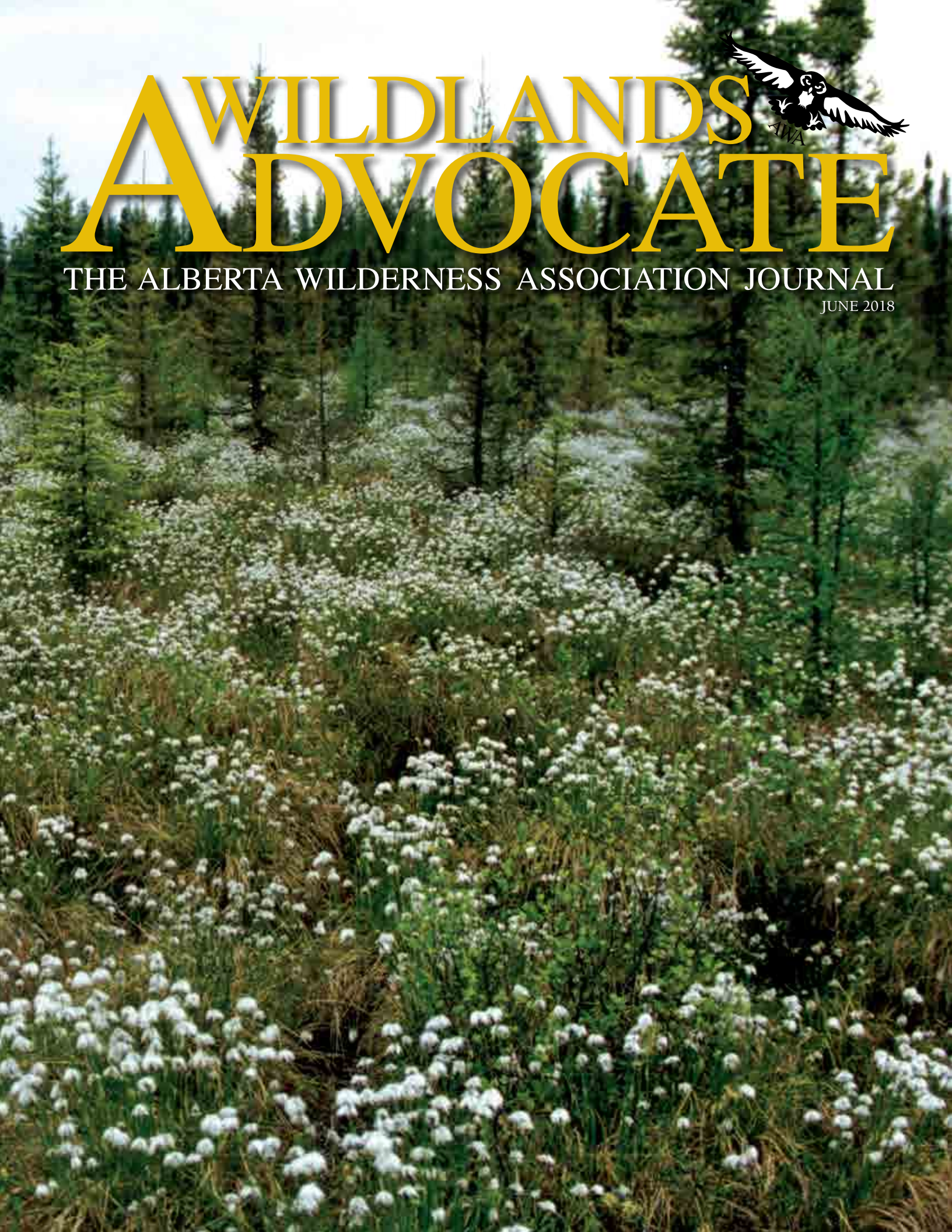


A WILDLANDS ADVOCATE



THE ALBERTA WILDERNESS ASSOCIATION JOURNAL

JUNE 2018



C O N T E N T S

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Cotton grass (*Eriophorum species*), featured prominently in this Vivian Pharis photo, is a common and colourful feature of Alberta's boreal forest and its associated peatlands. PHOTO: © V. PHARIS



Featured Artist: John Vickers

John Vickers is a Canadian graphic designer and artist. He has designed extensively for a variety of large and small businesses and organizations during his thirty-year career. His studio is located in Calgary, Alberta, Canada and operates under the business name John Vickers Design.

His artistic work focuses on the theme of habitat loss as a consequence of human encroachment into natural areas.

You can see more of his poster work at the Cave and Basin in Banff, Alberta. The exhibition runs until the end of October.

Posters and cards of his work can be purchased through the "Posters of Parks Shop" link on his website: johnvickersdesign.ca

Editor:

Ian Urquhart

Graphic Design:

Keystroke Design & Production Inc.
Doug Wournell B Des, ANSCAD
www.keystrokedesign.com

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Please direct questions and comments to:

403-283-2025 • wla@abwild.ca

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Alberta Wilderness Association

455-12 ST NW, Calgary, AB T2N 1Y9
403-283-2025
www.AlbertaWilderness.ca
awa@abwild.ca

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Three Cheers...Well A Hearty Two at the Very Least

May 2018, exactly three years after the NDP's surprising victory in the May 2015 provincial election, was a momentous one for conservation in Alberta. Three significant actions stand out. The government released the Castle Parks Management Plan, Land Footprint and Recreational Access Plans for the Livingstone-Porcupine region were unveiled, and a significant portion of Alberta's northeastern boreal forest was protected legally by new and expanded wildland provincial parks.

These actions are significant, very positive.

I will leave it to others, however, to heap effusive praise on Premier Notley's decisions. I cannot join them because the substance of these stories isn't as overwhelmingly positive as the spin doctors who craft the government's news headlines want you to believe. Compliments are warranted but a New Jerusalem for conservation in Alberta still remains on a faraway horizon.

Take the creation of the new wildland provincial parks in the northeast. Carolyn Campbell reminds us later in this issue that most of these parks were approved for designation in the Lower Athabasca Regional Plan of 2012 and have been managed subsequently as if they were wildland parks. Of course their new legal recognition is an important gain, as is the decision to establish Birch River as a wildland provincial park instead of a public land use zone. But, these areas were designated and offered de facto protection before Premier Notley's win in 2015.

I will reserve my third cheer until the day the government applies to wild spaces in northwestern Alberta the same logic it used in the northeast. When the government announced boreal protection in the northeast

it said: "the new parks were fully reviewed to ensure there are no economic impacts on natural resource industries or communities." In part this situation resulted from previous Progressive Conservative government decisions to compensate industries for the lands that would be used to protect the boreal ecosystem.

May 2016 saw Eric Denhoff (now deputy minister of Alberta Environment and Parks) recommend that 1.8 million hectares of land in northwestern Alberta be protected in order to implement Alberta's legal obligations under the *Species at Risk Act* to protect and restore woodland caribou. Following his recommendation would have delivered immediate, impressive habitat gains for the Chinchaga, Yates, Bistcho, and Caribou Mountain caribou populations. What would the cost be of this conservation recommendation to current forestry and energy operations in the northwest? Two small community timber permits would be traded for protecting caribou in the northwest. My third cheer waits until the government has the political and ecological sense to replicate in the northwest the positive action it has

taken in the northeast.

Turning to the Castle parks there is much good in the management plans officials and stakeholders have crafted for these new parks. Joanna Skrajny's article provides an overview of the difference those plans may make. But the plan doesn't deliver the politician's promise of September 4, 2015... "Province to fully protect Castle area" was the government's promise then. Premier Notley has delivered enhanced protection, not full protection.

Hunting and cattle grazing are legitimate activities in the provincial park according to the management plan. As a hunter, I believe hunting is a legitimate, valuable outdoors activity. However, I don't believe hunting should be allowed everywhere and it absolutely doesn't belong in provincial parks unless, as in Cypress Hills, it furthers a pressing wildlife management objective. No such objective exists in the Castle. Also, cattle will continue to graze in the Castle. There's nothing in the management plan to convince me that, other than to please those who already graze cattle in the area, there's a good justification to continue this practice.

In both cases, I'm concerned the trail Premier Notley chose is one that may be used in the future to justify these suspect activities in new Alberta provincial parks. So, for now, the government gets a hearty two cheers for its recent protected area efforts. With less than a year to go before the next provincial election I hope it's not too late for the Premier to recognize that both political and ecological logics support more initiatives to expand Alberta's protected areas network.

-Ian Urquhart, Editor



The June issue of the *Advocate*, for the past handful of years, boasts a healthy percentage of material that celebrates nature, that tells stories of why we value the natural world and the outdoors experiences it makes possible. The following articles by Harry Stelfox, Joy Friesen, and Ross Wein continue that tradition.

A Wilderness Adventure with My Grandkids

By Harry Stelfox



I checked the alarm clock after a restless night. It was almost 5:30 a.m. – time to get up to start the wood cook stove for an early breakfast and quick get-away. This was a special day to hike with my three oldest grandchildren – Zara, Kai and Maia (aged 12, 13 and 14) – to Coral Ridge at the southern extremity of Mt. Stelfox. The plan was to drive from our cabin property near Rocky Mountain House to an access point on the David Thompson Highway near the Cline River bridge, an hour and a half west of Rocky. We were scheduled to pick up my younger and fitter cousin Jim Stelfox on the way. Jim had cheerfully agreed to provide companionship and emergency back-up in case we got ourselves in a pickle.

Every August, for the past eight years, my wife Teresa and I have hosted a week-long ‘cabin camp’ with our grandkids, at our property near Rocky. A key goal has been to foster a deeper appreciation and respect for the natural world within our urban-based grandkids. Our simple, back-to-the-basics log cabin at our 320-acre forested woodlot in the foothills southwest of Rocky has been the setting for these camps.

I sensed the older grandkids were now ready for a more adventurous wilderness experience. Our planned day hike on Mt. Stelfox would be a good step in that direction. I knew Maia, Kai and Zara were physically quite able to do this hike, if suitably moti-

vated and prepared. We had discussed the hike for over a year now. Mt. Stelfox was an important touchstone for our family, having been named after their great, great grandfather Henry Stelfox. My grandfather played a significant role with early settlers, indigenous peoples, and fish and wildlife conservation, in west-central Alberta during the first half of the 20th century. The previous evening we had reviewed our trip preparations, packed up whistles and bear bells, lunches, day packs, hiking poles and water bottles. After a quick breakfast, we headed in to Rocky to pick up Jim. The weather was forecast to be very warm and mostly sunny. I wanted to be on the trail by 9:30 a.m. so that we could do the more strenuous part of the hike during the earlier, cooler part of the day.

We arrived on schedule. Clear skies and cool, fresh morning air greeted us as we headed up the Coral Creek horse trail. The first section of trail paralleled the lower Cline River and was relatively flat and easy going. As we swung north away from the Cline River, the trail became steeper and provided scenic views of Coral Creek Canyon and the surrounding mountains. Zara, Kai and Maia were in good spirits and keen to make quick progress toward our destination. As we hiked, Jim and I were quizzed on how much further it was before we turned off the main trail to start our ‘off-trail’ climb towards the crest of Coral Ridge. We took an occasional

short stop to rest, drink some water and admire the great views.

An hour and a half into our hike, we reached a prominent lookout over Coral Creek Canyon. This was the point where we left the main trail and started our climb through the forested lower slopes of Coral Ridge. At this point everyone was feeling loosened up and excess outer wear had been shed. It was rapidly turning into the very warm day weather forecasters had promised us.

The terrain steepened quickly as we headed up slope through semi-open lodgepole pine forest. There was a fairly well-worn trail with some flagging for the first 250 m, as it switched back and forth to get up and over some fairly steep bedrock outcroppings. It was much slower going now and the single trail we were following soon dissolved into numerous, indistinct trails. There were few, if any, markers to confirm our course. We were now on the ‘off-trail’ portion of our hike. The grandkids were showing some fatigue and concern for how much further it would be to our destination. Due to the lack of a distinct trail and trail makers, and some back and forth to find easier hiking routes, I think they may have wondered whether Jim and I really knew where we were going. Such concern made it a good time for another stop to eat our lunch and evaluate our progress.

Forest cover now obscured our views of the surrounding mountains, forcing us to



Signs of fall in the pine forest understory PHOTO: © H. STELFOX

pay more attention to what the pine forest offered. Scattered juniper and fir were characteristic of its understory. As well, blueberry, willow and other shrubs contributed to the richness of the understory. The fact that the latter's leaves were starting to turn yellow, red and purple signaled that, despite the heat of this day, fall wasn't very far away. We hadn't seen or heard much sign of animal life as yet – only the occasional call of a gray jay and ravens flying overhead. Some older deer droppings were scattered on the forest floor but no fresh sign. Jim and I assured the grandkids that we were on course, making great progress, and that it shouldn't be more than an hour or so before we reached treeline.

After a restful, rejuvenating lunch and a refreshing drink of water, we continued to angle upslope in an easterly direction. We kept an eye out for a steep, narrow draw which would help guide us to the open ridge slopes near our goal. Cousin Jim continued in the lead to find and follow paths of least resistance

through the forest, working around deadfall, heavier undergrowth and steep, rocky sections. I started to lag behind the group, needing to pace myself at a level I could maintain. My cardiovascular system was showing its age, particularly at these higher elevations and on steeper terrain. Jim and the grandkids were showing their grit and desire to get to the top sooner rather than later, but graciously made frequent short stops to allow 'grandpa' to catch up. Our collective focus was now on getting through the forest and to the open ridge. We weren't paying much attention to our immediate surroundings as we pushed onward and upward. However, we did have the pleasant diversion of seeing a blue grouse at close quarters, foraging on the forest floor and scurrying off to the side, just far enough to be out of our way.

The trees were becoming shorter, with a noticeable increase in subalpine fir. Significant openings in the forest canopy made one feel that we might break into open alpine terrain

at any time. And suddenly, there we were with an unobstructed view of the open ridge ahead of us. The mood quickly shifted to one of excitement peppered with some relief. Apprehension about whether we could/would make it to the top disappeared instantly. In the distance we could see the plaque which had been installed in honour of the mountain's namesake. It was located just below the ridge line on steeply slanting shale bedrock. Between us and the plaque was a scree slope and some large boulder jumbles. It only took another 15 minutes for the grandkids to make their way up to the plaque, with Jim and I close behind. It had taken us two hours to make the relatively short climb from the Coral Creek Canyon viewpoint to this point and a total of 3.5 hours from where we had parked the vehicle.

We found some rocks to sit on where we could take a well-deserved break, finishing our lunch and enjoying the mountain scenery. It wasn't long before Kai was up

and headed to the ridge top to see the other side. Maia and Zara soon followed. From the ridgeline there were unrestricted views of the surrounding mountains in all directions. Below to the east and southeast was Lake Abraham, the mouth of the Cline River, the Kootenay Plains, and the North Saskatchewan River. It was most rewarding to see how

the grandkids embraced the moment and marvelled at the grandeur of the views. I could feel their shared satisfaction in having reached our destination, proving to themselves and each other that they could push through mental and physical challenges they hadn't experienced before. I took some satisfaction myself in having made it up here once again – hoping I still might be able to do this hike in another few years with some of the younger grandkids.

The return hike to our parked vehicle took a couple of hours, but it was downhill for the most part and was now a known, do-able challenge. We worked our way down the steep forested slopes on a more direct route, following occasional game trails. Enroute, Kai spotted a golden-mantled ground squirrel sitting motionless in an upright posture.

Kai was able to slowly walk up close to the squirrel without causing it to dash away and I took a picture. It was a small, but special moment, to further connect with nature in this beautiful wilderness setting.

Once we reached the main horse trail, the grandkids took the lead, keen to demonstrate their physical prowess in beating us back to the vehicle. I asked only that they stay in sight of Jim and I, to ensure their safety. It was with considerable fatigue and much satisfaction that we reached the vehicle around 4:00 p.m., a little more than six hours from the start of the hike. The final payoff would be a Boston Pizza supper in Rocky, after our hour and a half drive back to town.

