recovery Strategy and Action planning into one stage with a strict, delimited timeline. The B.C. experts panel calls this Recovery Action Prioritization (RAP) and it differs from the two-pronged approach of SARA. Currently under SARA, the development of a Recovery Strategy is a separate process

from the development of the Action Plan. While this process is intended to enable differentiation between scientific recommendations and management decisions granting the public a more transparent and predictable process, it has not always been as time sensitive as it should be.

For example, in 2017 the average time for the development for federal Recovery Strategies was more than six years – twice the amount of time legally allotted. Furthermore, some Action Plans remain incomplete for many listed species years after recovery strategies were published. Prominent examples of this failure to protect would include westslope cutthroat trout and limber pine. With recovery teams overseeing the merged, singular approach of the RAP, the report believes it would facilitate the simultaneous collaboration of all experts (biological, socioeconomic, etc.). Guidelines would be immediately available for implementation by the provincial government. The streamlined process of RAP would not only address concerns related to timeliness, but may create a more efficient process by eliciting all expert opinions at once.

Turning back to Alberta, the conservation weaknesses of the *Wildlife Act* haven't gone unnoticed; experts such as the University of

Calgary's Shaun Fluker have pointed them out and urged government to correct them. Despite such efforts, provincial managers and political leaders appear reluctant to act. Plans to strengthen or develop species at risk legislation may be coming in B.C.; there are few to no signs they are even being thought about in Alberta.

Outside of Alberta and British Columbia, the Ford government of Ontario recently announced a review of the *Endangered Species Act*, stating that the current act is "unclear, administratively burdensome...and (creates) barriers to economic development." Ontario's *Endangered Species Act* has already endured a round of gutting; in 2013, the government instilled a series of regulations to exempt the activities of certain industries such as forestry and hydro in relation to species at risk conservation. Now it seems that the Ford government is keen on further relaxing the Act for short-term economic gain, essentially silencing the call to action to conserve our nation's biodiversity.

Removing the economic and political influences that have impaired species at risk legislation is key to empowering meaningful conservation initiatives. If we prioritize biodiversity, we must prioritize such removal. There are no other alternatives. ▲

## Featured Artist Joane Cardinal-Schubert

Original artwork entitled *Oh Please Preserve the Songs of our Ancestors*. Oil/Conte on Rag, 30 x 40 in.



# A Boreal Forest Divided Cannot Stand: A Cumulative Effects Story

By Mai-Linh Huynh



**C**umulative effects of resource development to Alberta's expansive Boreal region deserves its own euphemism as it's a well publicized matter that decision makers continue to ignore or struggle to grasp. Why, you wonder? Because effective management of cumulative effects requires institutional change, both in policy and law, that has been persistently rejected due to Alberta's economic priorities.

In the Lower Athabasca region, University of Saskatchewan researchers Joshua Cronmiller and Bram Noble theorized in 2018 that institutional arrangements are the main cause of "stifled" cumulative effects management. They made their claim after reviewing past and current studies and programs geared to monitor long-term environmental effects for the region. Institutional arrangements are critical for providing decision makers with the foundation to create and implement policies. They also are vital for delegating or sharing decision-making power with Indigenous groups, non-government organizations, and private sector groups to support and implement these policies.

"The Lower Athabasca is probably one of the most monitored ecosystems in North America. There is room for science improvement, but institutional challenges tend to pose the most enduring and significant constraints to long-term monitoring programs..."

- Cronmiller & Noble 2018, *Environmental Reviews* 26(2).

Cronmiller and Noble stated that discontinuous support for environmental monitoring in the region resulted from shifting priorities, short term commitments, lack of meaningful and balanced stakeholder engagement, and unclear governance. Such discontinuity has unquestionably led us down the rabbit hole, having us anxiously wonder "what's really happening to our Boreal forest?"

With the state of uncertainty and lack of credible scientific long-term environmental monitoring data, how can one begin to tell the story of cumulative effects on the Boreal?

## Landscape Impacts to Alberta's Boreal

Early last year, the Alberta Biodiversity Monitoring Institute (ABMI) updated its online reporting about the status and trend of human footprint. Human footprint, measured as land area directly altered by human activities, provides a good indication of direct habitat loss. Information is reported by ecological and Land-use Framework planning regional boundaries.

As of 2016, human footprint occupied 18.34 percent or 69,884 km<sup>2</sup> of the Boreal region, a region that occupies 58 percent or 381,047 km<sup>2</sup> of the province. Major footprint types in the Boreal were agriculture (11.27 percent or 7,876km<sup>2</sup>) followed by forestry (3.50 percent or 2,446km<sup>2</sup>) and energy (1.97 percent, or 1,377km<sup>2</sup>).

ABMI's trend data from 1999 to 2015 showed that human footprint increased by 3.30 percent in the Boreal (Figure 1). This increase came through the expansion in forestry (1.91 percent increase) and in ag-

riculture and energy (both a 0.5 percent increase).

Footprint information is useful in a number of ways. For example, ABMI can determine the effect of a footprint on a species per unit area by assessing the strength of the footprint's effect (positive, negative, neutral), degree to which the footprint occurs in the species' suitable habitat, and the total area of the footprint. Footprint data also serve as a baseline for evaluating future land-use changes in Alberta. ABMI notes that thresholds related to human footprint and for protecting undisturbed native habitat are expected to be established and that availability of baseline human footprint information is essential for this to occur.

As shown in the maps in Figure 2, Webster et al. in 2015 visually portrayed the spatial extent of total linear disturbance, active oil wells, roads, and seismic lines - *pipelines and transmission lines were not included in their analysis*. Clearly, linear disturbances are much more pervasive in Alberta than other parts of Canada. Although these linear footprints do not occupy large total areas compared to mining, agriculture or forestry, they can result in significant indirect habitat loss for species requiring intact forests and wetlands. The habitat loss is caused by fragmentation and habitat changes from being in close proximity to the disturbance. These 'edge effects' include changes in noise levels, natural and artificial light, air quality, groundwater, and surface water. More research is needed to inform resource management and restoration of these disturbances for minimizing their long-term effects on the Boreal and



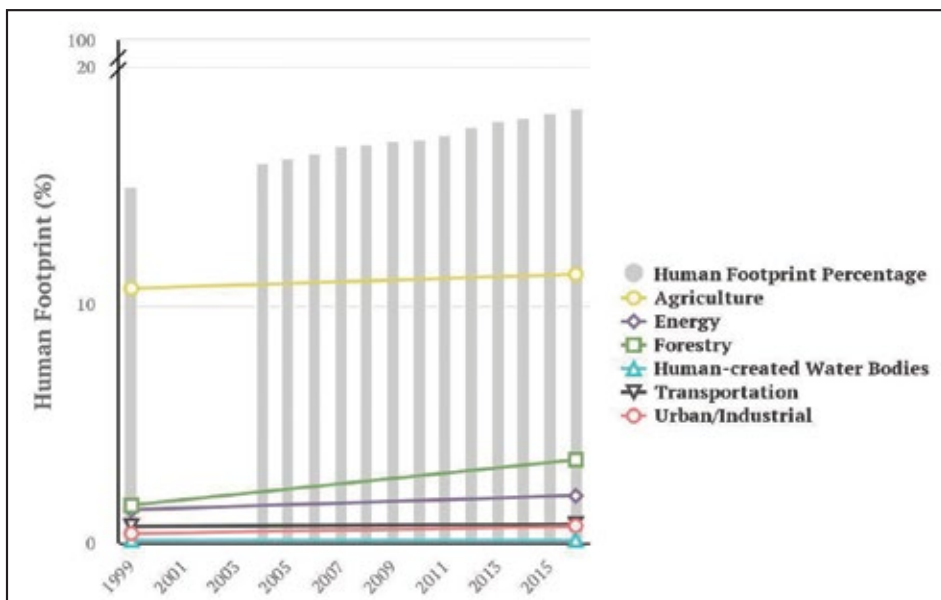


Figure 1: Trend in the percentage area of total human footprint, and by human footprint category in the Boreal Forest Natural Region between 1999 and 2016. SOURCE: ABMI, 2018.

for restoring landscape connectivity and ecological resilience.

Examining structural indicators such as footprint area or density alone cannot tell the full story on the Boreal's state of ecosystem integrity and health. They also cannot measure all of the potential anthropogenic impacts that might affect the Boreal ecosys-

tem which can run the risk of an environmental issue going undetected (e.g. effects of invasive species, wildlife toxicology).

Assessing cumulative effects on the Boreal requires careful consideration of various factors such as spatial scale, ecological focus (whether it be physiological responses, population impacts, ecosystem impacts)

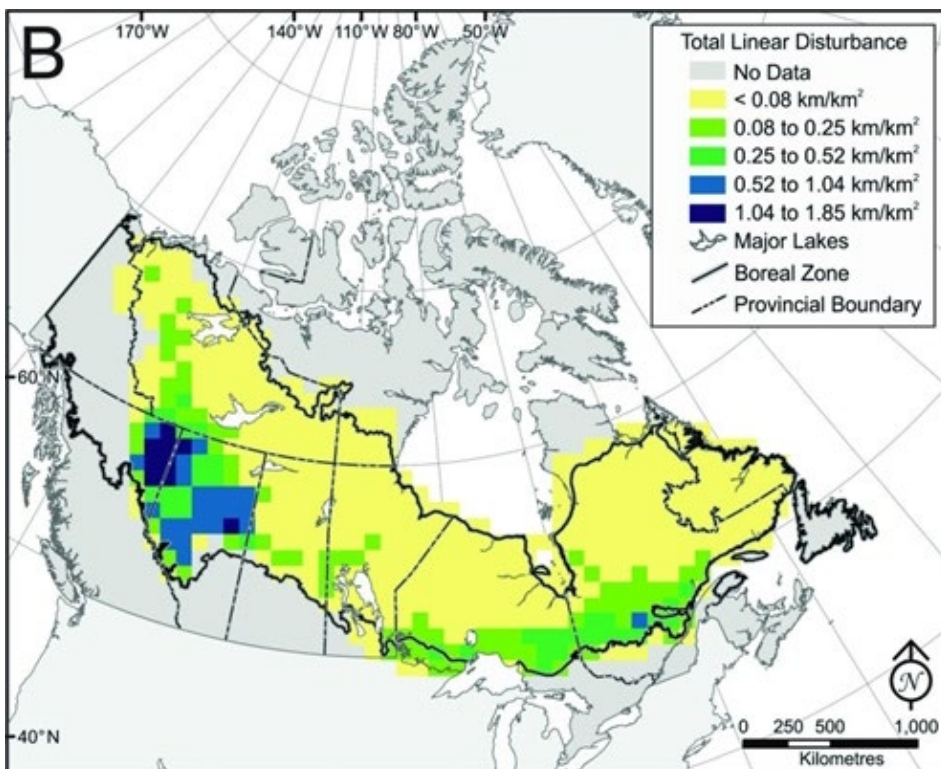


Figure 2: Total linear disturbances SOURCE: ENVIRONMENT CANADA, ANTHROPOGENIC DISTURBANCES ACROSS THE CANADIAN BOREAL ECOSYSTEM COLLECTED FROM 2008 TO 2010, LANDSAT IMAGERY GRIDDED TO 1 KM RESOLUTION. CITED BY WEBSTER ET AL. 2015, 54.

and ecological complexities (such as synergistic and antagonistic effects, impacts across space and time). Current academic research is looking to uncover innovative methods to address these challenges of cumulative effects assessment. Scientists Emma Hodgson and Benjamin Halpern suggested in 2018 that a combination of methods is a more useful approach for addressing ecological complexity. For example, multi-model comparisons could address uncertainty, a common issue with modelling, and provide a more holistic understanding of ecosystem impacts. Another 2018 study, this one by Jason Fisher and A. Cole Burton, described the 'common mammal community' of their northeast Alberta study region using data from a network of camera 'traps' along with species distribution models. They found this approach useful for assessing mammal community change and altered landscape function in the oil sands region, which was both an outcome and a cause of biodiversity loss.