A couple of days after the hike, I asked Kai, Zara and Maia to provide me with feedback on what they found to be especially enjoyable, challenging, and memorable from our adventure. Their comments focused on the physical aspects of the hike, including their satisfaction in reaching the top of the mountain, their sense of accomplishment



Grandchildren scrambling up Coral Ridge at the southwest end of Mt. Stelfox. The plaque honouring Henry Stelfox may be seen near the top of the photo.
PHOTO: © H. STELFOX



Plaque at Coral Ridge Honoring Henry Stelfox Caption: Harry, Kai, Zara, and Maia at the plaque honouring Henry Stelfox PHOTO: © J. STELFOX

in pushing through new and difficult physical challenges, and our ability to find our way to the top without well-marked trails. Kai commented: "I learned that if you get lost you can always find your way as long as you know the general direction of where you are headed." Here I think he was referring to the unease they had all felt when we were on the unmarked 'off-trail' portion of the hike. We discussed that issue and I suggested, as perhaps a grandfather should, that they needed to think about the desirability of following their own uncharted path as they grow up and not just follow the well-trodden paths of others.

They were also impressed by the stunning views from the top of the mountain. Zara noted the 'exquisite colours of Lake Abraham.' However, they had few comments about wildlife sign and the forest communities we passed through. Perhaps the more

physical aspects of the hike tended to override a focus on their more immediate hiking environment. Maia did mention 'seeing many fossils in the rocks' at the top of Coral Ridge. Also, it was obvious that Kai really enjoyed his close and intimate encounter with the golden-mantled ground squirrel. I think they all sensed the unique wilderness setting we were in for most of the day – extraordinarily beautiful and far away from other people. However, they may not have consciously thought about this, as a special thing to be embraced and appreciated in its own right. One feeling we all shared was that this adventure was definitely something we wanted to do again, especially with family and special friends. 🐿

Now retired, Harry Stelfox spent his professional career as a wildlife biologist working in western and northern Canada for mostly federal and provincial government agencies.



Golden-mantled ground squirrel offering its best impression of Kai. Or was it the other way around?
PHOTO: © H. STELFOX



We were treated with this spectacular view of Lake Abraham from Coral Ridge. PHOTO: © H. STELFOX

The Hungry Bend Sandhills

By Joy Friesen



If you were to turn off Highway 88, onto a country road, just north of the last bridge crossing the “Mighty Peace” River, in its powerful rush towards the Arctic, you would soon find yourself in an area that has come to be known as the Hungry Bend Sandhills. This is a very small piece of the continent-wide, boreal forest of North America; Canada’s boreal, in turn, is only a part of the vast boreal region that sits on the top of our globe, encircling the North Pole.

The boreal forest is a land without the dramatic features one comes to expect of impressive scenery. It is a land of miles of aspen, spruce, pine and poplar, of fens and beaver haunted marshes. Its rivers are slow and winding, its land gently undulating with an almost impenetrable and tangled undergrowth of wild rose, willow, and cranberry.

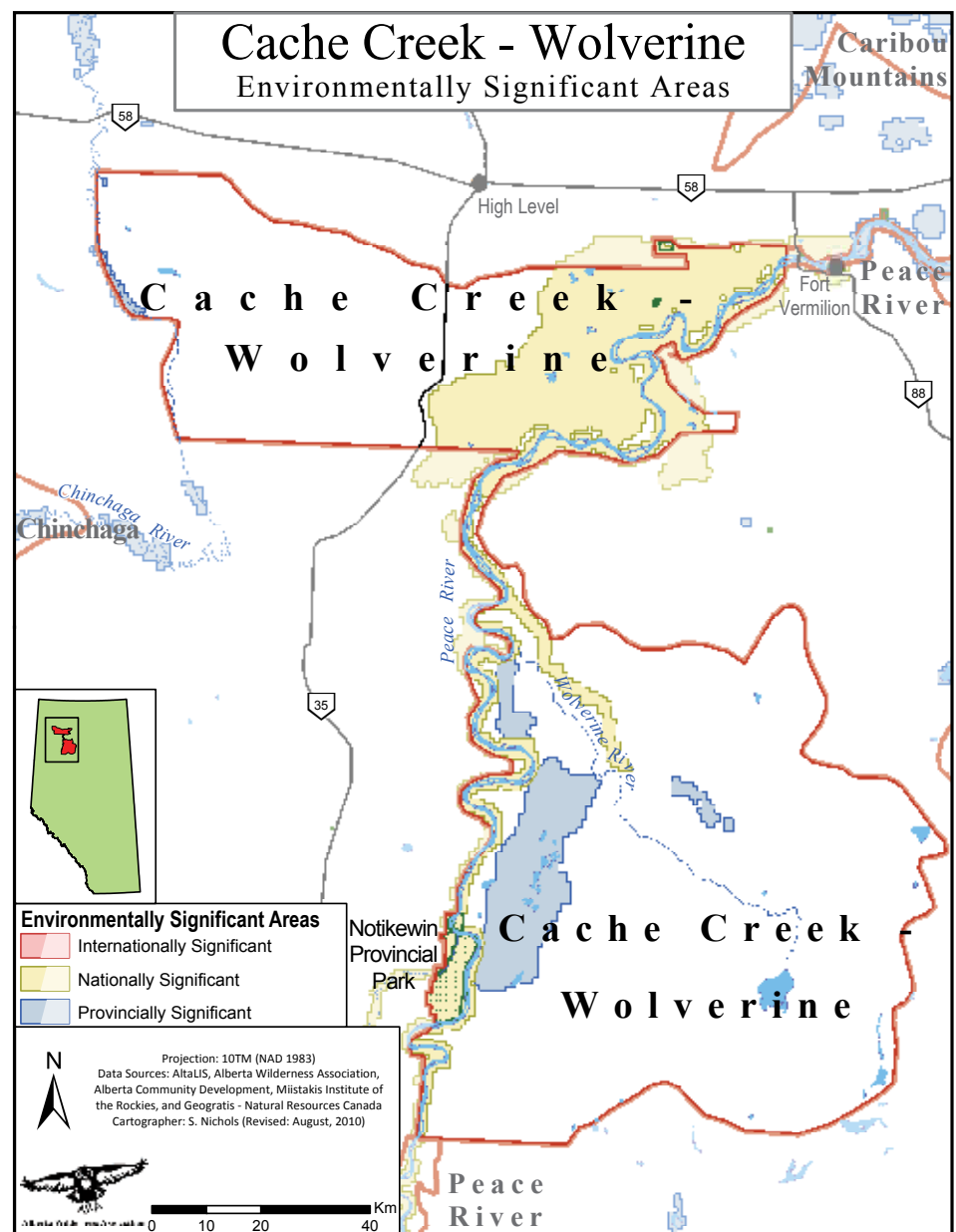
But, the boreal’s more simple, less dramatic, beauty is addictive. Its rivers cut deep and banks loom high; ancient volcanic hills rise out of its sameness and from their summits one looks north – out, far out into infinity. There seems to be nothing between you and the end of the earth. Consequently, the boreal forest is one of the few places left where the wilderness may be experienced on a truly vast scale.

And there are the pine lands. Dry and relatively barren, these areas are one of the few terrains within the boreal forest that can be accessed in ‘the raw’ without the need to follow trails. In them comes a freedom of movement, an excitement peculiar to the pine lands that is absent in the rest of the boreal forest.

The Hungry Bend Sandhills is a complex of tree-stabilized dunes; pine stretch

up over the ridges and down the slip faces, while spruce, marshes, and small ponds are cupped between.

Peter David, in his classic study of sand dune occurrences in Canada, notes there are



The Hungry Bend Sandhills are located north and west of the Peace River in the Cache Creek – Wolverine Environmentally Significant Area. PHOTO: © ALBERTA WILDERNESS ASSOCIATION



Hikers enjoying a fall day in the Hungry Bend Sandhills. PHOTO: © M. TOEWS

three distinct types of dunes within this area; transverse, parabola and lacadena. Most unusual are the transverse dunes which have been formed by prevailing southeast winds, then modified by northeast winds (which also lay down dunes of that orientation.) Then, yet a third time, the whole complex was warped and modified by east winds. These differing winds have created unusual dune formations where many of the dunes have two slip-faces and some are double dunes; dunes on top of dunes. David designates the region “a very important area from every point of view.” He also noted that: “It remains the only area (in Canada) with such complex (dune) orientations.”

A slip face is “the steepest face of a sand dune, down which sand slips”

– Oxford English Dictionary

Because of low soil fertility, this area has remained an “island” of wilderness between three communities, High Level to the northwest, Fort Vermilion to the east

and LaCrete to the southeast. It also adjoins the Beaver First Nation reserve, Child Lake reserve, Paddle Prairie and North Vermilion (Buttertown) settlements.

Because the dunes are easily traversed, there have always been trails through the area. Wild horses, early settlers and the native populations have shaped and used these trails. Some of the old pack trails and horse trails are still visible and are still able to be used today.

The marshes, when dried, were cut for hay; they were called hay grounds and identified by a user’s name, such as Arthur’s Hay Ground, etc. though the land has always been Crown Land, and so open to all.

In addition to wild cherries and one species of nut, the beaked hazelnut, there are wild berries that are still picked and preserved. Dwarf blueberries await, tart, yet sweet and silvery with bloom; cranberries too that burst sharp on the tongue and so closely resemble kinnikinnick that the uninitiated are easily fooled.

Dwarf dogwood or bunchberry present carpets of white in early summer, only to be-

come scarlet puddles on the autumn forest floor. The Beaver First Nation names these “itchy chin berries.” When I asked my friend Dominic Habitant why they were called that he told me: “Because when you eat them, you can feel your beard growing.”

The Beaver have some interesting, culturally special places scattered throughout these dunes. An elder told me of an island on one of the lakes, where two-year old children, chosen to be powerful medicine men in the future, were left alone, tied to a tree overnight. There is the story of a white moose that saved the people from starvation and the memory of the two magic stones. There’s the legend of the Tiko-cheechoke, a reptile unknown to science. There are active trap-lines and the Canadian Rangers make use of the area in their survival training.

Horses have always had a presence in the sandhills. For many years there were wild horses in the area. Today one can still occasionally meet teams and wagons out for a Sunday drive. Three years ago a local pony club’s dream was realized when part of the Machesis Lake Recreational Area was developed for access for horse trailers, along with corrals and other facilities needed for horses. This reduced the pressure on the land that horse trailers that were taken randomly into the area generated, destroying in turn some very sensitive habitats. From this staging area, riders are able to access a network of trails, many of which have been in use since the earliest use of horses in the area.

The sandhills are easy to get into, a pleasure to hike, and a favorite camping place. But the area’s close proximity to the local communities has been of concern to many of us who wish to preserve, at least some part of it, from intensive OHV activity. It was because of this concern that the Hungry Bend Sandhills Wilderness Society was formed in 1998; this year marks the twentieth anniversary of our society. Without official status, the society has, of necessity, remained relatively low-key. As we are unable to actively police the area, instead we have focused on efforts to teach the public of the area’s geological and historical importance; one important method we have used is to offer the occasional guid-



Signs of fall's approach greet this rider in late August in the Hungry Bend Sandhills. PHOTO: © G. HAYDAY

ed school excursion through the area. Our members, like the students, have enjoyed those trips a great deal.

An intensive effort was also made to create a Special Places 2000 nomination, for an approximately ten township block of the area. This project drew together society members with widely varying skills. We were very disappointed that our nomination wasn't accepted. The society's name was suggested by Dominic Habitant, a Beaver elder. There is a big double loop on the Peace River in the dune area. Dominic told us it took so long to navigate the loops that a river traveler had long finished his lunch and gotten hungry before completing it. This also seemed a good name choice for the society and it was by this association that the area, earlier known simply as 'the sandhills', have become known as the Hungry Bend Sandhills.

Like elsewhere, the government has given a high priority to resource development on public lands. Trap-lines, oil and gas concessions, diamond and timber allocations – they are all present here and are impediments to any sort of protection. A real challenge is to find an ideal type of protection for an area that it is subject to so many traditional uses. Mandated protection too often seems to be an effort to make "one size fit all"; that approach simply wouldn't work here. What the HBSWS would like to see implemented is a mosaic approach where differing areas with

differing needs could be accommodated. Perhaps this is an impossible dream, but one can always dream!

If you continue west along the country road north of the bridge, through the farming community, the gravel road you're on will become a sand trail winding through cool spruce bottoms and up over piney dune ridges. Wiry Kinnikinnick sprawls down over the sand cut-banks alongside the road. Here, only about an inch of duff – it would be a misnomer to call it "soil" – is on top of the dunes. Trails remain etched into the land for many, many years and the sudden upsurge of OHV traffic is of special concern to our group. Society's urge to get somewhere fast seems to affect even the ideas of how people choose to get away from the rat race. Too few want to take time to enjoy the journey; the destination is the goal. But to value the dunes, a walk-in is the only way to really enjoy them. It's the squishy marshes, steep slip-faces, and cool spruce bogs that make the magic of the dunes.

Here on the dunes, aspen and pine show the peculiar twisted growth resulting from being rooted in sand; pin cherries and choke cherries, very small shrubs, also are found here. The tracks of moose and bear show plainly in the sand of the trails and one can look deep into the open forest.

Autumn is probably the best time to hike or camp in the sandhills. The weather is

good, mosquitoes are gone, most marshes have dried over the summer and the golden leaves of aspen are glorious against pure blue sky. Mushrooms have sprung up all over to flaunt their oddities and musky scents. Silvery reindeer lichen crunches like corn flakes underfoot.

At night wolves howl and a lynx snarls and spits. There's the wild laugh of loons and a startled duck bursts noisily from the lake below camp. Small critters rustle in leaf litter on the other side of the canvas that separates us.

A morning camp is all enchantment. I love to creep out into the quiet pre-dawn and build my tiny breakfast fire. Its smoke drifts overhead into the branches of a jack pine; mist drifts in gauzy wisps over the pale lake and a gray, whisky-jack drifts into camp on silent wings. My battered tea pail is tucked over the fire for that first wonderful, glorious mug of tea. Breakfast is bannock and bacon and the whisky jacks and chipmunks make sure they get their share.

Then the rising sun tops the ridge, stretching its golden fingers through twisty pines; a gentle wing of air brushes over the lake, making it quiver. Leaves stir as the forest exhales a fragrant breath and that breath is the sweetest air on God's good earth. 🍃

Joy Friesen is a longstanding member of the Hungry Bend Sandhills Wilderness Society.

Linking Nature and Persons with a Disability:

Introducing Coyote Lake Lodge

By Ross W. Wein



If you want to stay informed about the worlds around you today, there is a danger you may become overwhelmed by the negativity of today's local, national, and international news on a wide range of topics. Internationally, wars, threats of wars, human rights violations, and refugee crises compete for your attention. Homelessness, poverty, and discrimination figure prominently in our local and regional news. And certainly, news about the conservation of wilderness and wildlife is not immune from controversy and worry. Some psychologists suggest that depression is likely for some who cannot escape the depressing news.

Here I invite you to set the darkness aside and join me in being more positive and

hopeful. My invitation is shaped by my experience and those of my family. I am a father with a son (Danny), disabled by a motorcycle-truck crash in South America, and with a daughter (Laurie) who, with her husband (David), is based in Jasper. Both Laurie and David are employees of Parks Canada. In my university career I always had an interest in conservation. Now retired, these experiences have led me to contribute time to increase the opportunities for seniors and persons with a disability to benefit from the healing power of nature.

Friends who have lived with a disability for decades tell me that society has changed positively in many ways. Persons with a disability are now much more accepted as valuable citizens. For example, the obvious infrastruc-

ture changes in transportation include everything from more rugged wheelchairs and scooters, to curb cuts, to kneeling buses. But, as important as these gains are, we still have a long way to go before we reach the end of this road. Think for a moment about how challenging air travel can be for people with certain disabilities. Or, from the perspective of experiences in nature, think about how difficult it is for people with disabilities to get outside in our Alberta winters.

The Alberta Abilities Lodges Society was formed to try to contribute positively to the place of people with disabilities in our society. In 2015, the Society purchased an Alberta Government minimum security correctional centre situated on 480 acres located 65 kilometres directly west of Leduc and



Dozens of staff from Alberta Environment and Parks volunteered their time to help maintain the grounds at the Lodge.

the Edmonton International Airport. Coyote Lake Lodge was born when we received Certificates of Title to the property in October 2015. Since then volunteers have contributed 500 to 600 days annually to develop a safe, secure, comfortable retreat in the lower foothills of Alberta. Before describing the Lodge in more detail there are four questions I would like to discuss.

Who are these persons with a disability?

The United Nation defines a “person with a disability” as a person who has a long-term or recurring physical, mental, sensory, psychiatric or learning impairment. Both the lists of disabilities and their underlying causes are very long.

Thousands of on-line sources provide information on the range of conditions experienced by these special citizens. One good, short introduction is on the Rick Hansen Foundation website (<https://www.rickhansen.com>). In Canada nearly 15 percent of our citizens have some form of a disability (see <http://ontario.cmha.ca/news/statistics-canada-releases-more-data-on-canadians-with-disabilities/>). To visualize this number, think of the proportion of your community's population. More than three million Canadians, or more than one billion disabled people around the world, may be too large to imagine.

People with a disability live with families, in hospitals, in group homes, and the list goes on. Many though live their lives isolated from their fellow citizens. Because so many live in isolation it is possible to go about our everyday life without noticing, let alone visiting or interacting with, one of these “silent” or ignored citizens.

What do these special citizens want?

I seldom hear this question asked today, perhaps because social media and society in general have greater levels of understanding of human medical advances. I think the answer to this question is simple: “I want the same opportunities and everyone else in society.” Often urban centres have better resources and support systems than rural ar-

reas; therefore, persons with a disability often gravitate to cities and greater isolation. When it comes to nature, the barriers to visit wilderness areas are much greater for persons with a disability. These barriers often begin with limited access at the gate and parking lot.

Why is it important to be sensitive to the needs of these special citizens?

We must give credit to all of those who have been advocates for years. Individuals, families, societies, governments, and businesses are increasingly aware of the value of investing in these citizens. Families are great supporters. But not all persons with a disability have such a support network and as a person ages this level of support may not be sustained. Governments should be sensitive to discriminating against 15 percent of their population. Businesses find that these citizens can be valuable employees. Personal contact leads to understanding and appreciation.

What can I do?

Learn by visiting people with disabilities and developing empathy for their circumstances. Whether you're on the street or in

a conservation area simply say “Hello” to someone with a walker or a wheelchair. To develop empathy join friends in a useful sensitivity exercise where you attempt to visit your favourite wildland site in a borrowed wheelchair, or with your ears plugged, or with a mask over your eyes. Try to appreciate what people with disabilities will experience before you take the next step of bringing a senior or a person with a disability to your special wilderness area!

If, like me, you want our society to be more inclusive for people with disabilities then join one or more of the many disability societies that exist. Volunteer your time in efforts that will deliver concrete results in a specific time period. Financially support a registered non-profit disability group that you recognize as being effective. Individuals, by pooling their interests and resources, really can make a difference.

What can we offer at Coyote Lake Lodge?

Until we win the lottery Coyote Lake Lodge will be a work in progress. While we opened for guests on Canada Day in 2017 we will be renovating and repurposing for years to come. William Watson Lodge and other international facilities are models for our



An aerial view of the main facilities of Coyote Lake Lodge.

vision. The over-riding goal of Coyote Lake Lodge is to make opportunities for more seniors and persons with a disability to enjoy nature throughout the year. If visitors enjoy nature, there will be a greater interest in exercising on our trails for example. All of us need more exercise and this is even more critical for persons confined to a wheelchair. Check out Facebook for our lodge photo album "Coyote Lake Lodge Alberta".

What has our society accomplished since late 2015? I think we have accomplished a great deal. Coyote Lodge (the main building) now has four ground- or deck-level entrances. We built three accessible washrooms; one has a wheel-in shower. There are three bedrooms (converted from offices), each with two single beds near the washrooms. While the library and meeting rooms are inviting, the main meeting area is the dining room with its adjacent commercial kitchen. Four cabins each have six beds. Newly completed concrete walkways reach from the main building to two of the cabins. These will be the first two cabins to be upgraded for better accessibility. A recreation centre will be refurbished to become a visitor reception office; it will also be home to a wellness centre with exercise equipment guests may use when the weather restricts outdoor exercise activities.

The Lodge's three-quarters of a square mile of hills and valleys is half forested and a wildlife haven since it provides a stream and forest corridor from Coyote Lake to the North Saskatchewan River. Elk, moose,



Coyote Lake Lodge was pleased to welcome visitors from the Hong Kong Rehabilitation Society.

deer, and coyote tracks are everywhere. Part of the land has gardens and hay meadows which will support garden/sport/trail therapies. A service centre with a steel-clad shed, double garage, and several other equipment storage buildings, have workshops, equipment and supplies to support the lodge facility and programs.

Adapting equipment to help get seniors and persons with a disability out on the land, water, ice and snow is an important focus of our work. We have four double sea kayaks, three single kayaks, nine canoes, 12 hockey sledges/sit-skis, five TrailRiders, six tandem bicycles, six regular bicycles, as well as 100 pairs of trekking poles and bins of helmets/hard hats, safety vests, ice cleats, and outer wear. This equipment is carried to events on

cargo or canoe trailers pulled by our heavy duty pick-up truck. We encourage people to try out our equipment first. If the person with a disability becomes enthused to get back to nature their support group may rise to the occasion again and possibly provide the necessary equipment to continue to improve their lifestyle.

Guests have ranged from weekend workshop attendees to individuals and families, to a delegation from the Hong Kong Rehabilitation Society, to 40 employees from Alberta Parks who planted trees in wildlife corridors and weeded gardens. We look forward to welcoming individuals, families, professionals, clubs, and business groups as guests to enjoy our facility. We also welcome volunteers to renovate buildings, to build trails, and to cultivate the gardens.

We hope you will see Coyote Lake Lodge as worthy of investment. Ask to be included in our email list, tell your friends about our project, and donate to our charitable society if you can. Every dollar supports the development of this Central Alberta opportunity for seniors and persons with a disability. It's long past time we brought to central Alberta the 35 years of service provided by William Watson Lodge in Kananaskis. 🐾

Ross Wein is a professor emeritus at the University of Alberta and the President of Alberta Abilities Lodges Society.



Trails, Sediment, and Aquatic Habitat:

McLean Creek

By Logan Boyer

It was mid-May and fresh snow blanketed the ground as I walked along McLean Creek searching for potential sediment sources. A strange bleating sound emanated from waters beside me, drawing me toward the creek. As I came to the edge of the bank, I finally saw the source of the unusual noise; a moose calf was trapped by the steep banks and unable to move in the cold waters. Thankfully, he was very young and I was easily able to pull him to dry land. There he barely had enough strength to attempt to stand up and fell to his knees again. Eventually, he was able to stand for a brief moment and I knew he would recover his strength. His mother's presence on a distant ridge urged me to move on and let nature take its course.

For moose, beavers, and many bird species, the wetlands and forests surrounding McLean Creek provide a suitable habitat despite the constant drones of OHVs, dirt bikes, and large trucks nearby. The same

cannot be said, however, for fish populations in McLean Creek. Trail erosion from the off-highway vehicle (OHV) trails provides significant levels of total suspended sediments (TSS) in McLean Creek. These sediments negatively affect fish feeding, behaviour and physiology, and has lethal effects on their eggs and larvae. Increased TSS also reduces water quality as sediments act as substrates for bacteria. This incurs costs to downstream water treatment plants which require removal of sediments.

Working under the supervision of Dave Mayhood, an experienced aquatic ecologist, we studied TSS loading from OHV trails and roads into McLean Creek over a three-month field sampling period (May to July, 2017). Located in the foothills of the Rocky Mountains, McLean Creek is a Public Land Use Zone (PLUZ). Apart from its network of OHV trails, this PLUZ is open to logging, gas development, livestock grazing, and camping. We were able

to verify a total of 113 sediment sources in the McLean Creek watershed, with a large portion of them being at moderate to high risk for sediment delivery to the creek due to large areas of erosion, steep slopes, and direct run-off into McLean Creek. Sources include official/designated OHV trails, gravel roads, pipeline access and cut lines – all provided run off into McLean Creek. The length of linear disturbance (130km) within the watershed was significant, over 2.5 times larger than the length of the watercourse. The density of linear disturbances (4.3 km/ km²) was the highest we recorded among the 105 small southwest Alberta watersheds we assessed. Trails and roads do not provide any mitigation measures despite the large risk of sediment loading into the creek they present. Even at the single OHV-bridge across McLean Creek, which reduces stream crossings, pools of muddy run-off accumulate on the bridge and pour into the creek as vehicles drive over them. It appeared as if the



East McLean Creek headwaters; likely the largest sediment source to McLean Creek and a common area for mudding. PHOTO: © L. BOYER



An OHV trail capturing stream flow of West McLean Creek PHOTO: © L. BOYER



Water quality differences in a McLean Creek tributary upstream and downstream of a gravel road. PHOTO: © L. BOYER

quality of McLean Creek waters had been sacrificed completely for recreational use.

Throughout the early months of sampling McLean Creek ran with a colour akin to a creamy coffee, as snowmelt and rain-fall eroded the various dirt trails. We observed significant increases in TSS during precipitation events, with an average threefold increase of TSS concentrations downstream of sampled sediment sources. A striking example of sediment delivery was at a trail crossing near the headwaters of McLean Creek, where I could observe crystal clear waters meeting muddy trail runoff, increasing the TSS concentrations a hundredfold. The clear, unaffected waters only flowed for a quarter-kilometre, with the entirety of the creek downstream looking an opaque brown. This crossing

is also a popular spot for mudding, as I witnessed multiple vehicles stuck in the mud there. This further exacerbates the sediment loading problem.

Although there have been no recent fish surveys in McLean Creek, a survey completed prior to OHV use in 1978 found small numbers of brook trout, bull trout, longnose dace and white suckers. Bull trout are of special interest as they are listed as a threatened species and are likely to have smaller populations where roads and trails are dense, if they even exist in McLean Creek anymore. The TSS levels we observed in McLean Creek during our study were enough to produce a 40 to 60 percent mortality rate for the eggs and larvae of spring spawning fish. Despite generally low concentrations of suspended

sediments, the exposure duration of eggs and larvae to suspended sediments during key developmental periods makes it detrimental. On top of the fish habitat impacts, we determined that McLean Creek contributed around 12 to 14 tonnes of suspended sediment to the Elbow River during our brief study period. This contributes far more sediment than expected given the size of the watershed area. These estimates seem high given the fact that a reservoir lies at the downstream end of all sediment sources affecting McLean Creek. In theory this reservoir should settle out sediments before they their way into the Elbow River. This did not seem to be the case. The TSS contributions to the Elbow River are therefore fine particles which can be carried long distances, and potentially incur additional costs to downstream water treatment facilities.

McLean Creek may be an extreme example of rampant trail erosion and sediment delivery due to OHV trails and roads, but it underlines the impacts poorly designed trail systems will have in sensitive watersheds. Sediment loading could be greatly reduced if the trail systems in McLean Creek were improved. Adding sediment traps and fences, cross ditching, and closing highly erodible trails are examples of the improvements this badly damaged watershed requires. 🏔️

Logan Boyer is a biologist and recent graduate of the University of Calgary who has a passion for all things outdoors and maintaining the natural setting of the Rockies.



Trucks and OHV's frequent McLean headwaters for mudding PHOTO: © L. BOYER

Protecting & Recovering Wildlife in Canada

By Joanna Skrajny, AWA Conservation Specialist



Efforts to try to prevent the further decline of wildlife too often seem as ineffective as trying to plug a geyser of water from a burst fire hydrant with your hands: largely futile and likely painful. The history of industrial development resembles that geyser. Resource extraction is too seldom slowed to benefit species at risk. Governments seem deaf to the argument that a healthy environment generates real economic benefits – by providing clean water and air or by improving mental health and tourism opportunities. Instead they more often are seduced by corporate promises of the resource sector jobs industrialization may deliver.

The first step on any road to recovery is admitting that a serious problem exists. The World Wildlife Fund of Canada's Living Planet Index reveals such a problem for wildlife. It shows that half of the species monitored since 1970 have declined in abundance. Those declines are stunning; the average decline in abundance is 83 percent. Even the species "protected" under the federal *Species at Risk Act* (SARA) continue their downward spiral; they have declined by almost 30 percent.

Amazingly perhaps, this reality of steep population declines sometimes co-exists with a denial that wildlife species are in trouble at all. Take for example Alberta's bull trout, which in 2012 were recommended for a federal threatened listing due to the fact that "no populations are abundant and more than half show evidence of decline." Without immediate actions to protect bull trout that recommendation projected an additional decline of

over 30 percent over the next three generations of this species. Unfortunately, since bull trout are very easy to catch, a common misconception may develop where angling success is mistakenly thought to be due to the fact the species is in great shape. On the one hand, this misconception makes sense. If you are out on the water and catch a couple of large fish in a day, your instinct might be to think there must be a lot of fish in that river. In the case of bull trout, it's highly possible you would have caught one of a small handful of large adult trout remaining in that river. Clearly, these sorts of misconceptions must be addressed for the public to understand the imperiled status of wildlife and to lend their support for the recovery of these species.

In Canada, a second step would be for the federal government to follow the spirit of its own law and actually list as "at risk" those species identified as such by its own advisory body, the Committee on the Status of Endangered Wildlife in Canada (COSEWIC). The federal Species at Risk Act is clear here: "within nine months after receiving an assessment of the status of a species by COSEWIC, [the Governor in Council] may review that assessment and may, on the recommendation of the Minister, (a) accept the assessment and add the species to the List; (b) decide not to add the species to the List; or (c) refer the matter back to COSEWIC for further information or consideration."

If the Governor in Council (the formal term for the federal cabinet) doesn't make a decision in nine months, the Minister is

required by the Act to list the species according to COSEWIC's recommendation. This process, in my view, is a reasonable one that establishes a sense of urgency to act on behalf of an imperiled species.

Over time, the interpretation of what these timelines demand has warped substantially. The clock did not begin ticking until the Environment Minister handed COSEWIC's assessment over to the cabinet. In 2015, Jamie McDevitt-Irwin and colleagues found that it took an average of 3 and a half years for the federal government to decide whether it would list marine fishes under the *Species at Risk Act*. If the species was assessed as threatened or endangered, the decision took even longer, an average of 5 years. It's a similar story in Alberta. Despite the fact that bull trout have been recommended for federal listing since 2012, they still have not been listed. The neglect of the lake sturgeon's endangered status is even more striking. COSEWIC first designated the lake sturgeon population in the Saskatchewan river as endangered in 2005; the designation was reaffirmed by a second COSEWIC status assessment in 2017; in January 2018 the Minister of Environment and Climate Change said she would forward the COSEWIC assessment to cabinet "as soon as possible." Lake sturgeon are still waiting for that to happen and the nine-month clock to start ticking.