Although cumulative effects research on the Boreal is currently limited, Paul Pickell (2015) believes examining the historical range-of-variability (HRV), (i.e. variability caused by historical fire disturbances) could provide insights into knowledge gaps and areas more at risk in the Boreal. They suggest that anthropogenic disturbance patterns have been outside the HRV for several decades and that, despite recent efforts by forest managers to implement HRV-based forestry practices, the energy sector activity may be overwhelming any concomitant change towards HRV from forest management.

## Cumulative Effects on Boreal Wildlife

The ultimate story of the Boreal would tell us about its adaptive capacity or resilience to both cumulative natural and anthropogenic disturbances. Although scientifically defensible long-term monitoring information is currently limited, the latest research on Boreal biological indicators provides useful insights about ecosystem processes as well as potential solutions for minimiz-

ing and mitigating cumulative effects.

Boreal wildlife responds to human disturbance in various ways. This variety provides crucial information on how the Boreal ecosystem is functioning. Such information could be used to help decision makers set ecological thresholds for cumulative effects management. However, there are challenges in assessing species' response to disturbance. These challenges include: determining abundance estimates together with natural variability, developing the ability to distinguish human-caused effects from natural variation, and establishing agreement on a reference or baseline condition that suits all interested parties (e.g. pre-industrial, pre-European settlement, or another specified period).

Woodland caribou is the most well-known example of a Boreal species' response to disturbance. Caribou are found to avoid areas with linear disturbances like roads and seismic lines due to the increased prevalence of predators (for example, wolves) and the associated increased mortality risk. Schneider et al wrote in 2010 that, if habitat loss trends continue, woodland caribou extirpation in Alberta is predicted over the next 70 years and the East Side of the Athabasca River caribou extirpation is estimated within the next three decades.

Deer and coyote response to disturbance in the Boreal provides a good example of how ecological changes can have positive effects to a species. University of Alberta researchers Erin Bayne, Stan Boutin, and Richard Moses found in 2004 that human disturbance is driving these animals to expand their range in the Boreal forest. This expansion could potentially result in altered predator-prey dynamics, new competitive interactions, and changes in the feeding patterns of herbivores. The above-mentioned research by Fisher and Burton reinforced this observation. Their camera trapping data showed white-tailed deer and coyotes exhibiting a positive response to disturbance associated with linear features and areas converted from mature forest to early post-disturbance vegetation in the oil sands region.

ABMI also has publicly available research data relating to human footprint type on the predicted relative abundance of a species. Their impressive online reports and infographics are useful in understanding a species status and relative abundance in the Boreal. Species reported by ABMI include: Canada lynx, elk, gray wolf, marten/fisher (weasels), and mink.

ABMI finds that Canada Lynx, for example, benefit from young to mid-succession forests that have originated from either fire or logging. These stands provide sufficient cover and prey. Canada Lynx were observed less at their southern range as a result of poor habitat quality from human development (e.g. conversion of boreal forest to agriculture and increased road densities), increased competition with coyotes, and the lower availability of its main prey, the snowshoe hare. Fisher and Burton also found similar results in their camera trapping research in the oil sands region where Canada Lynx positively responded to the conversion from mature to early succession forest.

I also will refer to ABMI's conclusions about the relative abundance of Canada lynx, marten, and fisher between reference and current conditions. Canada Lynx has shifted further into the interior of the Boreal, away from the expansion of agriculture and urban areas in the Peace region and southern Boreal. In contrast, ABMI's comparative abundance maps for marten and fisher portray a predicted decline in relative abundance compared to reference conditions. Marten and fisher are most commonly found in mature/old coniferous and mixedwood stands that provide habitat structure for meeting their foraging and cover requirements. Those requirements include large trees and snags, coarse-woody debris, and understory vegetation. ABMI reported negative unit effects on marten and fisher from all human footprint types. The energy footprint had the strongest negative unit effect.

Fisher and Burton's study also discusses Boreal species experiencing negative consequences to the changes in habitat caused by human disturbances in the oil sands region.

They note that moose, black bear, red fox, and fisher populations are decreasing while other species are benefiting from human disturbances (i.e. white-tailed deer, wolf, coyote, and lynx) and are increasing in population. Their research depicts an emerging community-level shift in relative abundance and distribution of common mammals in an oil sands landscape, and a large-scale restructuring of spatial ecological processes caused by human disturbances.

## Where do we go from here?

The optimist in me wishes there will be a happy ending to this story. However, the story's ending remains open to all possibilities until we better understand cumulative effects in the Boreal and about the natural processes and the drivers of change. That knowledge may produce better and more well-informed decision making.

A few big victories fuel my optimism. In May 2018, the Government of Alberta formally announced the creation or expansion of five Wildland Provincial Parks, most of which were committed to in the 2012 Lower Athabasca Regional Plan (LARP), adding more than 1.36 million hectares of new protected land in the Boreal. With the addition of these parks that are contiguous with Wood Buffalo National Park, Alberta is now home to the largest Boreal protected forest in the world. In an adjacent area, the 162,000 hectare Kitaskino Nuwenêné Wildland Provincial Park was created in March 2019.

According to Scott Duguid, Executive Director of the Land Use Secretariat of Alberta Environment and Parks, work continues on completing a Lower Athabasca Region Biodiversity Management Framework. This ongoing work includes developing and refining indicator methods and engagement with Indigenous communities. This Framework is intended to support the achievement of the regional biodiversity outcome where landscapes are managed to maintain ecosystem function and biodiversity. It also intends to add to Alberta's natural resource management system by providing open, transparent information on a suite of bio-



diversity indicators that informs land-use decision-making in the region.

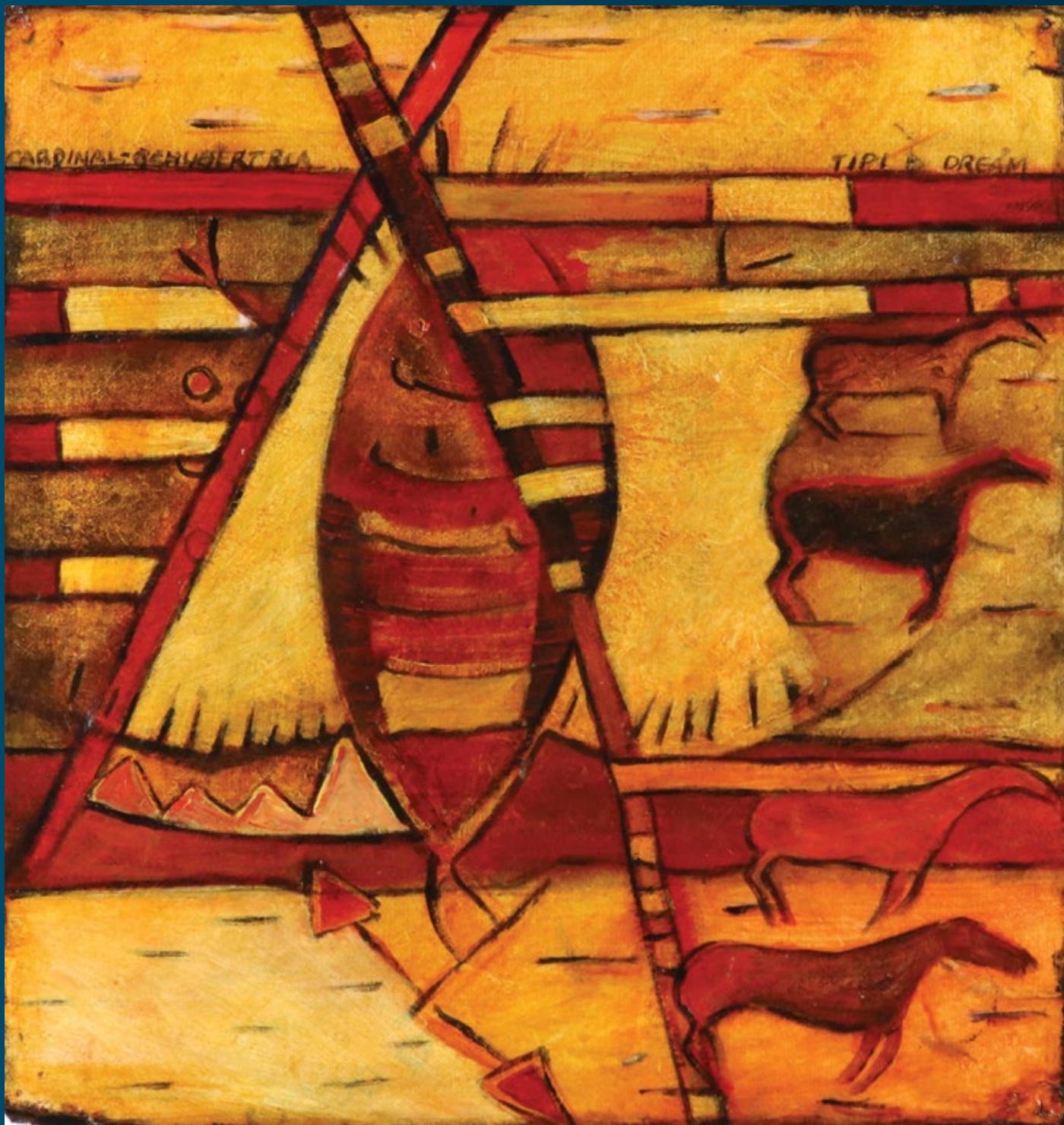
As land-use planning initiatives progress and new programs to study the Boreal emerge, there is unquestionable doubt about whether institutional arrangements can move forward from the “stifling” man-

agement issues of the past. Sustaining Canada’s boreal ecosystems and the ecological services they provide for future generations requires institutional change. Empowering local governments, stakeholders, and Indigenous peoples are part of this change along with our own individual responsibilities, as

consumers and citizens, in ensuring sustainable development remains top priority. 🐾

*Mai-Linh is a recent volunteer researcher at AWA and has significant former regulatory experience in federal environmental assessment. She enjoys traveling near and afar to discover and experience Earth’s natural wonders.*

## Featured Artist Joane Cardinal-Schubert



*Tipi Dream. Acrylic on canvas, 12 ¾ x 12 ¼ in. Courtesy of a private collection*



# Horseshoe Canyon:

## Scarring, Endangering A Gem of the Badlands

By Ian Urquhart



**S**tewardship...it's a value as old as conservation itself. Aldo Leopold's idea of a "land ethic" is one important version of this stewardship. It's nothing less than the conviction we have a moral responsibility to the natural world. Or, as the Aldo Leopold Foundation put it: "At its core, the idea of a land ethic is simply

carrying: about people, about land, and about strengthening the relationships between them." Over the years AWA has recognized and applauded families and institutions such as the Biggs, the Taylors, the Heydlauffs, and the Waldron Ranch for their stewardship of the land. They have practiced the land ethic for the betterment of all.