The federal government, having heard from the public, ENGOs and their own MPs on this issue, recently released a policy to create a standard timeline for listing species at risk. Since this timeline still

tolerates delays it's hard to see it as one driven by a need to take urgent action. The new policy specifies that the Minister must hand a COSEWIC assessment to the Governor in Council within 15 months "for terrestrial species and aquatic species with straightforward consultation requirements" and 27 months for "aquatic species with extended consultation requirements". This means that, within two or three years, the Minister will try to secure a Governor in Council decision on whether a species should be added to the "at risk" Schedule of SARA. For fisheries, the Department of Fisheries and Oceans (DFO) claims they must conduct an assessment of a species' potential to recover (is it even worth listing the species if we can't recover it), con-

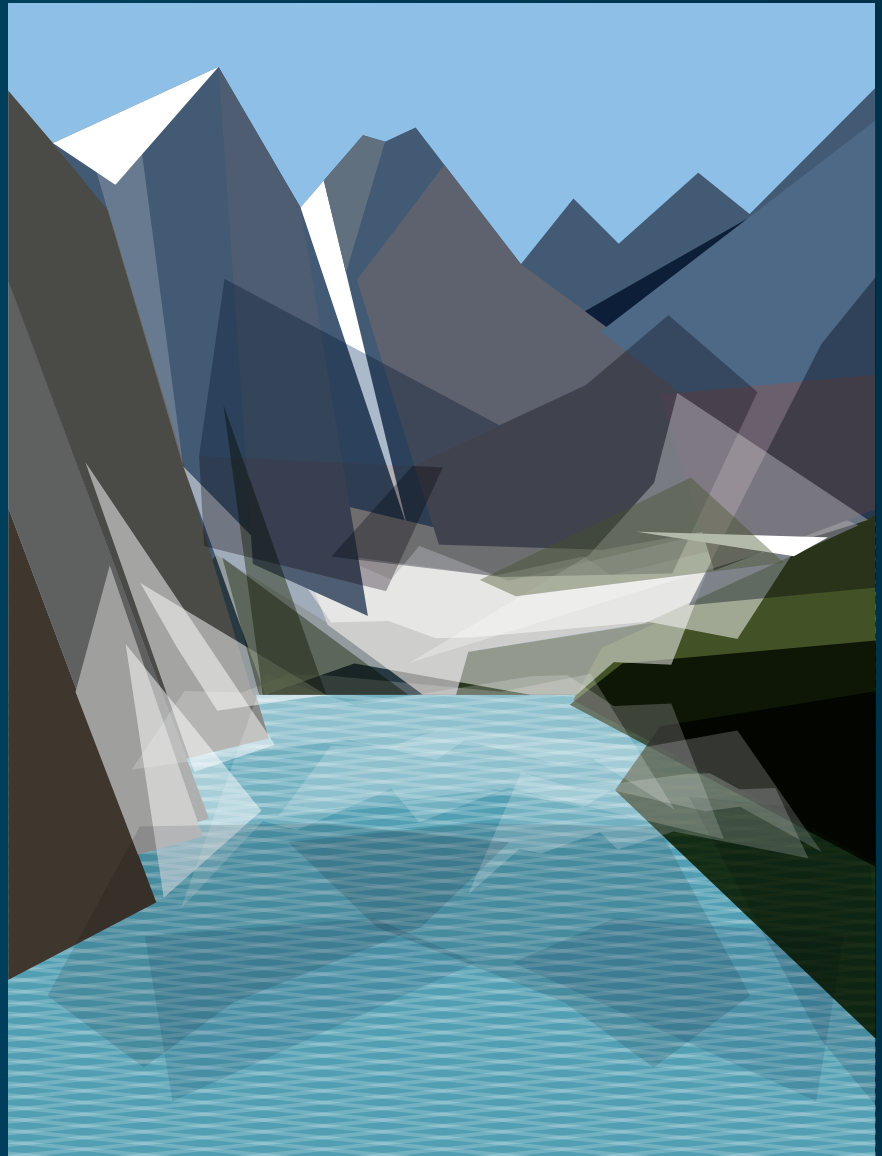
sultations and socio-economic analyses (what impact will listing a species have on the economy). Once advice is "approved nationally by DFO Senior Executive Committee + Implicated Sectors" DFO will submit their own recommendation package to the Minister, who then submits it to the Governor in Council.

While this policy shortens any political foot-dragging, it does not appear at all to address the bureaucratic quagmire that effectively seems to link a decision to list with convenience. The proof in this suspicion is in the pudding: Findlay et al reported in 2009 that when a listing decision is made, species perceived to be economically valuable, are managed by DFO, or occur entirely in Canada

are the least likely to receive listing. In fact, nearly three-quarters (70.6 percent) of the marine fish species identified by COSEWIC as endangered or threatened are denied listing. This pattern allows commercial fishing (usually one cause of decline) to continue.

In the summer of 2016, the federal cabinet rejected COSEWIC's 2011 recommendation to list Atlantic bluefin tuna as endangered as they believed it would "result in significant and immediate socio-economic impacts" on the multi-million dollar commercial and sport fishery. This privileging of industry over the existence of species couldn't be more contrary to the purpose of the *Species at Risk Act*. Federal politicians should imagine what

Featured Artist John Vickers



Banff National Park © J. VICKERS

the impacts will be when the species no longer exists.

If a species is listed as endangered or threatened, it's illegal to kill, harass, capture, buy, or sell a member of that species or damage/destroy its nest or den. However, these prohibitions only apply to federal lands. This is why when the *Species at Risk Act* was introduced and first debated, Senator Mira Spivak commented that “in this bill, we are left with two distinct classes of species at risk. We have those that, by chance, make their way to federal lands — about 5 per cent of our country outside the territories. By law, they and their dens and nests are protected if they are near a post office, an airport, a military base, a Coast Guard station or a national park. Then we have all the others whose life and residence may or may not be protected by cabinet order, unless they are aquatic species or protected under the *Migratory Birds Convention Act*. That is what is in this bill.”

The listing of a species triggers a series of reports and actions which are intended to help recover the species. The federal government is failing on this front as well. In 2013, the Auditor General of Canada stated the government was not meeting its legal obligation to complete recovery strategies, action plans, or management plans. At that time, 146 recovery strategies had not been completed and only seven of 97 action plans were in place.

Given AWA's work on species-at-risk this didn't surprise; most federal actions taken to recover species at risk have been due to Environmental Non-Government Organizations (ENGOS) taking legal action to force the federal government to uphold its own laws. AWA's defence of greater sage-grouse is a prime illustration of this.

So too is the example of killer whales in B.C. waters. Listed as endangered in 2003, southern resident killer whales were among the first species to go through the recovery planning process under the *Species at Risk Act*. In 2008, DFO published a Recovery Strategy for this species and issued a “protection statement” which they tried to use to protect critical

habitat using voluntary guidelines and non-binding laws — a completely unlawful approach. In 2009, this was replaced by a Critical Habitat Order, the first ever under the *Species at Risk Act* (SARA). However, it still completely failed to protect habitat that was critical for the species' survival and recovery.

In 2012, nine conservation groups represented by Ecojustice won a landmark decision in Federal Court, which ruled that the government had failed to adequately protect the critical habitat of southern resident killer whales.

Since this case, the government continues to fail to adequately identify critical habitat for the survival and recovery of species at risk. According to a review by Sarah Bird and Karen Hodges at the University of British Columbia, nearly two-thirds of species with published Recovery Strategies (62.9 percent) do not have any critical habitat designated at all. One quarter of these species have some partial aspects of habitat designated and only 12 percent of the strategies contain a complete identification of habitat. Remember too that identifying this habitat is only the first step — the critical habitat also must have an order protecting it. Under the Act, the Minister must publish a Critical Habitat Order within 180 days of a Recovery Strategy being published.

After public pressure and legal action to publish a critical habitat order for killer whales, the federal government refused to issue any more, despite the fact that over 100 species were now in need of habitat protection. That didn't change until Alberta Wilderness Association and Timberwolf Wilderness Society took legal action in 2015 to force the government to issue a Critical Habitat Order for threatened westslope cutthroat trout. Since that initiative, 18 more critical habitat orders have been issued.

But issuing a habitat order still does not guarantee the government actually will take action to protect and recover species.

For killer whales, the situation is now so dire that only 76 individuals remain

and no successful births have been documented since 2015. On behalf of five ENGOS (David Suzuki Foundation, Georgia Strait Alliance, Natural Resources Defense Council, Raincoast Conservation Foundation, and World Wildlife Fund Canada) Ecojustice sent a petition calling on the government to issue an emergency order for the species. On May 25 Minister McKenna announced that killer whales face “imminent threats” to their survival, suggesting an emergency order will be issued. This will allow the government to immediately implement protections for this critically endangered species. In the case of greater sage-grouse, the emergency protection order AWA pushed for at the 11th hour turned the tide away from certain extirpation of this species on the Canadian prairies. AWA hopes that recovery of westslope cutthroat trout can occur before the situation becomes as desperate. Yet signs are not yet pointing in the right direction. An Action Plan for westslope cutthroat trout is now more than three years late, despite being legally required under SARA. Meanwhile, threats to the species are real and ongoing, from forestry cutblocks to droughts to damage from off-highway vehicles.

ENGOS such as Alberta Wilderness Association view legal action as a last resort, but history makes it clear that not much is accomplished in Canada without it. AWA's goal is a commonsensical one — to make sure our governments are actually following their own laws and protecting our environments and species at risk. Surely that isn't too much to ask. ▲

Comparing Mining Liability Programs:

Lessons for Alberta?

By Madison Warne, (with Carolyn Campbell, AWA Conservation Specialist)



Following up on December 2017's *Wild Lands Advocate*, "Cleaning up after Ourselves: Oil Sands Mines Liability Program Needs Major Reform", I viewed other jurisdictions' mining liability programs to see what the Alberta government could learn. I compared jurisdictions where companies were legally required to post reclamation securities and compiled the key points of their programs. Alberta's mine liability program, as mentioned in Carolyn Campbell's article, is fragmented and underdeveloped. Currently coal mines have elected to pay full financial security while oil sands mine companies pay a company asset-based calculation. These asset-based calculations leave large potential for unverifiable liability calculations and inadequate security payments during a mine's peak revenue years. This risks underfunding future reclamation projects.

B.C.'s legislation requires a 100 percent financial liability payment from projects that will require long term water treatment and/or sites owned by a single company; this payment is collected at or prior to site closure. The amount is determined by the Chief Inspector of Mines, which means that discretion can be used to reduce a company's payment. British Columbia has many of the same problems that Alberta has with the gap between liability amounts and financial security held. This too results in potentially unfunded clean-up costs, although Alberta's gap is much larger [see Inset for comparison].

However, B.C. is actively working to improve its *Mines Act* and associated Mine

Reclamation Fund. They commissioned a report by Stantec, published in 2016, comparing mine reclamation financial security approaches in many jurisdictions. British Columbia has appointed a review committee for its 'Health, Safety and Reclamation Code for Mines' with two sub-committees that have produced a number of Code changes since the tailings breach at the Mount Polley Mine in 2014. The most recent change of the Code was June 2017. Alberta should imitate this with the Mine Financial Security Program and how it is implemented.

Moving to the east coast, Nova Scotia has minimum requirements, but also "best practice." The best practice is to require 100 percent financial security to reclaim peak disturbance of the site, according to Stantec's 2016 report. Financial security held by the government can be reduced as progressive reclamation occurs. However, the actual legislation is not as strong as other jurisdictions and there are some instances that allow liability amounts to be under estimated and underfunded. The government of Nova Scotia revised its *Mineral Resources Act* and regulations between 2016 and spring 2018, but the announced changes do not strengthen reclamation security.

Looking northwest and south respectively, best practices in Alaska and Nevada provide a 100 percent security that includes the cost of long-term water treatment and the closure costs of the mine(s). This amount is subject to periodic reviews which can result in reductions, or increases, of the liability and security amount.

The final liability amount is reviewed by state regulators, and also by federal agencies if the mine is on federal land. In Alaska, the liability amount established in the statute is a "reasonable and probable cost of reclamation." Alaska reviews mining permits every five years and usually requires financial security equal to the maximum liability projected in that five-year period. In Nevada, mining operations must limit disturbance to the amount they have financially bonded at the time. However, up to 75 percent of that security can be provided through a 'corporate guarantee.' This is simply a promise to pay made by the company itself or a closely associated entity. Nevada provides a publically available Standardized Reclamation Cost estimator and cost inputs that they update annually; companies have to provide backup evidence if they use other costs or models.

Within the European Union, Directive 2006/21/EC of the European Parliament and of the Council of March 2006 addresses this issue similarly to the best North America programs. They require 100 percent financial security to cover reclamation by a suitable and independent third party. The EU legislation appears to allow member states to substitute their own legislation and follow those laws instead of a common EU mining regulation, but the EU Directive lays out minimum expectations.

Across the Pacific ocean, Western Australia has approached the problem with a unique perspective. They expect companies to pay their reclamation obligations

but they don't require upfront security. Instead, they have a Mining Rehabilitation Fund which is reported to and paid into annually by all qualified companies, as a tax. This fund is used for rehabilitation of both legacy abandoned mines and any new mines that may default on reclamation requirements. A company's payment into this fund is generally one percent of their own reclamation liabilities, which can rise if it is shown that the mine paying is at risk of defaulting. Mines with a rehabilitation liability estimated below \$50,000 do not have to pay into the fund. This annual liability estimate is determined by the land usage and amount of land factored by one percent. The unusual part is that the Western Australia government has a rehabilitation liability estimate calculator available online. This allows the public to see what the associated unit costs of re-

mediation are for different mine features and infrastructure. However, this system does not address different land types that the mining activities impact. These differences, such as between peat wetlands and upland forest in Alberta, may have significant reclamation cost implications. While the Western Australia government also makes the reclamation reports available to the public, the company's total calculated liability costs are kept confidential, unless the company decides to release the information themselves. The largest mines in the state negotiate separate reclamation requirements, and most are not required to post reclamation security.

In 2017, the Alberta Energy Regulator publicly disclosed each mining company's posted financial security and the province's total mine reclamation liability, for the years 2014 to 2017. However, within

that liability statement there was no breakdown of landscape outcomes and associated fiscal data for interested third-parties to review. Since 2015, British Columbia has published financial security and estimated liability for each company, a step up from Alberta. Even better, Alaska and Nevada make mines' draft liability calculations available for public comment before they are finalized. Further to Campbell's points in her December 2017 article, more disclosure of financial liabilities, responsibilities, and annual reviews of remediation efforts or reports would improve the rehabilitation efforts in Alberta's oil sands.

Madison Warne is a second year student in SAIT's Environmental Technology program. She loves to go biking, hiking and snowshoeing in the mountains. She spent a week as an intern at the AWA. 🐾

Coal mining, metal mining, oil sands mining in Alberta and British Columbia:

Financial security payments, estimated reclamation liabilities, and funding gaps

	Financial Security held by Government (in millions of \$)	Estimated Reclamation Liability (in millions of \$)	Funding Gap (in millions of \$)	Financial Security Deposits as a % of Est. Liability
BC Coal mines	621	1,617	996	38
AB Coal mines	452	452	0	100
BC Metal mines	484	1,058	592	46
AB Oil sands mines	939	27,340	26,400	3

Under Alberta's current regulatory regime, multi-billion dollar reclamation costs for oil sands mines could fall to the public if the company defaults.

Sources: Alberta, Alberta Energy Regulator, Mine Financial Security Program – Security and Liability and Annual Mine Financial Security Program Submissions, (Sept. 2017), British Columbia, Chief Inspector of Mines. 2016 Annual Report, (Dec. 2017), 18-21.

The Public Lands Trifecta

Important Progress Made



By Joanna Skrajny, AWA Conservation Specialist

Ahead of the May long weekend the provincial government made a number of important announcements that will help improve the health and management of public lands in Alberta.

Public lands got an enforcement boost

On May 14, the provincial government announced that enforcement officers will be able to write on-the-spot tickets for 38 new and increased penalties for offences on public lands and waters. Some historical context is valuable here. When the Public Land Act Regulation (PLAR) was approved in 2011, it removed the authority of officers to issue on-the-spot fines. They instead had to send violators to court, often months after the offence occurred. Since enforcement officers were required then to appear in those court proceedings this require-

ment came at the expense of valuable field time. This was an additional burden on an already resource-strapped enforcement branch of government that tries to ensure that our public lands are protected and that people are safe. Now the courts only will be used to prosecute major offences.

In July 2016, the provincial government issued an Order in Council which reinstated an enforcement officer's authority to issue tickets. However, this authority only could be exercised in Public Land Use Zones (PLUZs) and Public Land Recreation Areas (PLRAs). These territories comprise a small percentage of the total area of public lands in Alberta. As of May 31, the regulation was amended to allow officers to issue tickets on all public lands – such as a \$287 fine for dumping garbage or participating in activities that could cause damage to public land. Fine amounts were also increased for almost all of the offences intro-

duced in 2016.

Last year, the province also increased its enforcement presence by hiring more problem wildlife officers, recreational engagement officers, and park rangers. The government committed to retaining these additional enforcement officers for this season. This is an important change that should help provide consistent messaging that all public lands are valuable and damaging them or placing others at risk is unacceptable.

Livingstone and Porcupine Hills final management plans released

On May 17, the provincial government released final Land Footprint and Recreation Management Plans for the Livingstone and Porcupine Hills area and established two new Public Land Use Zones (PLUZs) there.

You can read our detailed assessment of



Actions such as defacing a posted notice or dumping garbage on public lands will now result in the offender immediately receiving a \$287 ticket instead of taking up valuable court time. Photo: © C. OLSON (Left) and © W. HOWSE (Right).

the draft plans in the last issue of the *Wild Lands Advocate*. These final plans may represent the first time a plan has been developed for our public lands that requires various ministries, industries, and decision-makers to co-operate to achieve better public lands management. The establishment of PLUZs provides designated trail systems for off-highway vehicles, provides clear guidance for both motorized and non-motorized users, and allows officers to act if they encounter any illegal activities on these lands.

Not all of AWA's concerns are addressed in the final plan. For example, the trail system crosses westslope cutthroat trout critical habitat in a number of locations. These trails likely will contribute to the continued degradation of critical habitat since the runoff from the trail system dumps additional amounts of sediment into creeks. As AWA has noted, destruction of critical habitat is illegal under the *Species at Risk Act*. We believe strict avoidance of critical habitat is required to honour the government's legal obligation to recover westslope cutthroat trout.

Another major concern is managing the industrial footprint in this region. Effectively, this footprint is not managed seriously in the final Land Footprint plan. Instead, management actions here await the arrival of yet another plan, the long-overdue Biodiversity Management Framework. Currently industry is responsible for much of the linear disturbance on this landscape, disturbance that then may be used by OHVs. The linear footprint of seismic lines and pipeline right-of-ways needs to be regulated and AWA had hoped such regulation would have been included in the Land Footprint plan.

The Livingstone and Porcupine Hills are valued for many reasons. Perhaps most importantly, this region provides water for the Oldman River basin's residents, wildlife, and agricultural producers. Conserving these public lands likely will become more important as we grapple with the challenges posed by flooding and water scarcity. While not perfect, AWA believes these plans and land designations represent one of the first serious attempts by government to be a responsible steward of our public

lands. These government actions demonstrate well that department officials and planners appreciate the necessity to balance better the many demands we place on our public lands.

Castle Parks management plan released

Finally, on May 18 the provincial government released a final plan for the Castle Parks. This plan will guide how the parks will be managed in the future. AWA responded to the draft plan after it was released in the spring of 2017. Then we offered detailed comments to government as well as extensive pieces in the *Advocate*. As such, it is good see the final Castle plan reflect concerns raised in the consultation process and the wishes of Albertans to see this region protected.

For example, the draft Castle management plan stated that motorized recreation was not compatible with the conservation goals of these parks and recommended that OHV use be phased out in a three to five-year period. After hearing a range of public opinions during the consultation process,



This is an OHV trail (left) which eventually leads down to a bridge crossing over westslope cutthroat trout critical habitat in Silvester Creek. Clearly, the bridge does not solve the problem of sediment flowing into the creek and harming the threatened fish. PHOTO: © J. SKRAJNY

the provincial government conducted an independent review of the scientific literature regarding the impacts of motorized recreation in the Castle. This review animates the final management plan, a plan reaffirming the overwhelming body of science that is the foundation of the commitment to phase-out OHVs.

Again, there are still a number of concerns to be addressed in the months and years as these plans unfold.

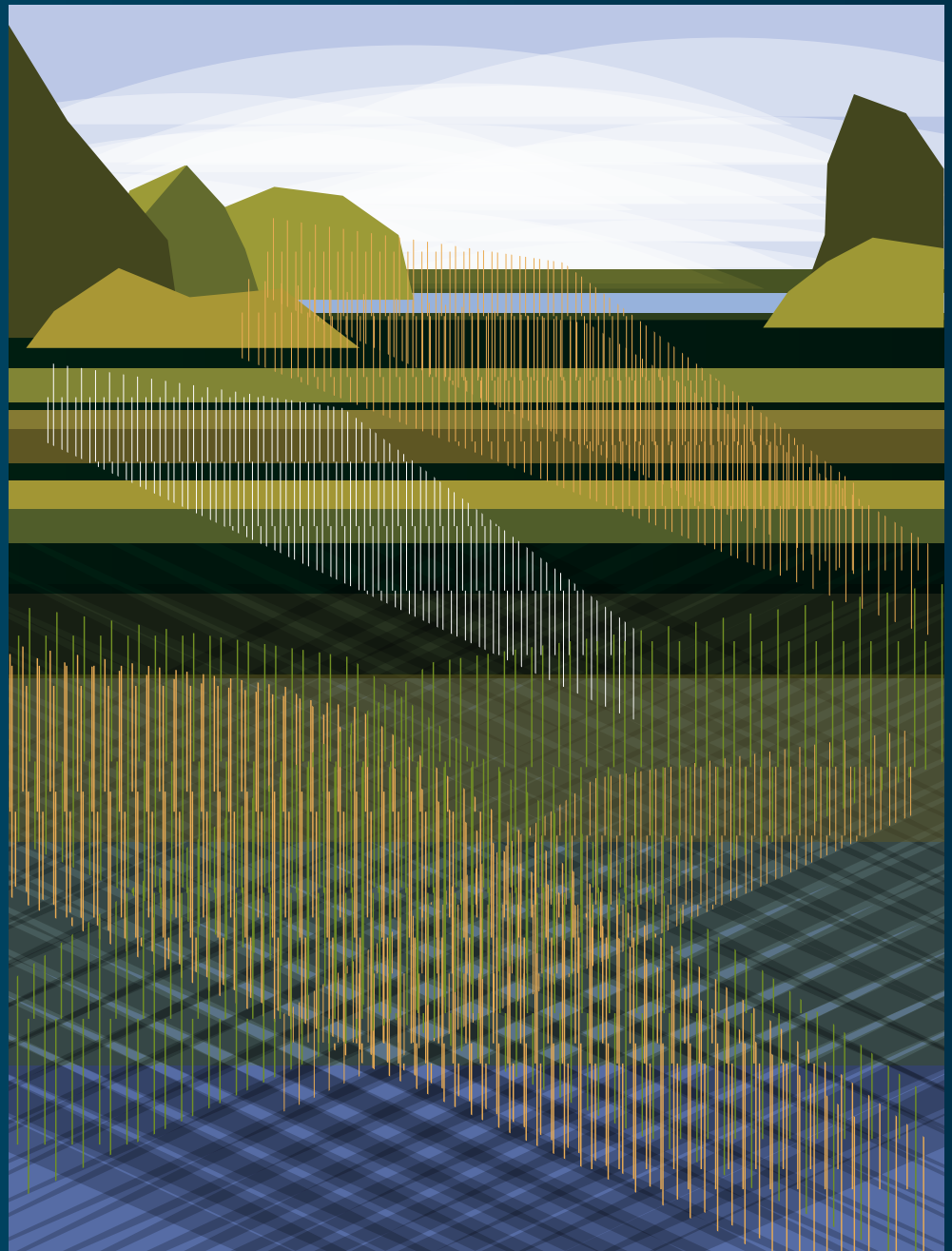
Unless there is a new government after the next provincial election, summer OHV use

will be phased out in the parks. But, the plan commits to the ongoing use of snowmobiles in the park. The final plan states: “because of the relatively lower impact of winter OHV use, this activity will be permitted.” Our reviews of this activity suggest significant impacts remain. Winter is a particularly stressful time for many animals as they cope with lower food availability and higher metabolic demands. Snowmobiles can cause increased stress levels as well as displacement and changes in animal behavior. In the Yellowstone National Park area, where snowmobiles

are also allowed, wolves produced higher levels of glucocorticoid (a stress hormone) in areas and times of heavy snowmobile use. The plan also offers nothing to address concerns about the appropriateness of cattle grazing and recreational hunting in provincial parks.

The final concerns surround ensuring that these parks retain and protect the wilderness values that make them so special. Here, we will continue to advocate for responsible grazing practices and will fight against any perceived commercialization of these parks. 🐾

Featured Artist John Vickers



Elk Island National Park © J. VICKERS

Where the Wild Things Are:

harnessing the power of citizen scientists

By Samantha Managh, *Parks Ecologist, Calgary Parks*

Citizen science in its simplest form is exactly as it sounds – it is the citizens and the science. The citizens are willing participants in the scientific process, and the science is a question that needs to be answered. Ideally, the program is accessible to non-specialists and the program is led by a team of scientists who have designed a structured approach to addressing the research question. Citizen science can be used by researchers to monitor biodiversity or other aspects of natural history and has long been recognized as a legitimate means of collecting scientific data. The level of difficulty of programs can range from easy checklists participants can do on their own to more complex methodologies that have trained volunteers working in conjunction with professional scientists. In contributing their time and effort, citizen sci-

tists are supporting important conservation and research efforts.

Citizen science can be a very useful method to engage all parts of society and build an informed citizenry that can successfully advocate for issues of concern to them. Within a municipality it can be used to achieve biodiversity and urban ecology goals through the generation of information and engagement of the public in urban ecological issues. In addition, citizen science can complement existing research and monitoring initiatives and enable data collection that would not otherwise have occurred due to cost constraints. Recent rapid technological advances have provided opportunities for participation that were not available in the past. It has accelerated the democratization of science.

Calgary Parks has committed to increasing

the ecological literacy of our citizens by providing volunteer initiatives and education programs to support environmental stewardship and biodiversity conservation. This commitment animates *Our BiodiverCity*, Calgary's 10 year biodiversity strategic plan. As part of this initiative, City of Calgary Parks has embarked on a multi-year wildlife remote camera monitoring program, *Calgary Captured*, which includes a large citizen science component.

This citizen science program was publically launched in January 2018. *Calgary Captured* offers Calgarians a novel way to peek into our local parks and classify wildlife caught on camera. Over sixty remote motion-activated cameras have been installed throughout Calgary's largest natural areas, including Fish Creek Provincial Park. The remote cameras are placed to capture im-



Some of the wildlife photographed by *Calgary Captured*. CREDIT: CITY OF CALGARY

ages of medium and large sized mammals, such as cougars, bobcats, coyote, fox, bear, deer, moose and elk. All of these species depend on intact wildlife corridors to move throughout the landscape. This data will inform conservation and management decisions about Calgary's open spaces.

Some of the questions we will be exploring with Calgary Captured over the next few years include:

Who calls Calgary home?

While we won't be directly measuring populations with the data from our cameras, we can get a sense of which species are most common and where they are.

Calgary supports a population of 1.2 million people but is also home to a diverse array of terrestrial mammals, including bobcats, moose, deer, coyotes and skunks. There are occasional reports of grizzly bears, black bears, and cougars as well.

How do species live with each other?

We know almost nothing about how species in Calgary might compete with one another, engage in predator-prey dynamics or avoid each other. By evaluating our camera images, we can begin to better understand the Calgary urban ecosystem, including how species interact.

How are they moving through our city?

How well do our natural areas function as movement corridors? This long term monitoring will help assess patterns of terrestrial mammal movement occurring in Calgary.

How can humans and wildlife co-exist in a city?

We know that people change the way wildlife behave, but many of the details about how humans impact wildlife remain unclear. Some animals adapt well to humans, some are indifferent, and some avoid us. In addition to images, by collecting incidental observation data on humans (what time of day do we use our parks etc) we can get a sense of how animals in urban settings react to the people who make the city their home.

Initial Results

Our first season of images (May – July 2017) was classified in a short 51 days. This first season included 120,000 unique images and each image was classified (viewed) five times and we had just over 2,000 volunteers sign up on the Zooniverse site. Interesting species of note captured in this first season were a long tailed weasel – currently listed as *May be at Risk* on the *General Status of Alberta Wild Species* report, a northern flying squirrel,

and a possible grizzly bear.

Our second round of images (August 2017 – January 2018) will be released in June 2018 for citizen scientists to classify. Look for a few species to show up that were not found during the first round of classifying! We will be releasing initial results from our first season shortly and more information will be made available on the Calgary Captured Zooniverse page.

How to Participate

Calgary Captured offers you a novel way to peek into our local parks and classify wildlife caught on camera. With your participation, tens of thousands of wildlife images can be reliably classified in only a few weeks.

We welcome your participation by:

1. **Going to Zooniverse.org:** and search for Calgary Captured to begin identifying species.
2. **Join the Conversation:** be sure to click the #talk button on the last screen before you submit your observation to let us know if you found something really great! Log on and start experiencing your parks from the comfort of your own home. This is a chance for you to take a peek into Calgary's local parks and see what the critters get up to!





Louise Guy Poetry Corner

In this issue we are pleased to republish Krystyna W. Fedosejevs's poem "An Early Spring Hike" and Julia Borden's poem "Gifts from Nature." These poems were the re-

spective winners in the 2011 and 2013 Louise Guy poetry competitions.

AN EARLY SPRING HIKE

Heavy, ripple-soled hiking boots
harness my woman's small feet,
grind vulnerable pebbles unleashed
from winter's relenting cover,
move me along an outdoor Alberta trail.

Radiant morning sunrays flicker
between branches of awakening
aspens touched by a tepid breeze.
Sunrays that arouse my drowsy senses,
my determination to explore
unfamiliar territory.

A sparkling rivulet trickles towards me.
My boots crunch its patchy ice coating.
The musty smell of fresh mud,
squirrels running wildly in circles,
distant crows calling out piercing caws –
signs of early spring.

The trail changes. Brightness fades.
Towering conifers cast sinister shadows.
Sheet ice before me. Snow banks on either side.

Panic! My heartbeat quickens. I gasp for air.

Nature's wildness.
Will I adapt to its sudden dangers?

I step into footprints carved in deep snow,
hardened by last night's ice crystals.
Imprints of boots similar to mine, worn by
yesterday's hikers determined to strive.

The trail swings the other way. Final stretch.
Sun returns to light my direction
on the gravel terrain.

I reach the summit.
I am in harmony with nature.