But what happens to stewardship concerns and efforts in the event good stewards decide they need to sell their properties? That's the question at the heart of this article.

What follows is the developing story of the Lowen family. Edward Thomas (Jack) Lowen purchased part of Horseshoe Can-



*Tent encampment with some of its attendant vehicles in Horseshoe Canyon, Fall 2018. Note the extensive rutting of the terrain caused by the vehicular traffic.*  
PHOTO: © J. GOODINE





Trucks, side by sides, tents, earth mover, forklift in the canyon – none from the Cretaceous period. PHOTO: © C. GROENEVELD

yon – a spectacular example of Alberta’s badlands geography in the 1940s. The property stayed in the family for the next 70 years. Jack Sr. passed it on to his sons Ralph and Jack Jr. The Nature Conservancy of Canada (NCC) describes the canyon, located just west of Drumheller, as “one of the best-known sites in the Canadian Badlands.” For NCC, the aesthetics plus the canyon’s representation of prairie, wooded coulee slopes, and badlands habitats make Horseshoe Canyon ecologically significant. It’s a beautiful, significant site.

Several years ago the children of Ralph and Jack Jr. came to a hard decision – they would sell their portion of the canyon to Kneehill County. The children – Judy Goodine, Cindy Groeneveld, Janice Blackie-Goodine, and Janice’s son Sean Blackie – endeavoured to ensure that whoever bought their lands would be obliged to preserve them in their natural state. By virtue of this, the developer who approached the family with his dream of building a golf course in the canyon was never invited to make an offer on the property. Protection,

not profit, was key to their outlook.

These landowners thought Kneehill County, the local government west/north-west of Drumheller, would respect their wishes. In a September 2018 letter to the County, the lawyer for the Lowen children wrote: “It was represented to my clients that the County’s decision in purchasing the lands was to preserve the lands in their natural state. It was this representation that persuaded my clients to sell the property to the County.” To try to ensure that Kneehill County upheld its end of the bargain, the Lowen family insisted on attaching a restrictive covenant to the sale of their property. That covenant stated, in part, that “the Lands are to be protected and preserved for environmental and conservation purposes.” To date, the County certainly hasn’t met the family’s expectations of what that phrase means and what would be done to their property. It may be up to the courts to decide if Kneehill County has fulfilled its legal obligations under this covenant.

## The Lost World

This story begins roughly 70 million years ago in the late Cretaceous period. Then dozens of dinosaur species, including the *Albertosaurus* – a smaller relative of *Tyrannosaurus Rex*, roamed the badlands bordering the Red Deer River valley. In what we now call the Horseshoe Canyon Formation, the dinosaurs lived and died in diverse marine habitats that then were the norm. The first recorded Western discovery of an *Albertosaurus* fossil in this region occurred in the late 19th Century. In June 1884, as recounted by Tanke and Currie more than 100 years later, the Geological Survey of Canada geologist Joseph Tyrell found Alberta’s “first good dinosaur specimen – the skull of an *Albertosaurus*...” Sadly the quality of the specimen suffered because Tyrell’s expedition had neither the time, the tools, nor the logistical experience and means to collect and preserve this specimen well.

Horseshoe Canyon’s dramatic aesthetic character testifies to the erosive power of wind and water over the millennia. The





*The gravel road built as part of the remediation effort now scars the canyon. PHOTO: © J. GOODINE*

Canadian Encyclopedia traces the initial formation of many examples of the badlands to the retreat of the Laurentide ice sheet approximately 13,000 ago. That glacial meltwater sculpted the shale, siltstone, and sandstone formations into what Travel Alberta calls today “an eye-popping sight.” There is no disputing that. For me, perhaps because the canyon boasts the fossilized legacy of the dinosaurs, the place has a surreal, other-worldly character. To set your eyes on the multi-coloured rock layers or stripes on the hills in the canyon might be your introduction to stratigraphy, a branch of geology that studies the layering of rocks such as the sedimentary ones found in the canyon. Regardless, to descend into the canyon is to go back in time.

## **Balancing Legal Risks and Public Enjoyment**

Given its proximity to Highway 9, the canyon rim and its unofficial viewpoint have long been a popular place to stop. As the Nature Conservancy points out it is “a favourite spot for tourists to catch

their first glimpse of this unique aspect of Alberta’s natural heritage.” For 40 years, Louisa Lowen, Ralph’s wife, operated a refreshment stand at the rim of the canyon. There she provided hamburgers, ice cream, and other essential rations for anyone who was about to venture into the canyon. For Louisa’s children and grandchildren, the refreshment stand provided a chest of happy memories. Grandchildren helped serve the visitors and welcome them to their family’s special place. And, when the kids weren’t helping out you’d likely find them scrambling up and down into the canyon. I’ll wager such fun made its own dent into Louisa’s ice cream supply. Steve and Sharon Wolchina were other fixtures on the canyon’s rim where visitors could see some of the types of fossils found in the badlands.

Travel Alberta and other organizations encouraged the public from far and wide to come and visit the canyon. You might have thought then the canyon lands were public. They weren’t. When people visited the canyon and picked their way down the slope to the canyon floor, more often than not they were on private property – Low-

en land. Since the portions of the family’s land not bordering the canyon were fenced, Janice asked her father one day why they had never put a fence up along the top of the rim. Jack Jr. told his daughter that it was “because Grandpa said this was God’s country and everyone should have access to the beauty of this land.”

But, concerns about public safety and landowner liability came with the visitors who wanted to take in the beauty of this badlands gem. If someone fell as they scrambled down the predominantly clay hillside into the canyon would they try to hold the Lowens responsible? Over the years at least a handful of people needed to be helicoptered out of the canyon due to mishaps of one kind or another.

The risks of legal action and the costs of securing liability insurance led the Lowen children to approach Kneehill County. Would the County help the family bear the costs and risks associated with allowing the public to negotiate these private lands? The answer was no. But, the County countered by raising the possibility of a land sale. Would the family consider selling their



quarter-section of land to the local government? In light of the public safety concerns, Judy, Cindy, Janice, and Sean faced a hard choice. Hang on to the land and face risks in the future or sell the land to Kneehill County.

I had the opportunity to meet some of the family this past January. Judy Goodine invited me to talk about the state of the canyon with herself, her husband Doug, Judy's sister Cindy Groeneveld, and the Wolchinas. They impressed me as people who cared very deeply about the health of the canyon. Keeping the canyon in as pristine a condition as possible was clearly uppermost in the minds of the family when we talked about the future of the canyon. Their love of that landscape made it clear that, when they were considering the future of the canyon, they needed to be assured the landscape wouldn't be despoiled. As Doug Goodine mentioned, if the family wanted to maximize the dollar value of the land they would have put it on the market in the hope of attracting a land developer. But, they didn't. Their passion for preserving the canyon was clear from talking around the Goodines' kitchen table that Sunday afternoon. Their decision to consider the County's unsolicited offer was rooted in the family's belief that, if the County bought the property, the local government would be a good steward of the lands.

## The Restrictive Covenant

A restrictive covenant is a promise not to do something. Such covenants are intended to ensure that certain activities or land uses will not take place when property passes from one owner to another. Both Cindy and Judy were very worried that, good intentions aside, the County would balk at offering the protection for the canyon they wanted to see. Therefore, they wanted to make the County's conservation commitment binding and saw a restrictive covenant as the way to realize that.

The restrictive covenant Kneehill County agreed to when it purchased the Horseshoe Canyon parcel begins by stating the overriding intent of the agreement. The canyon



*A closer look at the gravel road on the canyon floor. Note how raised the road is from the floor and how the road redirects surface water. PHOTO: © I. URQUHART*

lands "are to be protected and preserved for environmental and conservation purposes." It then proceeds to outline seven stipulations, restrictions, and provisions. The first clause stipulates that the lands "shall not be developed." Clause 5, one forbidding the new owner from subdividing the lands, affirms that the more profitable path the Lowen family could have followed cannot be pursued by the County or any subsequent owners.

Clauses 2 through 4 of the covenant temper slightly the "thou shalt not develop" message of the first clause. The second clause states that lands above the canyon may be developed – but "solely" for establishing a day-use area or an overnight campground. Neither imagined development extending down into the canyon and disrupting the ecological integrity therein.

The third and fourth clauses detail the very minimal level of development within the canyon the Lowen family thought the County was committing to. According to the third clause, the County could alter or develop the lands in the canyon "to allow for walking trails, bicycle paths, or such other *minimally environmentally invasive alternatives (sic) or developments.*" (my emphasis) The fourth clause prohibits all off-road vehicles from entering the canyon. The only

exception to that blanket prohibition allows four-wheel drive or off-highway vehicles to enter the canyon if they needed to be there to build or maintain the permitted minimal alterations and developments.

Through securing these terms in the restrictive covenant the Lowens were confident the County would preserve the integrity of the canyon. They thought their reputation as local landowners who were, in the words of the Nature Conservancy, "similarly dedicated to maintaining the canyon in its natural state" would be intact.

## Lost in Space, Found in Horseshoe Canyon

Some may see the County's subsequent actions as ones questioning its commitment to honour the spirit of a covenant intended to protect and preserve lands "for environmental and conservation purposes." I certainly questioned the County's interpretation of what constitutes "minimally environmentally invasive" alterations and development after visiting the canyon in January 2019. Instead of a bicycle path, my descent into the canyon came courtesy of a gravel road more than three metres wide. It must be one helluva bicycle that needs such a road in order to enter the canyon. Since there were no walking trails or bicycle trails at the bottom





One of the new permanent bridges constructed as part of remediation in the canyon. PHOTO: © I. URQUHART

of the canyon this road certainly had not been needed to construct any of the permitted alterations or development anticipated in clause 3 of the covenant.