GIFTS FROM NATURE

The wind in the trees
Beautiful song of nature
A gift from the woods

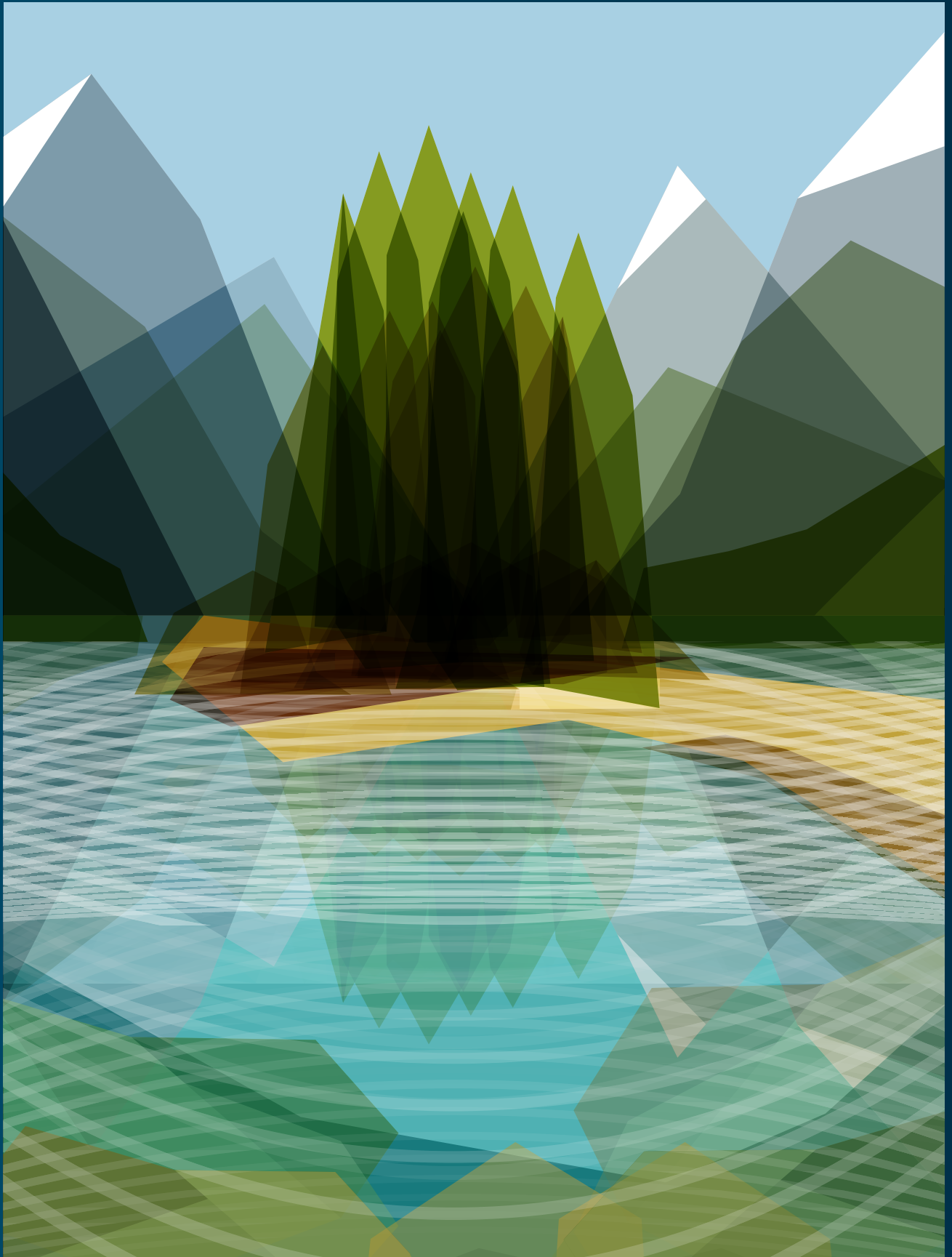
Beauty of birdsong
Such a wondrous melody
A gift from the wild

Sun and summer breeze
A warm and radiant light
A gift from the sky

A sparkling stone
Shining from the river bed
A gift from the hills

First flower of spring
Open as the white snow melts
A gift from the earth

Featured Artist John Vickers



Jasper National Park © J. VICKERS

The 2018 Climb for Wilderness

By Nathan Schmidt, AWA Outreach Associate



The Climb for Wilderness and AWA's Annual Earth Day Celebration has come and gone for another year. Thanks to all of our donors, sponsors, and participants... it was a great success. This year's donations have totaled more than \$93,000 and more than 900 people, including our exceptional volunteer tea, participated. One of the highlights of the

climb every year is the opportunity to build new relationships and maintain our existing friendships throughout the community.

The 2018 Climb proved no different in this regard, and we were excited to see familiar faces from our returning volunteers and climbers and to meet many new faces. We had contributions from long-standing supporters like Gord's Running Store and Brooks, Loblaws, Higher Ground, Patagonia Calgary, and of course venue support from Cenovus. We also saw some new arrivals with the Calgary International Blues Fest, Calgary's Best Walks, Strides Running Store, and Ollia Macarons & Tea. There was also some special participation as part of the 1% For the Planet initiative with partners the North Face, Campers Village, and MEC.

WDX Couriers once again helped make sure everything got where it needed to be. The Climb for Wilderness gets so much more support from the Alberta community than we can mention here. Please visit our website to see the full list of who contributed to this year's event.

There were many special moments during



1. Cliff Wallis and family celebrating Katrina's second year at C4W and climbing all the stairs on her own!



2. Abigail Hadden (8 years old), one of this event's top supporters, and her friend Kasha MacDonald (age 6 years) were happy to have their time recorded and realize they were in the running with a jackrabbit!



4. More than 100 volunteers like Steve Herrero and AWA staff conservation specialist Joanna Skrajny make this event the best Earth Day event in the West!

3. There were plenty of high fives at the top from AWA Board Member Joe Vipond



5. KC – our famous mascot grizzly bear got more pets and selfies as folks learned more about wildlife in Alberta

the Climb and it was great to see the sense of accomplishment as our first group of climbers made it past the finish line, some of whom headed right back down to climb again. Most climbers took a real interest in the displays and opportunities to speak with AWA staff and Board Members as well as



6. Lots of smiles from this family, climbing stairs in support of AWA!



8. Robb and Abigail Hadden, sporting the shirts that recognized top fundraisers. "This is my second time up!"

the Cenovus team working on habitat restoration for caribou. Smoky made his rounds throughout the morning and was exhausted from so many hugs, while KC was a popular centrepiece for group photos. The spectacular setting of the 54th floor of the Bow Building was enjoyed by all as a place to revel in the accomplishment of climbing all 1,204 steps (or more if you were one of the keeners) while also getting in that invaluable selfie with the mountains, foothills or prairie as a backdrop visible far beyond downtown Calgary. Finally, it was wonderful to once again see Richard Guy, one of our strongest



9. Polly Knowlton Cockett says – I got a few more climbs to go!

10. We know Alberta's endangered species matter – climbing was fun!



7. Richard Guy – C4W celebrity extraordinaire. This year at 101 years he climbed 5 flights with his dear wife Louise's photo next to his heart.



11. Thanks to AWA's Diane Mihalcheon and the great team of Cenovus volunteers who managed the check-in desks!



PHOTOS 1, 3, 4, 6, 7, 8, 9, 10: © J. QUIROZ
PHOTOS 5, 11: © K. MIHALCHEON
PHOTO 2: © N. SCHMIDT

Introducing AWA's Two New Conservation Specialists



Grace Wark

My name is Grace Wark, and I'm excited to join Alberta Wilderness Association as a Conservation Specialist focusing on the Southern Eastern Slopes (SES) and forestry. I am a recent graduate from the University of Calgary, with a B.Sc. in Environmental Science, concentration in Geography.

I feel the past five years of my education prepared me well for my arrival at AWA. Highlights of those years include exploring the Eastern Slopes in field school and writing an Honours thesis examining how the environment is represented in "open data." The book *The Data Revolution* defines open data as data that are free for "anyone to use, reuse and redistribute," and built upon the premise of "openness, participation and collaboration."

My research in open data emphasized that how we choose to create and share information influences the ways that environmental opinions are formulated and consequently how environmental decision-making proceeds. Moreover, this research emphasized the importance of non-governmental organizations as intermediaries between governments and their citizens, sharing and acting upon knowledge of the environment and environmental issues.

I chose to work at AWA because here I can blend my passion for environmentalism with my enthusiasm for community-building. Community-building is an essential component of environmental initiatives, as it is often our communities who are affected most directly by and feel most strongly about environmental conservation. I am a founding member of a community project, RePlastic YYC, which has sought to change the public perception of plastic recycling. RePlastic YYC is an initiative born out of the University of Calgary. There we built our own recycling machines to both close the local waste production loop and encourage plastic users to understand the life cycle of plastic products (i.e. plastic recycling doesn't end at the blue bin). RePlastic YYC explores creative solutions to waste production and highlights the

unsustainability of single-use plastics. I'm excited to further my passion for community-building as I join others in advocating for their environment and seek to deepen the connections between government, citizen, and industry.

I was also drawn to AWA by the passion, persistence, and integrity with which this organization holds its environmental values. While I understand the need to compromise with other environmental stakeholders, I admire the firm stance that AWA has taken to conservation. I believe that environmental NGOs, like AWA, are doing critical *on-the-ground* work to ensure the conservation of Alberta's wild spaces. Whether it's teaching a class of fifth graders about grizzly bears or taking environmental action in court, this is the type of work that must be done to foster environmental stewardship and the idea that wild spaces are inherently valuable in and of themselves.

In the two decades that I've lived in Calgary, I still manage to discover something new every time I travel to my local mountain range. I feel privileged to live amongst such diverse beauty and feel honoured to contribute towards its conservation. Here's to the future, to be kept wild ad *infinitum*.



Nissa Petterson

I grew up on an acreage south of Innisfail, Alberta, and a good portion of my youth was spent outdoors. My family always had some kind of project ongoing, whether it was raising chickens, growing a garden, building a barn or fence, or planting more trees on our property. We were always trying to bring more nature into our home-stead. Most of our summer weekends were spent out west, in the "west country," fishing or camping. As I grew older, my father and I toured most of southern Alberta and

the northern parts of the United States on motorcycles.

My father, originally from small-town Saskatchewan, always talked about how the mountains called him out west. He really was at his best when he was spending time with his family in the outdoors. We enjoyed our time together exploring nature, and, eventually, the outdoors is where I felt most comfortable as well. By means of many adventures, he taught me to respect nature, and he asked, whenever

I could, to try and leave things better than I found them. My father always emphasized that having access to so many beautiful wild spaces was a privilege, not a right, and that understanding the difference was what mattered the most.

Once I graduated from high school, I knew that I was enthusiastic about the outdoors, and wanted to be someone who would foster positive change in the world. But how would I make a career out of that ambition? I had no idea.

Since science was my strongest subject and I loved animals I started my postsecondary career in pre-veterinary medicine. In the beginning of my third year of study, I discovered the discipline of ecology and, within it, the principles of conservation. I knew instantly I had found the opportunity to pair my passions with a career. A new group of friends who shared many similar values helped nurture this new found in-

terest. We bonded over our love of nature (okay...and of beer and hot wings too) and called ourselves an Ecofamily. Despite the demands of university and my new family, I always made time for adventures with my father, and was eager to share new knowledge with him.

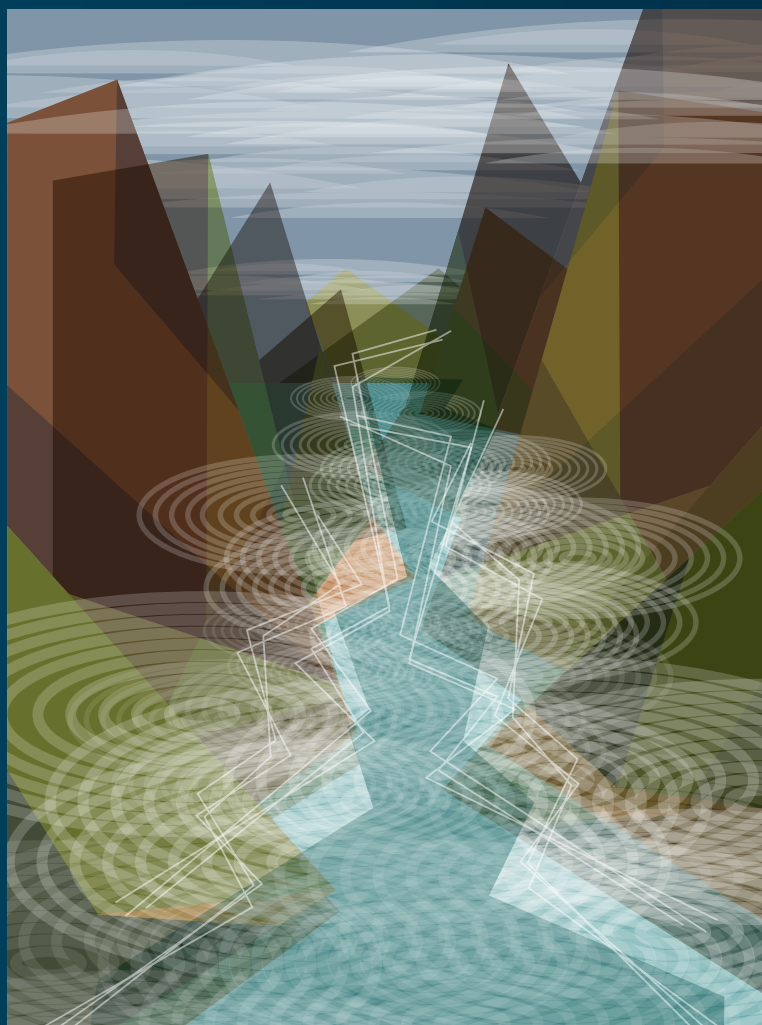
In June 2014, I graduated from the University of Calgary with a Bachelor of Science, majoring in Ecology. In my graduating year I wrote an honours thesis on the population dynamics of the tiny, endangered, and surprisingly popular, Banff Springs Snail. My thesis stoked my fervour for conservation and introduced me to the importance of communicating conservation issues to a broad audience. For instance, I had to explain what jargon like “population dynamics” meant – and why it’s important – to a blue collar fellow like my father.

Abruptly, these trips and talks with my father ended. Shortly after graduating, my

father suddenly passed away. His death was crushing and I found myself lost. Overcoming the loss, trying to live without my father is now, and may be forever, an ongoing process. But in Dad’s absence, I have learned to find peace by reconnecting with the greatest legacy he left me, his love of nature. The wild places of Alberta offer me a spiritual haven and a bountiful reserve of many happy memories that will help me on my path of healing.

Being a part of AWA grants me the opportunity to bring my passions to life by working to protect the places that I and others cherish. I am thrilled to be an active agent of change in a community that is dedicated to conserving Alberta’s wilderness for generations to come. I am grateful to have found my place amongst the amazing ensemble of individuals that contribute to AWA, and I hope to add to their legacy. I know Dad would agree.

Featured Artist John Vickers



Waterton Lakes National Park © J. VICKERS

Moments That Matter:

Wendy Ryan's life of defending the Castle Wilderness

By Vicki Stroich



AWA's 2018 Alberta Wilderness Defender Award recipient Wendy Ryan pauses when I ask her how she developed the fierce and passionate care she has for wilderness. Memories of her childhood on the family farm near Brooks working with her father to care for the horses and the land come flooding back. Reflecting on her father's dedication to cleaning up debris from sloughs around the area touch her deeply. In the life of an outspoken and tireless activist like Ryan, memories of moments shared with her father are the quiet embers that keep her determination to protect areas like the Castle burning.

Ryan moved to the Pincher Creek area in the 1970s and joined a community of activists through her marriage to Mike Judd. "I fit in as a fighter and a watchdog," she recalls. In her time as a community organizer, Ryan has been a vital part of many pivotal moments in the ongoing fight to keep the

Castle wild. She participated in early grass roots organizing with neighbours around kitchen tables in the 1980s, stood with her infant son Matthew on her back in front of heavy equipment to stop drilling in 1985, and picketed logging around Spray Lakes in 2012.

Between those big events are years of quieter moments spent caring for the Castle, an area Ryan describes as her "backyard." As Stewardship Coordinator at Castle Crown Wilderness Coalition, Ryan picks hundreds of bags of invasive weeds, engages with ranchers, motorcyclists, and Park staff to protect the delicate ecosystem from careless use and organizes hikes to help people develop "awareness and compassion" for the region. Eager for a change after 15 years of spending her summers working at hunting camps in the North, Ryan took the position at CCWC 12 years ago. "I was already doing most of the work for free on my own

time anyway," Ryan admits.

Ryan's stories about her work over the years, both the dramatic moments of protest and the quiet moments that come with constant stewardship are peppered with disappointments; fights that weren't won and challenging conversations with industry, government, ranchers, and recreational users. As Ryan says, "The life of an activist is hard." Many weekends she stays away from the area. It is just too heartbreaking to see motorbikes doing donuts on the shale and cows grazing in the basin.