I have to admit one thing here. I knew before my January trip to the canyon that a gravel road would greet me there, a gravel road not built to construct/maintain walking or bicycle trails. I knew that, as counterintuitive as I regarded it, much of that gravel road was part of an effort to remediate damage inflicted to the canyon lands. The ultimate source of the environmental damage was the County's interpretation of what activities the covenant permitted in Horseshoe Canyon. The County's interpretation allowed the activities that prompted the eventual need for reclamation.

What type of canyon activities did the County believe were consistent with the covenant's environmental and conservation commitment? Would you believe making the canyon a stage for a television series? That's right...the County negotiated an agreement with the Netflix series "Lost in Space" to film in the canyon for approx-

imately two weeks in September 2018. As photos taken by Judy Goodine and others show so clearly, an extensive, multiple tent encampment was erected in the canyon. In one photo, seven 4x4s, five side-by-side OHVs, a shooting boom forklift, and a skid steer earth moving machine all are operating in the canyon. Without a road in the canyon bottom, these vehicles essentially carved one out on the valley floor by following a much less intrusive walking trail. With the rains that came in mid-September the canyon floor became a perfect canvas for these vehicles to disrupt the native vegetation and leave extensive tire damage throughout.

The family felt betrayed, not simply because of the activities, but because when they owned the land they had privileged protection over profit. The few weeks of filming in the canyon generated \$89,000 in revenue for the County. Overnight the canyon became the County's most significant source of parks revenue. Turning the canyon into a revenue-generator for the County was never part of the future the family imagined.

## Concerns Dismissed, Canyon's Integrity Put at Further Risk

Very soon after the Lowen sisters discovered what was taking place in the canyon they retained a Drumheller lawyer to explore the situation further. William Herman wrote to Al Hoggan, the Chief Administrative Officer of Kneehill County. Herman's letter stated that the Lowen family sold the property to the County because of the County's representation to the sellers that it would "preserve the lands in their natural state." The Lowen family reacted in dismay to seeing roads and vehicles throughout much of the canyon. The letter ended by asking Hoggan to outline what the County intended to do "with respect to reclaiming the roads and prohibiting motor vehicles from accessing the canyon floor."

Hoggan, rather than making any effort to dialogue with the Lowens himself, handed the ball off to Kneehill County's legal counsel, the Edmonton firm of Reynolds, Mirth, Richards & Farmer. Someone from



the 18 lawyers there who practice municipal law would respond to the Lowens' concerns. That response, from Sean Ward, effectively found no merit in those concerns. The County, he declared, was "fully committed to preserving and protecting Horseshoe Canyon, and is careful to abide by the terms of the Restrictive Covenant..." Since the activities that so troubled the Lowen family were just "temporary in relation to a film production" Ward argued they fell outside of the restrictive covenant's definition of "development of the lands." Despite what I thought the photographs I had seen suggested, the film production's activities were "minimally environmentally invasive." Ward suggested the County's stewardship bona fides in his comment about the municipal government's taking "careful steps to ensure the party responsible for the film production is contractually bound to complete a full and complete remediation of any disturbance to the lands..." Writing in October 2018, Ward was confident this remediation would soon be completed "with no damage of any kind to the lands."

For this layperson, it was impossible to square what I read in Ward's letter with what I saw at Horseshoe Canyon in January 2019. I have always thought remediation means restoring a site to its previous condition. That understanding didn't apply to what Horseshoe Canyon looked like in January.

First, by definition a *new* gravel road that covers up the damage which forklifts, 4x4s, and OHVs did to the terrain isn't remediation; it isn't restorative. Instead, it replaces one natural landscape with a second man-made one. It's simply counterintuitive to see a new gravel road as not representing a form of damage "of any kind" to the lands. Furthermore, it's impossible for me to see how a new gravel road conforms to a plain reading of the stipulations and provisions outlined in the restrictive covenant. I have the same view of two, permanent bridges that now cross watercourses in the canyon. What language in the restrictive covenant contemplates such structures?

Second, it would be safe to wager that

most people who looked into Horseshoe Canyon from the canyon's rim prior to the fall of 2018 likely were impressed by the view's aesthetic power. The NCC highlights the aesthetic value of the canyon in its account of the canyon's significance. Today, that view is marred by the new gravel road. The narrow, unobtrusive walking trail that decades of human use etched into the canyon now is buried beneath an eyesore that sticks out of the canyon like the proverbial sore thumb.

Third, as I walked on Horseshoe Canyon's new highway in January, I was struck by just how little thought this "remediation" effort seemed to have given to the erosive forces that had sculpted the canyon. The road sits well above the natural height of the valley bottom. In several places I measured the road's height to be approximately 23 centimetres higher than the natural terrain; in other places it was nearly 13 centimetres higher; throughout virtually the entire canyon the road was at least seven centimetres higher than the land underneath it. Earlier that day Steve Wolchyna had alerted to me why these differential heights were important to the geology of the canyon. Runoff from the canyon's hills now would be barred from flowing as it has throughout time. The gravel road's design meant that water will pool in ways it didn't prior to using the canyon to film *Lost in Space* and that water's impact on the land will change unnaturally in the future. Sure enough when I walked along the road I could see what Steve was talking about. Cycles of thawing and freezing during the winter had produced new pools of frozen water that were contained and re-directed by remediation's new addition to the land.

Finally, what the County hasn't done since it purchased the property in 2016 makes me skeptical of Ward's assertion that "(t)he County is aware of and will continue to comply with the terms of the Restrictive Covenant." The covenant stipulated that no off-road vehicles "shall be used on the Lands." But, the County hasn't done anything at Horseshoe Canyon to try to prevent off-road vehicles from entering

the canyon from the viewpoint. It doesn't take long to identify the vehicle barriers installed there. There are none. Zero... that's how many effective barriers to off-road vehicle access to the canyon were there in January 2019. It strains credulity to proclaim the County's commitment to the covenant when the paved trails and entry points at the canyon rim are wide enough for off-highway road vehicles to pass through.

## Conclusion

When the Lowen family sold their property in 2016 they believed Kneehill County would be a good steward of the Canyon lands. To date, many things have become clear. The County sought to make money from the canyon's aesthetic character through the film production agreements. After the film production crews created an informal roadway where a walking trail had existed previously, they tried to rectify that damage by hardening the road with gravel. That road detracts from, if not scars, the vista that previously lay before visitors to the top of the canyon. No measures have been taken to ensure that motorized vehicles cannot enter and abuse the fragile canyon lands. In summary, the County's understanding of what the restrictive covenant demands to protect and preserve Horseshoe Canyon is a galaxy away from the understanding the Lowens had when they signed the agreement. For this reason, Judy Goodine, Cindy Groeneveld, and the other members of the Lowen family are considering suing Kneehill County.

I intend to explore the Horseshoe Canyon controversy in future issues of the Advocate. It raises a number of questions and claims about how the County's appointed and elected officials handled the purchase of the lands and the decision to allow film crews into the canyon. It also raises questions about what future actions will be taken to ensure that preservation of the canyon has the pride of place the Lowens assumed it would when they agreed to sell their land to Kneehill County. 🍷

# An Unsettling Truth:

## The Looming Liability of Alberta's Oil Sands Mines

By Alyssa Anderson



### **W**hat is Oil Sands Mining?

Oil sands mining involves truck and shovel operations to extract bitumen located less than 75 metres from the earth's surface. Since Alberta's first oil sands mining operation in 1967, the oil sands have provided significant economic benefits. Today, Alberta is home to nine active oil sands mines which account for approximately 50 percent of production from our oil sands, with the remaining 50 percent coming from in-situ operations.

Although economically important for our province, oil sands mining has severe environmental impacts. These impacts include the destruction of boreal forest habitat, the construction of tailings ponds to store toxic waste, the release of greenhouse gas emissions, and major landscape transformation. Given these significant impacts, there is growing concern over reclamation liability. In other words, who will end up bearing the clean up costs to return these mine sites to their pre-disturbed state?

To answer this question we examine Alberta's Mine Financial Security Program (MFSP). Administered by the Alberta Energy Regulator (AER), the MFSP governs reclamation liabilities for Alberta's oil sands mining industry. The program aims to ensure that mining companies are fully liable for their reclamation costs. This is achieved by requiring companies to provide the AER with financial securities to reclaim their specified area. In the event a company is unable to carry out its reclamation obligations, the government-held financial securities

will be used to fund reclamation. Although sound in theory, the MFSP requires major reform. The program contains four key deficiencies. These deficiencies may result in Albertans, not oil sands companies, bearing the cost of reclamation.

### **Deficiency 1: Asset-Liability Approach**

The MFSP does not require companies to provide full financial security for the cost of reclaiming land. This is a key deficiency. Instead, the program employs an asset-liability approach to security collection. Under this approach, companies that maintain an asset-liability ratio of greater than three are not required to pay the majority of financial securities until the mine is nearing the end of its life.

The asset-liability approach has generated a significant liability gap. This means the AER only holds financial securities (\$939 million) that cover a mere 3.3 percent of the oil sands mining industry's total calculated reclamation costs (\$27.8 billion). As Alberta's Auditor General reported in 2015, this liability gap poses a risk that Albertans will bear clean up costs in the event a company is unable to carry out its reclamation obligations.

Alarming, the liability gap may be larger than these numbers suggest. A Freedom-of-Information-and Privacy (FOIP) request revealed AER documents from a February 2018 private presentation on reclamation liabilities. The presentation documents were published by the *National Observer* in November 2018 and garnered significant media attention. Robert Wad-

sworth, AER's VP of Liability Management, gave the presentation. In it he acknowledged the flawed design of the MFSP and the need for change. His presentation revealed that AER experts estimate the cost of oil sands mining reclamation to be a staggering \$130 billion.

The AER swiftly downplayed this number, stating that the estimates were based on a "worst case scenario" in which the oil sands mining industry shuts down overnight. Despite this, the huge discrepancy between the \$27.8 billion industry-calculated reclamation costs and the \$130 billion AER estimate should not be swept under the rug. The Wadsworth presentation documents did not describe how reclamation estimates came to \$130 billion, but this startling number raises serious concerns about the severity of the liability gap.

The asset-liability approach also fails to acknowledge the uncertain future of the oil sands in an increasingly carbon constrained world. Due to its carbon emission intensity, the oil sands may be among the first fossil fuel source to face abandonment. As such, it is increasingly important for the Alberta government to secure the appropriate amount of securities while companies are still financially able. Securing the appropriate amount of securities would require mining companies to provide financial security for the cost of reclaiming currently disturbed land. Doing so will avoid the unacceptable scenario where Alberta taxpayers bear the reclamation costs of bankrupt companies.



## Deficiency 2: Self-Reported, Non-Transparent Reclamation Costs

The MFSP also faces serious transparency challenges. The transparency issue revolves around the AER's unwillingness to publicly disclose per-mine reclamation costs. Rather than publishing the reclamation costs associated with individual mines, the AER publishes a single value denoting the entire oil sands mining industry's reclamation costs. This lack of transparency is even more concerning since mining companies are permitted to estimate their own reclamation costs. The lack of public scrutiny around per-mine reclamation costs, and exactly what factors were accounted for when calculating costs, provides opportunity for companies to underestimate costs and avoid scrutiny over the land outcomes connected to those costs. For example, how much peat wetland and forested areas will be on the reclaimed site compared to pre-disturbance conditions? Canada's

Ecofiscal Commission, a group of policy minded economists, published a report in July 2018 focusing on how to most effectively hold firms liable for environmental impacts and risks. The report acknowledged that requiring external experts to review industry estimated reclamation costs could enhance accuracy and accountability.

As noted in the Alberta Auditor General's July 2015 report, the MFSP is also plagued by a low auditing frequency. To verify the information submitted by companies, the AER performs in-depth audits on an average of two oil sands mines per year. With a total of nine mines in operation, a rate of two in-depth audits per year raises concerns around the accuracy of the self-reported reclamation costs. Self-reported reclamation cost estimates are problematic as they may conceal an even larger liability gap than currently understood. Correcting this deficiency would require the development of a comprehensive audit schedule with more audits each year. The new audit schedule could be supplemented by a re-

quirement to disclose per-mine reclamation costs (and their associated calculations) to facilitate enhanced accuracy through increased public scrutiny. Although the Auditor General recommended reforming the audit program in 2015, an update in November 2018 indicated the MFSP was not ready for a follow up audit.

## Deficiency 3: Failure to Address Technological Uncertainty of Reclamation

Reclaiming tailings ponds is one of the biggest challenges associated with oil sands mining clean up. As of 2018, Alberta's tailings ponds hold over 1 trillion tonnes of toxic waste from the mining process. A technique known as water capping has been proposed as a possible reclamation method. Water capping involves pumping tailings into empty oil sands mines and capping the tailings with a layer of fresh water to create an artificial lake. Importantly, water capping is an unproven technology and requires decades of testing



*To protect Albertans from bearing multi-billion dollar oil sands mining reclamation costs, it is vital that the Alberta government reform its Mine Financial Security Program by collecting appropriate financial security while companies are still financially strong. PHOTO: © I. URQUHART*

to confirm its feasibility and effectiveness. Despite the unproven nature of this technology, the MFSP does not require contingency premiums from companies who plan to rely on water capping. If water capping proves unsuccessful, other potentially more expensive technologies may be required to reclaim tailing ponds. Companies will not have provided securities to fund those alternatives. To account for the technological uncertainty of reclamation, the MFSP should require companies relying on water capping to pay contingency premiums. In their July 2018 report, Canada's Ecofiscal Commission also suggested using contingency premiums to reduce risk in Alberta's oil sands mining sector. These premiums would help offset the cost of potentially more expensive reclamation technologies in the scenario where water capping is unsuccessful.

#### **Deficiency 4: Inappropriate Extension of Mine Life**

Under the current system, oil sands min-

ing companies can modify the area of land covered in their mine approvals. This means that companies can effectively combine multiple mines into a single approval. This is concerning as companies can strategically combine an old mine and a new mine into a single approval to postpone paying financial securities for the older mine. This deferral of security collection extends the period in which the AER lacks securities to fund reclamation. The MFSP also permits companies to enhance their operations by combining their truck and shovel mining with in-situ technology. The in-situ technology increases the amount of recoverable reserves and thus acts to extend the life of the mine. However, the quantity of mineable reserves remains the same. Permitting companies to combine mining and in-situ operations provides a second method in which companies can delay security payment by inappropriately extending the life of the mine. The delay in security payment adds to the already sizeable risk of Albertans bearing reclamation costs.

#### **Alternative Financial Security Regimes: Yukon Territory and Québec**

The Ecofiscal Commission's July 2018 report "Responsible Risk" studied financial security policies from across Canada's mining sector. On February 11, 2019, I interviewed Jason Dion, Lead Researcher at the Ecofiscal Commission, for an added perspective on the research. Dion noted that the scale of the liability gap in Alberta's oil sands mining industry makes this a pressing policy issue. He stated that Alberta should reform its financial security policy to abandon the flawed asset-liability approach and address the liability gap. For examples of strong financial security policies, Dion recommended looking to either Yukon or Québec.

Under Yukon's system, mining companies must provide the government with full financial security for the cost of reclaiming currently disturbed land. Although the program is new and untested, the design ensures that the government holds 100



*Although the Supreme Court's recent Redwater ruling reaffirmed the 'polluter pays' principle, the existing liability gap still poses a significant risk that Albertans will be left with oil sands mine clean-up costs. PHOTO: © I. URQUHART*



percent of the securities required to fund reclamation. This eliminates the risk that taxpayers will be stuck with the clean-up costs. In our interview, Dion commented favourably on Yukon's system, acknowledging its clear incentives for companies to reduce risk and progressively reclaim land. Dion noted that reforming Alberta's financial security system to reflect Yukon's is a potential path forward.

Québec also recently reformed their mine financial security regime. Québec's regime requires companies to provide securities to cover a project's entire estimated cost of reclamation within two years of operations commencing. Dion spoke favourably of Québec's system, indicating that it stood out as the most stringent financial security system for mining in the country. According to Dion, despite the bold and highly stringent financial security policy, Québec's mining industry continues to thrive, and that it appeared unlikely that Québec's policy had significantly hindered investment in the mining industry. As such, Québec

and the Yukon are leading the way with the most effective financial security regimes. Alberta needs to follow suit and strengthen its currently weak financial security regime.

To lessen the initial financial burden of adopting a full financial security approach, companies could be required to provide 10 percent of the required securities each year over a 10-year period. Securities thereafter would be required to fully cover reclamation costs as they are incurred and would be returned when reclamation is complete. This approach would incentivize companies to progressively reclaim their mine sites, a key practice promoted by the MFSP. In addition to this recommendation, Alberta should also mandate contingency premiums for companies relying on unproven technology, define an auditing schedule to increase accountability, and ensure accessible and transparent per-mine reclamation costs.

## Looking Forward

The time for change is now. The Government of Alberta needs to reform the MFSP

to more effectively protect Albertans from bearing the costs of oil sands mining reclamation. It is vital that the government collect an appropriate amount of financial security while companies are still financially strong. By reforming the MFSP, the government can ensure that reclamation costs are borne by the companies responsible rather than by Alberta taxpayers. As echoed by Dion, arming stakeholders and the public with an understanding of the importance of risk is essential. By increasing public awareness around this serious issue, we can motivate government to push for more meaningful and effective financial security policy in Alberta's oil sands industry. 🐾

*Alyssa Anderson is a student in the University of Calgary's Master of Public Policy program. She loves to play sports, travel to the mountains, and has been an intern at the AWA since September 2018.*

## The Risk of Catastrophic Mining Disasters

Although outside the scope of the MFSP, the Alberta Government does not require mining companies to provide financial security against the cost of potential environmental disasters. In fact, no province or territory in Canada requires financial security against the risk of mining disasters. This lack of security creates risk that Albertans may have to bear the costs of disasters such as tailings ponds breaches or leaks. As noted by Canada's Ecofiscal Commission, establishing a financial security regime for catastrophic disasters would incentivize companies to take greater care to avoid disasters. The financial security regime could be designed using a tiered approach, with the first tier requiring hard financial security from companies based on their level of risk. The second tier could require companies to pay regular premiums to a third party which would fund any remaining clean-up costs in the event of a disaster.

The Ecofiscal Commission specifically recognized high-cost/low-probability risks, such as catastrophic tailings ponds breaches in Alberta, as ones requiring a tiered financial security system. As such, developing a financial security regime for tailings ponds disasters should be another key focus area for Alberta's policy-makers.

## The Redwater Supreme Court Ruling: Positive Progress

On January 31, 2019 the Supreme Court of Canada issued a decision on the landmark case between Redwater Energy and Grant Thornton Ltd. The case revolved around the bankrupt oil and gas company Redwater Energy Corporation and whether its remaining assets should be used to fund environmental clean-up or settle debts to its secured creditor (ATB Financial). In this landmark ruling, the court decided that Redwater's remaining assets should be used to fund clean-up of its outstanding reclamation obligations. The

judges determined that "bankruptcy is not a licence to ignore rules." This ruling sets the precedent that future bankrupt oil and gas companies cannot leave their reclamation obligations to the government, and ultimately taxpayers. Thankfully, with this ruling, the polluter pays principle has been reaffirmed in Alberta. But, as noted by Dion in our interview, despite the court's favourable ruling a significant gap still exists between reclamation costs and upfront security payments in the oil sands mining industry. Dion acknowledged that the Redwater decision avoided making the situation worse but warned that the big picture problem still remains. The remaining assets of a bankrupt oil sands mining company may not be enough to fund the extensive reclamation required of oil sands mines. Unfortunately, the existing liability gap still poses a significant risk that Albertans will be left with clean-up costs.

# Climb for Sage-Grouse

By Grace Wark, AWA Conservation Specialist

It's that time again. Time to lace up your running shoes, roll on your deodorant, and climb 1,204 stairs to support Alberta's incredible wilderness and wildlife species! Climb for Wilderness is AWA's annual Earth Day event, hosted on the daunting stairs of Calgary's Bow Tower.

In previous years we climbed in support of woodland caribou and grizzly bears. This year our featured species is the greater sage-grouse, a species that is doing even worse in the wild than it would be if it was trying to climb stairs in the Bow Tower. The greater sage-grouse is the largest grouse in North America. It is an

imposing, turkey-sized bird with mottled brown/grey upper parts and a black belly. The birds gather in communal "leks" in the spring, where the males dance and strut to impress females and challenge rival males, inflating their puffed-up white throats and showing off the striking yellow combs above the eyes, all the while emitting whistling and popping sounds. Males are known to display for several weeks while the female will visit only for a short time to mate. Dancing grounds or lek sites are a critical part of the habitat that greater sage-grouse depend on.

Regular readers of the *Advocate* will

know that sage-grouse are in dire straits in Alberta and Saskatchewan. With the gradual conversion of Alberta's grasslands to urban, industrial, and agricultural landscapes, sage-grouse have lost much of the critical native prairie habitat that they need to survive. With only 1.25% of Alberta's grasslands currently protected, the areas that sage-grouse rely have shrunk considerably. Their future will become even bleaker if we allow further conversion and degradation. In 1998, sage-grouse were federally listed as an endangered species. Their endangered status prompted Ottawa to issue an emergency protection order (EPO) in 2013. With a need for urgent action, if we don't take action now to protect sage-grouse habitat now, we run a great risk of losing our favourite prairie dancers forever.