But there are moments of triumph, too. The 2015 announcement of protection for the Castle and the 2017 designation of Castle Provincial Park and the Castle Wildland Provincial Park are long overdue watershed moments in the fight to protect the area. After 40 years of fighting for protection and discouraging false hope from previous governments, Ryan and the CCWC now find



Wendy Ryan has played an important role in the decades-long activism that contributed mightily to the designation of the Castle parks. Twenty-five years apart, these photos detail grassroots protests against drilling on Prairie Bluff and logging in the Castle. © AWA (Left) and © N. DOUGLAS (Right)

themselves engaging with Alberta Parks staff to ensure the area is well managed as a park. Understanding the history of the area is key to its management and Ryan's dream would be a book outlining the Castle's history that Park staff would need to sign after reading.

The Castle region has as storied a life as Wendy Ryan herself, with many catalytic moments that have shaped the environment and the people connected to it. The Castle has a long history as a sacred and ceremonial site for First Nations. Fights over the use of the area by settlers has been going on since the provincial government removed the area's designation as a wilderness preserve in 1954; this departed from the original intent for the area when it was given to the province by the federal government in 1921. Since then there have been many threats to the ecology of the Castle from logging, mining, and drilling with locals protesting the effect of these extractions through protests, picketing, and legal actions.

While these protests may make headlines, the hard work of protecting the area is constant. With each new industrial camp, new roads are built that open the area to use by recreational vehicles. All that access also means ranchers often extend grazing for their stock higher and higher into the basin. The cows wreak havoc on the delicate ecosystem bringing invasive plants and polluting the watershed.

With protection now designated for the Castle region thanks to the countless hours put in by Ryan and her peers, the Castle Crown Wilderness Coalition faces a new challenge: what to do now that they have achieved their goal? For the time being, they plan to focus on stewardship of the park planning for the area. For Ryan, the next challenge is to engage a new generation of activists, "We've lost a lot of our lead hikers who are in their 70s and 80s now. We need new people to take up those programs and volunteer. Young people care about the environment but they have less

time to volunteer."

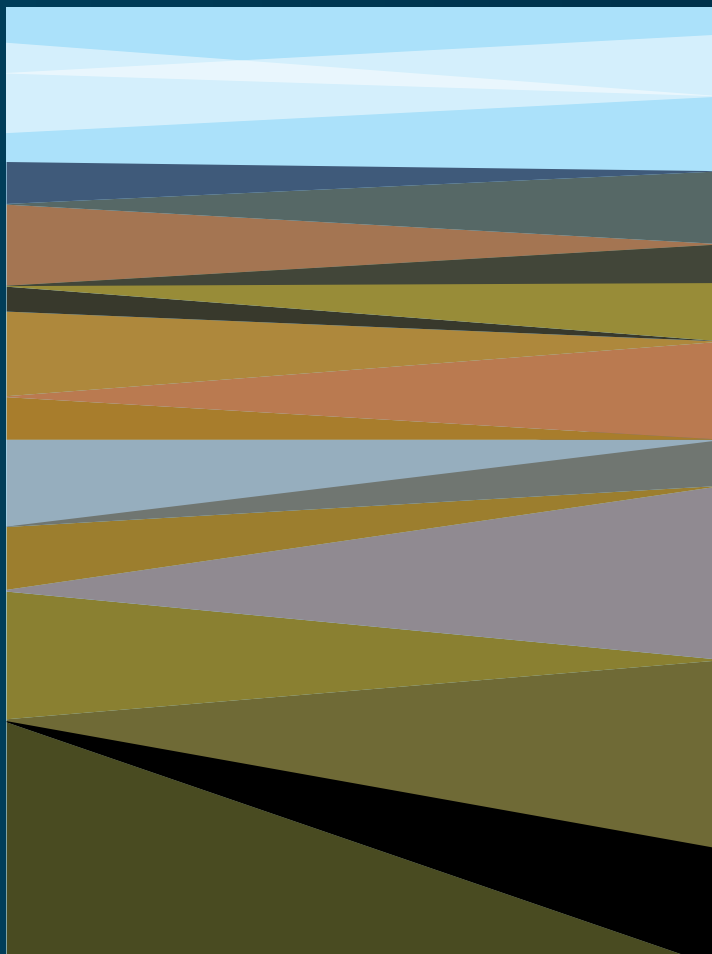
By expanding their stewardship events schedule to include shoreline clean ups and interpretive hikes with yoga alongside their beloved moderate to difficult hikes in the area the CCWC are hoping to encourage new people to have the kind of transformative moments that will inspire them to fight to protect the wilderness around them.

After a lifetime of defending the Castle wilderness, Wendy Ryan doesn't plan to stop any time soon. "My new goal is to protect every last bit of grass in the area," she declares with determination. Ryan continues to make every moment count in her life as an activist. We all owe her a debt of gratitude but I am sure a few hours of volunteer work to help protect a wild area in our province would be a fitting tribute to this true wilderness hero in our province. 🌲

Vicki Stroich is a Calgary based theatre artist and facilitator with a love of the environment and Alberta's wild spaces.

Featured Artist John Vickers

Wood Buffalo National Park © J. VICKERS



Updates

Climate Change and Harry Potter: Sadie Vipond Speaks Truth to Power at Calgary City Council

Hello, my name is Sadie Vipond. I'm 12 years old, and I came here today to make a difference. I want to try to help fix global warming, because it's making lives around the world, not just humans, worse.

In talking to you, we can make a bigger difference, the more people that are helping, the bigger the difference is going to be. I'm not saying that one, single person is going to fix the entire problem of global warming by themselves. It's going to be by thousands and millions of people, working together to make the world a better place. And some people, well, they don't believe that the world is suffering from global warming that we created.

Sadie Vipond, taking a cue perhaps from her father Joe Vipond, recently delivered a call to action to Calgary City Council. We're very pleased to republish Sadie's remarks here.



In Harry Potter, I don't know if you've read Harry Potter, but if you have you'll know that the ministry of magic didn't want to believe that Voldemort had come back from the dead because they were scared of that idea. But just shoving it away and claiming that it doesn't exist doesn't make the whole idea just disappear. Pretend that the ministry of magic are the ones that don't believe in global warming, Voldemort is global warming, and Harry and many other people are the ones that raise an army to overcome Voldemort. We are that army. And guess what? Once the ministry figures out that they were wrong all along, they put in maximum effort to help overthrow Voldemort. We want that to happen. Since we made this problem, we have to fix it. If we don't, who will? I'm pretty sure we won't have dolphins and sloths in lab rooms trying to figure this out.

You guys are leaders, you can make a huge difference and lead us in the right way. My whole family is trying to make

a difference. Even things that are quite small. My sister, Willa is working to ban plastics in this city and my dad does countless things to improve the planet. I beg of you to try your best to help our (mine and yours) future. And the more people we have helping, the more people will notice all of us trying to help, and this will go on like a chain reaction. Maybe the more people that are helping, we may have the whole world of 7.6 billion people helping to change the world. I'm just 12 years old, I shouldn't have to worry about this stuff. But I have to, because this isn't the world I want to grow up in. So, we all have to protect my generation, the next generation, and so on. So please make a change for the better. Thank you.

- Sadie Vipond

Caribou Restoration Economy, Flags, and Nets

In May, I was pleased to represent AWA in a caribou range plan panel discussion hosted by the Canadian Heavy Oil Association. It was encouraging to hear company representatives outline technical advances, funding ideas, and caribou habitat gains to be made by restoring historic surface disturbances no longer required for their working leases.

AWA believes a thriving restoration economy is possible while respecting caribou habitat needs. For example, jobs will be generated from energy activity in clustered development corridors, extensive seismic line and pipeline corridor restoration, abandoned well reclamation, and eco-tourism. We have engaged some expert economic consultants to investigate how optimized range plans for the Bistcho and Yates ranges in northwest Alberta could support both caribou recovery and industry.

AWA's caribou flag project engages artists of all ages this summer to design flags to raise awareness of caribou. The Caribou4ever.ca website has all the details, plus caribou Q&A myth-busters and a quick letter template so you can let the Premier know why saving caribou and their habitat is important to you. Your voice is really needed now: this is a decisive time for our caribou.

Meanwhile, the most significant recent government steps are that the Minister of

Environment and Climate Change Canada (ECCC) recently moved closer to applying her powers and obligations under the Species at Risk Act to prevent caribou extinction. This isn't just federal pushiness: back in the early 1990s, Alberta and the other provinces committed to maintain their biodiversity and recover their species at risk. For a generation now, they have failed to follow through.

On April 30, ECCC issued a progress report on unprotected critical habitat for Canada's boreal woodland caribou. The report found that the laws of Alberta, and other provinces, did not protect caribou habitat. This is perfectly obvious to anyone observing expanding industrial disturbance in Alberta caribou ranges. However, it's the very first time the Canadian government has issued such a report for any at-risk wildlife under the 2002 Species at Risk Act (SARA). The Minister also pledged to take another positive step – to issue these reports for other species at risk.

By reporting unprotected caribou critical habitat, the Minister is obliged under SARA to recommend to cabinet that a safety net order should be issued to protect that habitat. This report serves notice to the provinces that a countdown clock is ticking.

Then in early May, ECCC announced that Minister McKenna had determined there was an imminent threat to the recovery of southern mountain woodland caribou, including the Narraway, Redrock-Prai-

rie Creek and Jasper populations of west central Alberta. Unless Alberta and B.C. finalize range plans that enforce habitat protection, this language indicates the Minister soon will be obliged under SARA to recommend to the federal cabinet that an emergency protection order be issued to protect habitat.

What would a caribou habitat protection order mean? In AWA's view, it should be applied as an interim measure in one or several Alberta caribou ranges. It could apply only to new habitat destruction so, for example, energy companies would remain operating on their current footprint. It could apply for several weeks or months, just until enforceable range plans are finished in the affected range(s), which Alberta has already had over five years to do. The order could cease as soon as the range plan is in effect. The plan would outline how forestry, energy, and other activities will be managed for the next 100 years. This is to ensure enough good habitat is maintained, and that at least 65 percent undisturbed habitat is restored, so caribou can survive and recover. Achieving self-sustaining caribou populations has been an Alberta policy commitment, without action, since 2011. An interim habitat protection order would spur Alberta to apply the solutions for industry, communities, forests, and caribou that are within reach.

- Carolyn Campbell

New Northeast Wildland Provincial Parks

In mid-May, the Alberta government established four large new wildland provincial parks and expanded an existing wildland provincial park in northeast Alberta. Three of the parks, plus the expansion area, were already approved under Alberta's Lower Athabasca Regional Plan (LARP) of 2012. They had been managed as wildland parks since that time. Still, this announcement should be applauded since it means these areas now have full legal protected

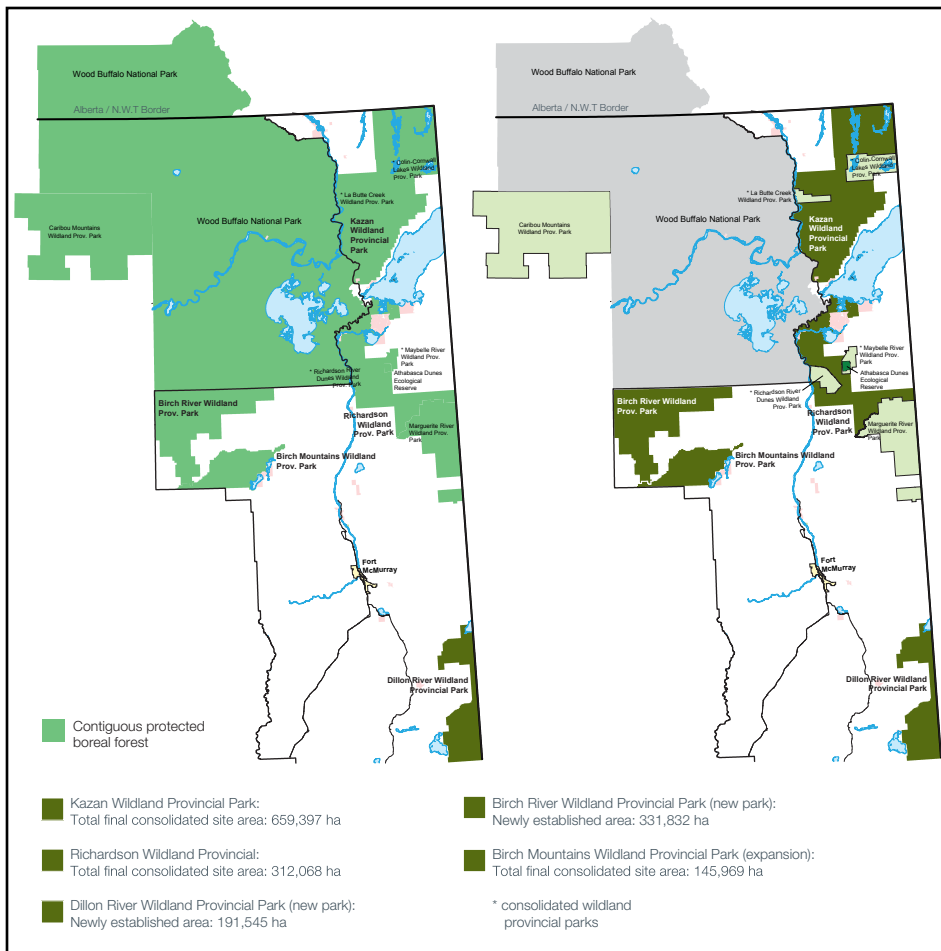
area designation.

The fourth new wildland provincial park is Birch River, which the 2012 LARP had identified as a Public Land Use Zone (PLUZ) with commercial forestry. However, through a March 2018 agreement the Tallcree First Nation gave up its forestry rights so that Birch River could become a wildland park. Wildland parks place higher priority on ecological values than PLUZs. The Alberta government, Syncrude, and the Nature Conservancy of Canada (NCC) facilitated this arrangement. Syncrude contributed \$2.3 million to the Nature Conser-

vancy and NCC made a payment for the Tallcree's timber quota. (Syncrude's payments will give it offset credits for some of its oil sands mining disturbances.)

The Alberta government and Tallcree First Nation agreed to cooperatively manage Birch River for economic opportunities compatible with conservation. Alberta has committed to cooperative management with nearby First Nations for all these parks. AWA believes this is an important advance in regional planning.

Significant areas of the Red Earth and Richardson boreal woodland caribou rang-



Caption: Alberta's new Lower Athabasca region (northeast Alberta) wildland provincial parks.
CREDIT: GOVERNMENT OF ALBERTA

es will be protected in these parks. The East Side Athabasca River and Cold Lake caribou populations have relatively smaller new areas of their ranges protected (about seven and five percent respectively). But the parks could still help protect the populations using those areas. However, the protection potential delivered by these new parks needs to be complemented by other measures. Good habitat restoration and access/infrastructure disturbance limits still will be needed to enable caribou to recover in their home ranges within and outside of these new protected areas.

Between 2012 and 2016, \$45 million in oil sands and metallic minerals leases were repurchased by Alberta in these lands. Some petroleum and natural gas leases remain and are a permitted activity, though no new leases with surface access will be sold there. The new parks also allow grazing as a potential permitted activity; even though grazing requests must satisfy a

suitability assessment, this is a concerning precedent for boreal wildland parks.

AWA was disappointed to note that the Gypsy-Gordon Wildland Provincial Park, another park approved in the 2012 LARP, was not created at this time. We will continue to seek protection for its diverse forest communities along and south of the Clearwater River.

Here is a brief introduction to Alberta's newest parks.