So this year, as you reach your 500th stair and need some climbing motivation, let sage-grouse put a little boogie in your step! Your support helps AWA push for greater protection of sage-grouse and their habitat. Year in, year out, it's your participation that makes Climb for Wilderness the success that it is. We hope to see you there! 🍷

## Event details

**Date:** Saturday, April 27, 2019

**Time:** 8:30 am to 11:30 am

**Location:** The Bow Tower

**To register visit:**

[www.climbforwilderness.ca](http://www.climbforwilderness.ca)



PHOTO: © C. OLSON



# The 2018 Annual Awards Presentation



1. Some of the crowd settling into their seats for the 2018 AWA Wilderness Awards and the Martha Kostuch Annual Lecture
2. AWA Emeritus Board Member Vivian Pharis and Wendy Ryan, AWA 2018 Wilderness Defender Award Recipient
3. Wild Lands Advocate Editor Ian Urquhart and Dave Mayhood, AWA 2018 Wilderness Defender Award Recipient.
4. AWA Executive Director Christyann Olson and George Campbell, 2018 Great Gray Owl Award Recipient
5. AWA Board Member Chris Saunders and Murray Little, 2018 Great Gray Owl Award Recipient

# Native Trout and the Need to Share:

## Michael Sullivan's 2018 Martha Kostuch Annual Lecture

By Ian Urquhart

I wanted to be a biologist. That was one of my boyhood answers to the question: "Ian, what do you want to be when you grow up?" If I had taken that path I hope I would have ended up like Dr. Michael Sullivan. Michael is a fisheries science specialist with the provincial government, an adjunct professor in the University of Alberta's Biological Sciences department, and a key figure in the efforts to help recover Alberta's native trout populations. His lecture, "Being Responsible & Realistic: A Vision for Alberta's East Slope Trout Streams," was captivating and inspirational. His passion for his vocation, for the fish and fish habitats he studies, was on display throughout the evening.

As his introductory remarks underlined, he's also an adventurer and devoted father. That combination has led him to take his daughter Sierra, a future PhD graduate in Zoology, on wilderness trips where occasionally they would be "doing things that you don't show mom."

The trips Michael described, such as spending five weeks in the backcountry with Sierra, were trips that, when it came to the fish the Sullivans love to study, literally turned back the clock. "We would see the types of fish our grandparents probably saw," he said. For these two fisheries scientists then, these backcountry trips were much more than just fabulous adventures. They were trips that changed their impressions profoundly; to take a trip into an isolated corner of the backcountry "reset our baseline that this is probably what good is supposed to look like."

Their travels taught them that, in undisturbed settings, Alberta's native trout thrive. They're big, they're easy to see...even in

low productivity, cold, silty waters. Even in far from ideal habitats these trout are big and abundant as long as there's nothing else threatening them.

Even those who are only vaguely familiar with the state of Alberta's trout fisheries should realize that what the Sullivans experienced in the wilderness is far from the norm in today's Alberta. In less than a generation bull trout plummeted from being the most common salmonid in Alberta's streams to being a species-at-risk. Alberta's Athabasca rainbow population has followed a similar trajectory. Labelled as Endangered in 2014 by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC), the Athabasca rainbow population is estimated to have collapsed by more than 90 percent over only three generations (the last 15 years).

What were once plentiful game fish are now species at risk. The plenty of the past, as seen in archival black and white photos such as those in the Glenbow Museum, seems like a fantasy to today's biologists. "We're dealing with dust," in Michael's words, "we're dealing with bread crumbs left on the landscape."

This history is tragic if you believe, as the audience for Dr. Sullivan's lecture did, that healthy native trout populations are a tonic essential for the soul of Alberta. Michael evocatively described the wonder of autumn in the foothills and the opinion of his friends who have traveled to many of the world's more exotic locales: "Nowhere else on the planet is as perfect as a foothills autumn in Alberta but without the trout in the pool there's a hole torn in that picture."

Michael's vocation is to help craft a vision

that will move us back towards the baseline, the "what good is supposed to look like," he has witnessed in the wild. The ambition he shares with AWA is to make it more likely that my grandsons will have the opportunity to see the types of fish their great-grandparents often saw.

The challenge facing fisheries biologists today is to identify what we had, what we have now, and what's responsible for the changes. What are the limiting factors responsible for the health of fish populations? To meet this challenge and to answer this question, he and his colleagues inside and outside of government build and apply models in order to identify what the most important limiting factors are. In order to identify the best hypothesis when it comes to identifying limiting factors, Michael talked affectionately about the "Joe Modeling Process," an approach named after the internationally-renowned University of Alberta fisheries biologist, Joseph S. Nelson. Nelson published more than 100 scholarly articles over his career, wrote *Fishes of the World*, co-wrote (with Martin Paetz) *The Fishes of Alberta*, and served on COSEWIC for 26 years.

Once you've identified the most likely limiting factors you test them. Eliminate a limiting factor from the equation and study how the troubled fish population responds to its elimination. In the Berland River system, for example, the four limiting factors the Joe model identified were: angling, sediment, hanging culverts, and non-native rainbows. The government's trout recovery program decided to channel the vast majority of its efforts here into completely eliminating one of the limiting factors – culverts. Accompa-





*Michael Sullivan, AWA's 2018 Martha Kostuch Lecturer. Judging by Michael's look, he was in the midst of telling his audience about something he did on an adventure with his daughter Sierra that "you don't show mom."*

nied with a considerable investment from oil and gas companies the government sought to, and succeeded in, eliminating the threats posed by hanging culverts. More than 300 culverts were taken out in order to re-establish fish habitat connectivity. But, fixing the habitat, supplying more quality accommodation for bull trout in the Berland system, didn't produce the fish needed to use this improved environment. More than culverts were limiting the growth of the bull trout population there.

Michael didn't say so explicitly but I thought his remarks inferred that angling pressure was the more important limiting factor in the case of the Berland. Angling pressure contributes vitally to two of the most noteworthy features of Alberta's trout populations today: fish don't get as big as they used to and fish today die younger than their predecessors. Fish don't "not get old anymore" because of culverts that they can't get through or be-

cause of silt. Certainly, silt harms the ability to reproduce and dims the survival chances of fry while culverts restrict fish population movements. But, his remarks suggested instead that angling pressure and angling restrictions are connected more closely to both the age and size of fish in Alberta's waters.

He made this point in part by comparing government studies of the populations of mountain whitefish in the rivers flowing through Canmore and Jasper. These populations were compared over time and the relatively greater size and age of fish in Jasper appears positively correlated with the length of fishing seasons. The Canmore stretch of the Bow River was open to fishing in the autumn while the Jasper stretch of the Athabasca was closed to fishing in that season. Mountain whitefish didn't get as old or as large in the Bow as they did in the Athabasca because the fishing season in the Bow was longer.

Here those who think that catch and release

is definitely not a problem should take note. Michael outlined three angling behaviours in a catch and release fishery: immediate release, a photograph – then release, and illegal harvest. He then estimated the mortality rates associated with the two examples of catching and releasing fish. Depending on the heat of the day, those of us who immediately release the fish we catch likely kill up to five percent of our catch. If you photograph your catch before releasing it, you increase the mortality rate very significantly. An informal summer 2018 survey in Willmore found that 33 percent of the fish caught, photographed, and then released... died. The little time it takes to photograph a fish before releasing it greatly increases its chances of dying. And, given how low some populations – such as bull trout – are even very low incidences of illegal harvest can collapse a population.

If five to twenty percent of the fish taken in a catch and release fishery might die, fisheries scientists such as Dr. Sullivan can estimate how many anglers we can have on our streams in order to sustain the species subject to catch and release. His conclusion? Up to 20 to 30 hours of catch and release angling per hectare is sustainable. The problem, and it's an existential one for Alberta's trout populations, is that the average angling pressure is 270 hours per hectare. Angling pressure is roughly ten times the level that a fisheries scientist such as Michael Sullivan has concluded is sustainable.

Throughout the evening Michael suggested that, when it comes to resource management in Alberta, sharing is hard. What he meant is that, while we may value the presence of many attributes and activities on the land, it's often impossible to have them all. In the context of Alberta's trout, he suggested that forestry, fishing, and trout all are highly valued. But, trout cannot survive the cumulative effects of both forestry and fishing. If we want to restore the health of our native trout populations, we either have to reduce forestry – something that government and industry alike will oppose – or reduce angling pressure.

This message about the need to reduce angling pressure on native trout shouldn't be

seen as a pessimistic one. Alberta's walleye fishery was offered as one exciting example of what Alberta's native trout fisheries could look like in the future. By the 1990s the populations of walleye in road-accessible lakes had collapsed. Good science, well-informed anglers, and recovery regulations/walleye tags led to an impressive recovery in the walleye fishery. From collapse in the 1990s to arguably the best walleye fishing in North America today – that's what the management focus on reducing angling pressure on walleye 25 years ago has delivered. Since the walleye recovery the government estimates that over \$3 billion has been added to the Alberta economy.

Such an impressive fishery recovery in Alberta's lakes is something that Michael be-

lieves can be duplicated in our streams for our native trout populations. But, it means we must find ways to reduce angling pressure. In the 1950s Alberta had many fish sanctuaries in the Eastern Slopes (for example, Racehorse and Dutch Creeks). Dr. Sullivan thinks that the sanctuary concept is one that managers could apply creatively to our native trout streams. Tags, area restrictions, time of day restrictions – they are all measures that could be used to reduce the angling pressure that today stands as likely the most significant limiting factor to the health of Alberta trout.

Michael Sullivan's passion and optimism were inspirational. His lecture was as invigorating as the mountain streams in the Willmore he and his daughter waded through.

Sharing often is difficult, not least when choices have to be made between highly valued activities and attributes. That is the situation we face now with respect to our economic dependence on forestry and our love of fishing and native trout. If he is right and we can only have two of those three, the choice comes down to whether it will be the fishing status quo or native trout (since government already has decided forestry will be one of the three). Here, as a fisherman who hopes to share this love with his grandchildren, I hope we will listen to Michael's advice. Select a few watersheds, creatively apply the sanctuary concept, and see if the successes seen in Alberta's lake fisheries can be replicated in our trout streams. The prize is one I'm willing to share for. ▲

## Featured Artist Joane Cardinal-Schubert



*Free Trade Stampede. Mixed media on paper, 22 ¾ x 30 ¾ in. Courtesy of a private collection. As the owner of this painting suggested, the placing of targets on the bison, underneath the Stars and Stripes, tells us much about what Joane Cardinal-Schubert thought about the Canada-U.S. Free Trade Agreement.*



# AWA Water Forum for Calgary-Mountain View Candidates

By Ian Urquhart

For the third provincial election campaign in a row, Alberta Wilderness Association hosted an all-party water issues forum before a standing-room only audience at the Hillhurst Cottage School. The 2019 forum was held on March 5th and Judy Aldous, the host of CBC's *Alberta at Noon* radio program, generously volunteered to moderate the event.

The Calgary-Mountain View candidates from the Alberta Party, the Green Party, the Liberal Party, the New Democratic Party, and the United Conservative Party were invited to participate. All of the candidates, with the exception of Caylan Ford – the UCP candidate at that time, participated in the forum. After a round of opening remarks, the candidates were asked to give their views on headwaters protection, flood/drought risk management, and responsible water use. Questions from the audience followed those three rounds and the evening concluded with a round of closing statements.

I was impressed, both by the commitments to a healthy future for water I heard that evening and also by the respect the candidates showed to each other. That respect was evident in the audience's questions as well.

The Alberta Party's Angela Kokott opened the evening with a sentiment shared by all the participating candidates. As much as Alberta may value oil, water is a much more important resource to our province's future. I thought one of her strongest moments came through her comments on the need for Alberta to plan for the long-term in a way taking into account the differing needs of the province's diverse regions. She felt that climate change likely would affect most seriously Alberta's water supplies and therefore

strong regional plans should be a high priority. She also stressed, too optimistically perhaps, her party's belief that technology could produce what she called an "and" outcome. This would be an Alberta where we could have a strong economy "and" strong protection of our water resources. This is a vision where technological improvements would allow us to protect water without disrupting the economy. Technology would allow the province's many sectors to access needed water without severely limiting anyone's access to this resource.

Like Kathleen Ganley, NDP MLA and Minister of Justice, Ms. Kokott supports the Notley government's decision to construct the Springbank dam. In her opinion, the greater good represented by a need to avert a future catastrophic flood in Calgary must prevail over the concerns of some (such as the Tsuut'ina First Nation).

Thana Boonlert, the Green Party candidate, is an environmental engineer who was more skeptical than Minister Ganley and Ms.

Kokott about the merits of the Springbank dam proposal. In part that skepticism is based on his belief that the interests of the Tsuut'ina First Nation in their traditional lands must be respected. For me, his strongest moment in the evening came when he raised climate change in his comments on flood/drought mitigation. Recognizing climate change and the need to reduce greenhouse gas emissions enjoyed "motherhood and apple pie" status during the forum. All candidates declared climate change's importance and their party's commitment to take the issue seriously. Mr. Boonlert was the only candidate who pointed out how contrary Alberta's greenhouse gas emissions reduction commitment is to the goals of the 2015 Paris Accord. In a world where governments pledge allegiance to reducing emissions relative to 2005, Alberta has committed to a version of leadership where provincial emissions are projected to be 17 percent above 2005 levels by 2030.

Mr. Boonlert was enthusiastic about the Green Party's commitment to an environ-



Calgary-Mountain View candidates at AWA's March 5th water forum: (L-R) David Khan (Liberal), Thana Boonlert (Green), Angela Kokott (Alberta), Kathleen Ganley (NDP)

mental bill of rights as an avenue to privilege environmental concerns. I thought there was some irony in that endorsement since he had previously outlined his aspiration to see fewer lawyers and business people in the legislature and more natural and applied scientists elected to public office. The interpretation of an environmental bill of rights, after all, ultimately would be left to the legal system, the preserve of lawyers and judges.

Liberal candidate and party leader David Khan has spent the last eight years of his legal career focusing on First Nations' issues. It wasn't surprising then to see him echo Mr. Boonlert's questions about whether the Springbank dam should proceed without first guaranteeing the fulfilment of First Nations treaty and aboriginal rights. He began his night by noting how poorly Alberta had planned the management of our water resources. At several subsequent points in the evening he stressed (as all the other candidates did as well) the need for evidence/expert-based policy. To that end he (like Ms. Kokott) called for a robust regime of groundwater testing and monitoring, something

that has been noticeably absent in Alberta.

His best moments may have been when he called for greater scrutiny of clearcutting in the Eastern Slopes. He urged the audience to see land use decisions (such as clearcutting) in Alberta's headwaters as the root causes of downstream calamities such as the 2013 floods.

Minister Ganley didn't try to suggest that the New Democrats, in the less than four years they've been in power, have solved Alberta's water challenges. But, she was able to point to a number of decisions and programs that gave credence to her claim her government was on the right track. The Castle Parks figured prominently in her first-round comments, not for the Parks' recreational contributions, but instead for their contributions to the integrity of the Oldman River's watershed. The anxiety Calgarians still feel about the risks of future floods is something that the Notley government was trying to address through the Springbank dam initiative. When it came to protecting Calgary from future flooding, the Minister foreshadowed an announcement the Premier would make

later once the campaign had started. This was the New Democrat promise to spend \$1 billion to complement the Springbank dry dam. Three options along the Bow River would be considered if the New Democrats were re-elected: an upstream reservoir at Morley, a reservoir near the existing Glenbow Reservoir, and a larger Ghost Reservoir.

The forum was one of the events that make me proud to be a part of Alberta Wilderness Association. It was another excellent example of your Association's commitment to inform and educate Albertans about the environmental challenges we face. It exemplified how AWA reaches out to the broader community we are a part of.

Was there a winner of this forum? Without a doubt...all of the nearly 100 people who attended were winners that evening. They had the opportunity to hear the thoughts that four of the five candidates have on water issues and how committed those candidates are to ensuring that water concerns figure prominently in the work of whoever represents Calgary-Mountain View after the April 16th election.

## Featured Artist Joane Cardinal -Schubert

Original artwork entitled  
This earth belongs to  
everyone.  
Graphite/oil/pastel on  
Rag, 22 x 30 in.







## Amisk Hydroelectric Project Near Dunvegan

In early December, David Berrade wrote AWA about the proposed Amisk Hydroelectric Project near Dunvegan, Alberta. Mr. Berrade is the stakeholder engagement consultant retained by AHP Development Corp., the company behind the Amisk project. His letter disclosed that the 370 MW run-of-river project is currently at a standstill, with AHP choosing not to restart the collection of environmental data during the winter of 2018/2019. The decision was attributed to the government's current Renewable Electricity Program (REP), as that program has yet to accept any bids for hydroelectric projects. As of now, AHP "cannot forecast a commencement date at this time."

The letter states that "AHP is exploring opportunities for a long-term power purchase contract, through government procurements and other means..." (The letter may be viewed here: <https://ceaa-acee.gc.ca/050/documents/p80112/126482E.pdf>) I asked Mr. Berrade to clarify what this statement means. He elaborated that investing further into a long-term project such as Amisk is not feasible without having a Power Purchase Agreement (PPA) in place prior. He explained that AHP would prefer to see the project be advanced through the next round of the REP, rather than through direct agreements with private electricity companies.

Given the favour the Renewable Electricity Program has shown wind projects, it seems that, at this time, the REP pathway for the Amisk project is not a promising one. AWA will continue to monitor the project and update members when new information becomes available.

- Nissa Petterson

## Prairie Conservation and Endangered Species Conference (PCECSC)

In February, I represented the Prairie Conservation Forum (PCF) Board of Directors and AWA at the 12th Prairie Conservation and Endangered Species Conference in Winnipeg, Manitoba. The conference was exceptional. Some of the faithful attendees bragged about only having missed one since the triennial conference began in 1986. The conference is held in January or February to avoid field seasons as much as possible and the conference location and planning responsibilities are rotated through the prairie provinces. In 2022 the conference will be held here in Alberta. Attendees include scientists, landowners, consultants, educators, nature enthusiasts, conservationists, land managers and others concerned with the health of our prairie landscapes. What's new on the land, what's working, and what's not working with respect to prairie/prairie species conservation guides impressive conversations, information sharing, and inquiry. The opportunity to learn is only surpassed by the opportunity to network, to greet old friends and make new ones. It's a chance to hear the long time champions of our prairies, those heroes who have stayed true to the cause of conservation, and a new generation of brilliant young minds that challenge the status quo. This conference offers a sense of shared concern for the well-being of our environment and our economy.

The 16-member programming committee, led by Dr. Christian Artuso of Bird Studies Canada, rolled out an extensive and excellent program on the theme of working landscapes. Presenters challenged the notions that tweaking will make a difference and urged us instead to turn our attention away from the symptoms and seriously attempt to build sustainability into management system. For example, Dr. Christy Morrissey of the University of Saskatchewan discussed

the ongoing use of neonic pesticides. These pesticides, banned in the European Union, are controversial because of their impacts on bees, natural pollinating insects, butterflies, beetles, and aquatic organisms. According to Morrissey, the use of those pesticides is symptomatic of a broken management system. The system needs to be redesigned and work towards increase sustainability and resilience in agriculture. Morrissey described systemic reforms that, through innovation and collaboration, would support and promote regenerative agriculture practices, address crop stability, climate change, pollution and biodiversity loss. It was an optimistic, hopeful message.

Participatory, whole-farm, studies are central to the activities of the Canadian Prairie Agroecosystem Resilience Network (CPARNet). This network has grown out of the work of 34 academics from seven institutions and includes representatives from agro-industry groups, government scientists and policy makers, NGOs, First Nations, and farmers. How might prairie agriculture reduce risk, increase productivity and profitability, and improve crop diversity and ecosystem services? Ryan Boyd, who operates a third generation family farm north of Brandon Manitoba, spoke about the transition he made to adopt regenerative agricultural practices. Regenerative agriculture, as he explained to Jennifer Blair of *AlbertaFarmer Express*, tries "to build a profitable, resilient system that's maintaining a good level of production while reducing the amount of inputs we're relying on." There was much to learn from Boyd, Morrissey, and the other presenters.

Trevor Herriot, renowned Saskatchewan author and naturalist, spoke during the first plenary session about how we care for the land and produce our food. Individual short term self-interest too often is at odds with long term sustainability and the common good. The road into the future must be different from the one we've taken



so far if we value the health of the land. Regenerative practices in agriculture such as cover crops, leaving some lands uncultivated, and closing the cycle of waste are all part of the systemic changes needed to reverse collapsing biodiversity and adapt to climate change. Herriot urged his audience to see ecological goods and services as gifts from nature and to realize that, despite past harms, there's still potential for recovery. To Herriot a government with the courage to do the right thing will make it profitable to keep native grassland.

In 2022 it will be Alberta's turn to host this conference. In 2019 Manitoba set the bar high and the Prairie Conservation Forum, the host for 2022 has accepted that challenge.

- Christyann Olson

## Caribou Pieces Not Adding Up to Critical Habitat Protection

Woodland caribou are a 'sentinel' species for older, relatively intact boreal and foothills forests and wetlands. These landscapes store significant water and carbon and many other wildlife species rely on these lands. As 2019 opens for Alberta's threatened woodland caribou, we hear some promising intentions, but see far too few on-the-ground actions.

I will first note that Premier Notley's seasonal 2018 holiday card featured a painting of a caribou and snowy owl. Terry McCue, an Alberta-based Ojibwa artist, entitled his painting *Northern Brothers II*. The owl is perched in his caribou brother's antlers. Hear and consider what Terry has said about his paintings: "Take the animal portraits, for example. I was taught that the animals are our relatives. They don't exist only in their relation to us. They have an integrity of life separate from us and it is our responsibility to guard their cultures. We have life because they have life." It's a quintessential conservation statement.

A welcome step for wildlife came in

mid-December 2018, when the Alberta government proposed a new protected area south of Wood Buffalo National Park. Although range protection for the important Ronald Lake wood bison herd is central to the proposal, the area would provide some additional connected protected lands for both the Red Earth and Richardson woodland caribou populations (see our other update on the BSA-WPP in this issue). AWA supported this proposal during public consultation and we hope it will become a reality soon.

In late December, Environment and Climate Change Canada (ECCC) released its second progress report on recent steps taken to protect critical habitat for boreal woodland caribou in Canada. Critical habitat essentially means habitat within our remaining caribou ranges that either provides suitable habitat now or has the potential to do so with responsible restoration and management. AWA agrees with the Report's overall assessment: "Despite the progress being made, the gaps in protection, as described in the first Progress Report, remain. Additional efforts, including those noted in this report, are needed to reverse the loss of critical habitat and declines in boreal caribou populations."

More positively, the ECCC report notes that Alberta will end forestry surge cuts within the Little Smoky caribou range by April 30, 2021. Since the 2007 inception of Alberta's so-called Healthy Pine Strategy, AWA has maintained that the Strategy's extensive mandated surge clearcuts in Alberta's conifer forests are more ecologically harmful than the mountain pine beetles they are meant to address. These surge clearcuts are particularly inappropriate in species-at-risk habitat. AWA supports this Little Smoky decision but we would like to see it take effect earlier and extend farther. We are also concerned, as with many other parts of this report, that this 'progress' is really a statement of future intention that is vulnerable to be changed.

Another interesting point in the ECCC re-

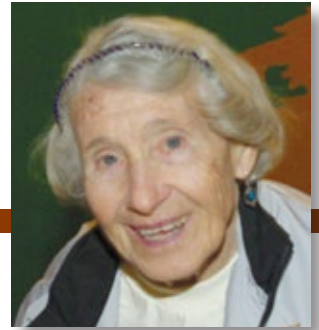
port is that almost 2,000 km<sup>2</sup> of sub-surface energy and mineral tenures, in eight Alberta boreal caribou ranges, have been returned to the provincial government since July 2017. AWA believes that these tenure reversions are due to: market conditions, pre-existing tenure regulations, and to Alberta's deferral since summer 2015 of new sub-surface resource tenure sales in caribou ranges. We strongly support Alberta's tenure deferral in caribou ranges: we believe these deferrals must remain in place until SARA-compliant range plans are finalized. Tenure reversions and deferrals are helpful stop-gap measures because at least they forestall even more disturbance pressures. They provide more options to develop essential access and infrastructure plans for managing surface disturbance that are compatible with caribou survival and recovery.

However, Alberta is still allowing new industrial surface disturbance in its fifteen woodland caribou ranges. This additional activity is sanctioned despite the fact disturbance levels in these ranges mostly far exceed what caribou can tolerate. Meanwhile, Alberta has not completed any range plans outlining how it will maintain or achieve minimum caribou habitat requirements over time. The October 2017 deadline for these range plans, as set out by the 2012 federal boreal woodland caribou recovery strategy under the *Species at Risk Act*, has come and gone. And no such plans are in sight.

As a result, AWA is once again headed to the courts. In late January 2019, Ecojustice lawyers, acting on behalf of the Athabasca Chipewyan First Nation, Mikisew Cree First Nation, Alberta Wilderness Association and David Suzuki Foundation, filed a lawsuit against the federal ECCC minister for her failure to protect the critical habitat of five boreal caribou herds in northeastern Alberta. Decades of federal and provincial inaction mean that interim federal habitat protection is urgently needed for these Alberta boreal caribou.

- Carolyn Campbell

# Louise Guy Poetry Corner



## **Randy Lundy, *Blackbird Song*, (Regina: University of Regina Press, 2018), 96 pp.**

Review by Ian Urquhart

Is there a correct way to read a poem? One thing I remember from my second-year English class at U.B.C. was our professor asking us to consider whether the poems we studied centred on “man versus wilderness,” “man versus himself,” or “man versus man.” (as the language suggests I took that class a few years ago...). I also remember Patrick Lane, then in his early 30s, coming to our class to talk about poetry. I took a special interest in Lane’s visit because our professor told us he was born in the West Kootenay, my home, and I thought she said Lane had spent some of his early years in the Sheep Creek Valley outside Rossland where my grandparents lived. Little did I know he would become arguably this country’s greatest poet.

We had studied one of Lane’s poems in our class. I think its title was “Snow” or maybe it was “Snow Storm”...something like that. My memory tells me the poem featured a man struggling with a horse in a corral during a snow storm. Sometimes the man was visible through the window of the house; at other times the raging blizzard took him out of sight.

In any event a student who thought much about themes in poetry asked Lane about that poem. She asked him if his poem was about “man versus wilderness” or “man versus himself.” He replied that he couldn’t really say. He didn’t write it with either of those themes in mind; he wrote it instead just because he wanted to say something about the striking, eerie scene taking place outside the window. I loved his answer because I loved the poem for reasons that had nothing to do with literary themes. It was so evocative. It took me back to where

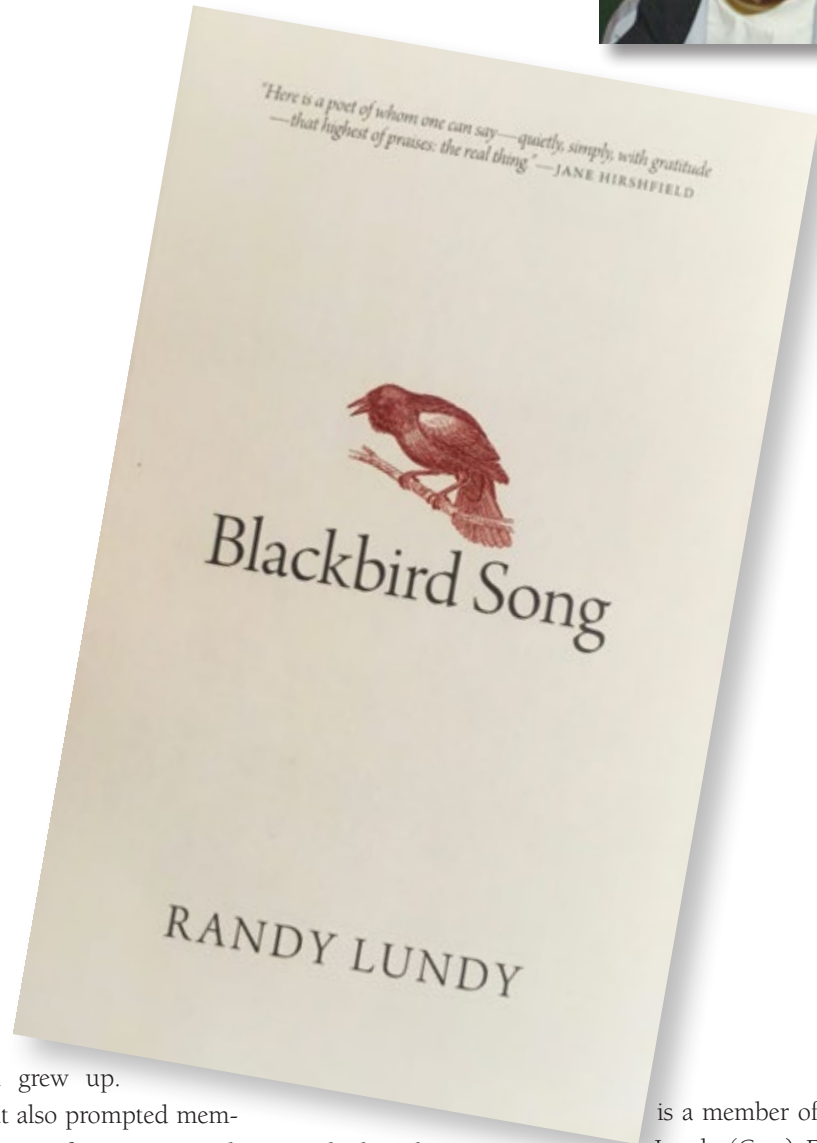
I grew up.

It also prompted memories of so many good times I had in the vicinity of Sheep Creek – grouse-hunting in the fall on the Summit with my dad, feeling the cool fog lick my face as I waited for it to break so I could get back to looking for blue grouse. I couldn’t care less about what deep meaning or message the poem may have had. For me, the poem didn’t need to be anything more than a ticket to experience feelings again.

This is the view I take, and the joy I receive, from reading *Blackbird Song*, Randy Lundy’s 2018 collection of poetry. Lundy

is a member of the Barren Lands (Cree) First Nation and has spent most of his life in rural Saskatchewan very close to nature. Samraweet Yohannes wrote that the 84 poems in *Blackbird Song* explore Lundy’s “kinship to the land.” With portraits of the parkland, the prairie, and the many fauna and flora he’s seen there, Lundy’s poems “explore love, loss and longing.”

Like a student cramming for a final exam, I raced through the collection the first time I picked it up. It overwhelmed me. The nature scenes Lundy describes reminded me





of what I've seen or teased me with what I want to experience.

In "Black Bear" he writes in part:

*Standing on the bank of the Fir, the surface of the river*

*aflame in mid-afternoon August sun, casting your line and lure*

*for that tug that will jerk you out of yourself and into the world.*

*All at once, as if materializing suddenly from pine shadows, she appears.*

*In truth, you cannot say how long she had been hunched, watching.*

*She raises her broad nose, two dark moon nostrils, to taste you in the air,*

*distinguishes you by sight and scent from trees against which she will rise*

*to sharpen her claws.*

He must have been looking over my shoulder that day I was flyfishing on Kookanee Creek when the marten appeared out of nowhere, bounding over logjams with a cutthroat in its mouth.

The very short poem "Under Northern Saskatchewan Pines" reads:

*At sunrise, marsh marigolds appear  
where the deer dipped their muzzles  
to drink from the no-moon dark pond.*

I want to wake up there.

Love, loss, and longing, as Yohannes wrote, figure prominently in the collection. And, more often than not, those feelings are interwoven with nature. Take, for instance, the poem "Cypress Hills." I interpreted part of the poem to allude to the Cypress Hills massacre of 1873:

*...The restless dead  
wander through pine shadows muttering,  
unable to hear your desperate invocations.*

*Even if they could, they would not pause  
but simply vanish into the moon-soaked night  
like the white-tailed deer on gleaming hooves  
stepping into the mist and darkness, leaving  
opposing crescent glyphs in the wet earth.*

*Blackbird Song* is a powerful, evocative collection that undoubtedly will lead you to rediscover old connections and feelings or imagine new ones. If you don't want to believe this Kootenay boy, listen to what another said about *Blackbird Song* "Lundy has entered the place where the masters reside..." (Patrick Lane: 1939-2019)

*Samraweet Yohannes' CBC story included an interview with Randy Lundy. It is available here:* <https://www.cbc.ca/radio/thenextchapter/full-episode-feb-4-2019-1.4999137/randy-lundy-searches-for-truth-amid-solitude-with-the-poetic-blackbird-song-1.4999180>

## Featured Artist Joane Cardinal-Schubert

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This is My Father's River - 20" x 30" - oil on canvas - 1989

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