Kazan Wildland Provincial Park (5700 km²): protects a large portion of Alberta's Canadian Shield natural region, including about half of the east bank of the Slave River (the west bank is mostly protected already by Wood Buffalo National Park). Together with two smaller wildland parks created in 1998, Kazan protects most of AWA's Wylie Lake and Charles-Cornwall Areas of Concern. Lakes cover about 12 percent of the landscape of these new protected areas.

Richardson Wildland Provincial Park (2600 km²): protects the Athabasca River's east bank and much of Richardson Lake within the internationally significant, waterfowl-rich, Peace-Athabasca Delta. Together with two smaller wildland parks created in 1998, and a small Ecological Reserve created in 1987, Richardson protects the northern part of the Athabasca plains boreal subregion. This area includes jack pine forests and part of Canada's largest sand dune complex.

Birch River Wildland Provincial Park (3300 km²): protects portions of the Peace-Athabasca Delta, Northern Mixedwood, and Central Mixedwood boreal subregions along the southern border of Wood Buffalo National Park. Birch River connects to a small western portion of Birch Mountains Wildland Provincial Park.

Birch Mountains Wildland Provincial Park expansion (16 km²): protects additional forest and lakeshore areas along the Park's east border in Alberta's Highlands boreal subregion.

Dillon Wildland Provincial Park (1900 km²): protects a portion of Alberta's Central Mixedwood boreal subregion along the Saskatchewan border, north of the Cold Lake Air Weapons Range. Lichen-rich forested peatlands cover about a third of the area.

- Carolyn Campbell

Notice to Members

Annual General Meeting of Alberta Wilderness Assn

Nov. 24, 2018

10 am

AWA Hillhurst Cottage School
455 - 12 St NW, Calgary

Reader's Corner

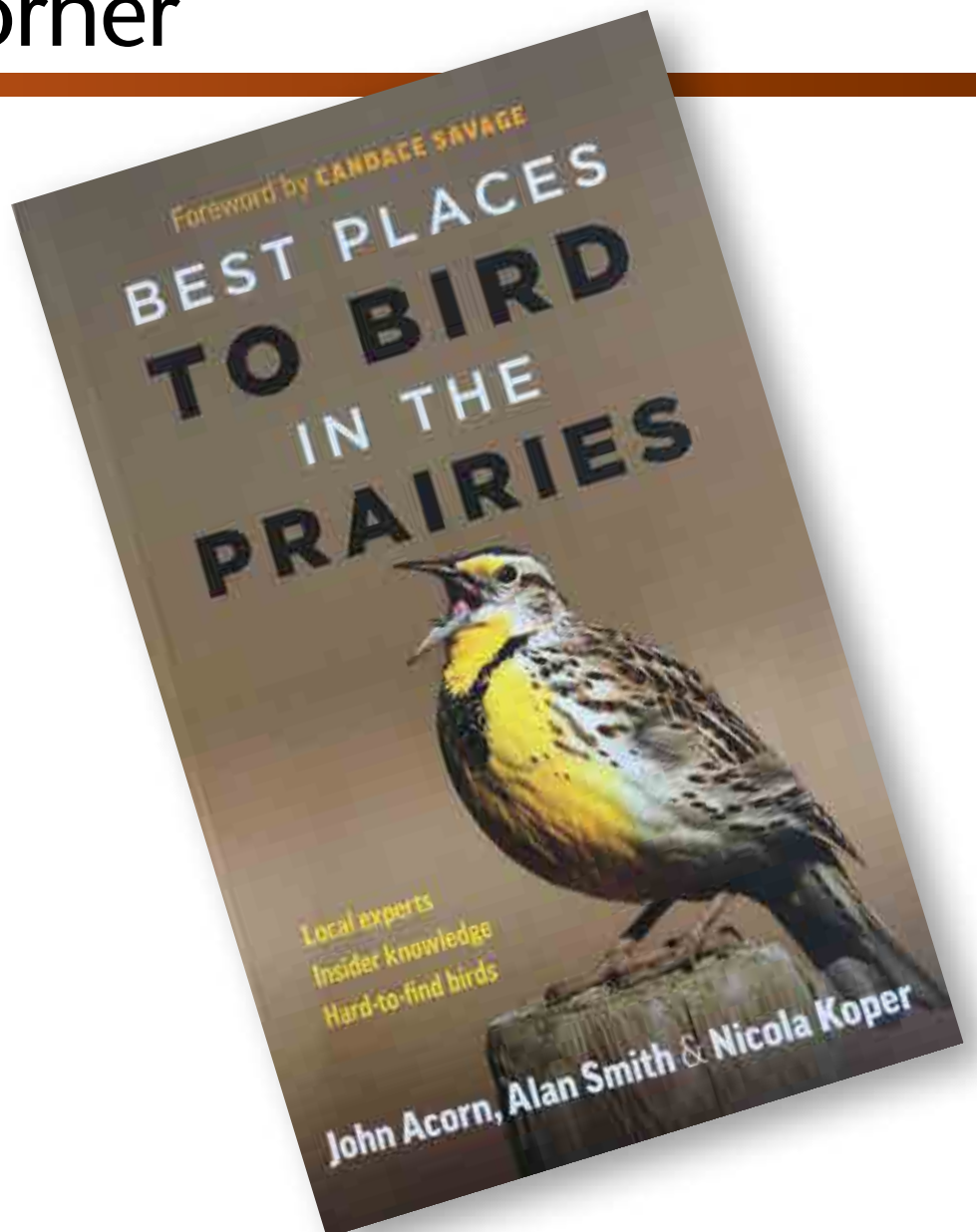
**John Acorn, Alan Smith,
and Nicola Koper, *Best
Places to Bird in the Prairies*,**
(Vancouver: Greystone Books, 2018).

Reviewed by Nathan Schmidt

Well-known author Candace Savage ends her foreword to the new book, *Best Places to Bird in the Prairies*, with a fitting sentiment: “I’ve spent most of my life in the Prairie Provinces, and though I’m not a very serious birder...I usually have my binoculars and bird book within easy reach...And yet, thanks to the generosity of these authors, I am reminded how much I have yet to discover.” That was the feeling I had after reading through this guide to some of the best birding locations in Alberta, Saskatchewan, and Manitoba. The Prairies are blessed with many species of birds and many excellent places to see them. Luckily, John Acorn, Alan Smith, and Nicola Koper have done a lot of the heavy lifting in identifying the what and where of birding on the Canadian prairies and conveniently packaged their knowledge into this attractive collection.

For those of us whose ears perk up as we’re walking through a trail when we hear an unfamiliar song or who stop dead in our tracks to the chagrin of our fellow travelers when we see a glimpse of something interesting in the underbrush, *Best Places* could be a great tool for getting out there to learn more. If you’re already quite knowledgeable it may be valuable as a guide to help you find a few more special places to see some amazing birds.

The book is divided into three sections, one for each prairie province. Each author offers the reader 12 recommended places to bird in each province. John Acorn writes about Alberta; Alan Smith offers his 12 recommendations for Saskatchewan; Nicola Koper follows suit for Manitoba. Maps usefully identify the geographical location of these 36 locations across the three provinces. Every “best place” has the same format.



A general introduction to the location and its surrounding area is followed by a “birding guide” specific to the location itself. Each chapter closes with welcome directions on how to get to these sometimes out of the way birding locations. Most of the preferred locations are found in the more heavily populated southern regions of the provinces, with a few exceptions being Lac La Biche, Prince Albert National Park, and Churchill.

This is not the book to buy if you’re looking for a field guide to identifying birds that frequent the prairies. If you want to identify a black-throated gray warbler or an indigo bunting on a perch or on the fly you’ll need to buy a good field guide. That said the book

includes 43 excellent photos that you could use to identify some of the species you could encounter during your trips. It’s a book that’s much more about the “places” where you’ll find excellent birding opportunities. The authors share their knowledge and expertise in a familiar and easy-going writing style. The anecdotes about their personal experiences were entertaining and also gave some insight into how more experienced birders approach their adventures.

Best Places has something for everyone. Whether you’re a beginner looking where to get your feet wet or a seasoned birder who wants a few more special locations to add to their repertoire, it will work well as your companion to some great birding experiences.

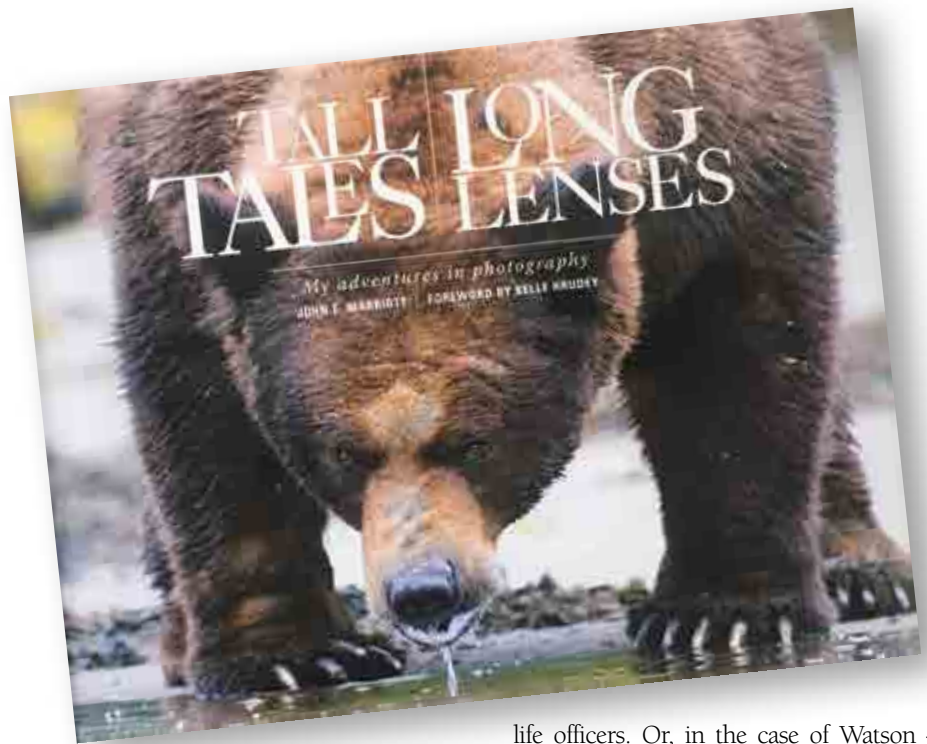
John E. Marriott, *Tall Tales, Long Lenses: My adventures in photography*, (John E. Marriott, JEM Photography, 2017).

Reviewed by Ian Urquhart

“Unforgettable”... that was how *Canadian Geographic* characterized John Marriott’s first book, *Banff & Lake Louise: Images of Banff National Park*. That term is just as applicable to Marriott’s latest book, *Tall Tales, Long Lenses: My adventures in photography*.

Through more than 200 pages of text and photos covering nearly 40 years Marriott evocatively displays his passion for wildlife and the landscapes they need to survive and thrive. If you’re hungry for a book celebrating wild creatures and spaces then *Tall Tales, Long Lenses* should be on your menu of summertime reads. It’s a celebration that takes its cue from a Charlie Russell quote Marriott uses at the beginning of the book. In that quote Russell sketches an ethic where wildness doesn’t threaten us; it sustains us and we will live better lives if we overcome our fear of the wild.

Marriott organizes his tales and his adventures chronologically for the most part. He first takes his reader on a formative fishing trip a five-year old John Marriott made with his father in the B.C. Interior. The book’s final chapters are set in this decade and focus on trips to photograph grizzly bears in B.C.’s Chilcotin, Kluane, and Kwanash regions. In between Marriott details the trials, tribulations, and triumphs that came with his quest to become a professional wildlife photographer. That quest took him tens of thousands of kilometres across western and northern Canada – from the Bow Valley Parkway in Banff National Park to the Dome Diner on the Yellowhead Highway to the Dempster Highway in the Yukon, from the headwaters of the Fraser River to estuaries on the Pacific. Marriott’s journey is filled with memorable characters. Some of those characters are the wild creatures Marriott respects and searches out such as Delinda, the Alpha female of the Bow Valley wolf pack, or Frank the Tank, the dominant grizzly male featured on the book’s cover. Others, such as the Yu-



kon’s Trapper Ivan, insert humanity into the wildness.

Tall Tales, Long Lenses showcases Marriott’s remarkable talents well. Along with Wayne Lynch, I think he is one of this country’s premier wildlife photographers. The photos included in this collection comfortably support that judgment. The composition, textures, colours, and details of his photographs prompt a wide range of responses and reactions. It’s impossible not to be moved by photos revealing the power of Frank the Tank, or the playfulness of the two grizzly cubs he named The Devil and The Dark Side. Magical auras emanate from his photos of the Yukon landscape and the Great Bear Rainforest. The beauty of Marriott’s photography alone will lead me to return to it over and over again.

Tall Tales, Long Lenses is much more than a beautiful book to adorn your coffee table. It also conveys important conservation messages. The death of Field in 1992, the first grizzly bear Marriott observed, testifies to how our irresponsible behaviour threatens the place of bears in the wild. Sloppy food storage in Banff National Park campgrounds encouraged Field to develop a taste for human food. Removed from Banff, she didn’t lose that appetite. That appetite led to her death at the hands of Alberta Fish and Wild-

life officers. Or, in the case of Watson – a Kermode bear in northern B.C. – people put themselves and the bear at risk by getting far too close to him alongside the Yellowhead Highway in 2013. These incidents, more than 20 years apart, suggest that our species still has much to learn when it comes to giving wildlife the respect and distance they need and deserve.

For me, the book’s most compelling lesson may rest in its introduction. John’s father offers that lesson through his hope that his son would grow up to share the love of nature the father found flyfishing along Scotch Creek north of Shuswap Lake. That love was one he wanted to share with his son. Without that father’s love of nature and without his desire to share it with his son would John Marriott have become the wildlife photographer and conservationist he is today? Would advocates for wilderness have his photographs and stories to inspire them? John is the first to point out how formative those experiences in and around Scotch Creek were to his world view and ambitions. The lesson for me is that, as supporters of wilderness, we need to do what we can with our own children and/or grandchildren to bring the spirit of Scotch Creek into their lives.

Tall Tales, Long Lenses is a beautiful, compelling collection that any wilderness advocate will treasure.

In Memoriam



In May our world lost Charlie Russell, one of the great champions of grizzly bears and wilderness. Russell passed away in Calgary due to complications following surgery. I never had the opportunity to meet Charlie Russell so these few words are not born out of friendship. They come instead from the respect I have for Russell's outlook on the world and our place in it. That outlook, as shown through his research on grizzly bears, stressed the values of humility and trust.

Russell's work on grizzly bears reached a worldwide audience, not least because it was featured in two television documentaries: BBC Natural World's *The Bear Man of Kamchatka* and PBS Nature's *Walking with Giants: The Grizzlies of Siberia*. With Maureen Enns, Russell wrote several books about their experiences with grizzlies in Kamchatka (most notably *Grizzly Heart: Living Without Fear Among the Grizzly Bears of Kamchatka*). Those collaborations followed his first book, *Spirit Bear: Encounters with the White Bear of the Western Rainforest*, a book in part about Russell's efforts to establish a relationship of mutual trust with the Kermode, or spirit, bear on Princess Royal Island.

Russell's belief that bears are intelligent creatures capable of establishing relationships of trust with our species made his research noteworthy and controversial. It's a belief that challenged conventional wisdom and bear management practices. If we better understood bears, then we wouldn't need to fear

them and let our fear guide bear management. Kamchatka offered an ideal setting for Russell to test that belief since the peninsula's grizzly population was plentiful and quite isolated from human contact. Kamchatka's bears had not learned to fear humans. The Kamchatka experiences of Russell and Enns in the 1990s also demonstrated that it was possible to raise orphan grizzly cubs and return them successfully to the wild. Their success remains one that politicians in Alberta and elsewhere refuse to acknowledge and implement.

When Louisa Wilcox interviewed Russell in 2016 for "The Grizzly Times Podcast" she noted that many people liked to call Russell a "bear whisperer." Russell didn't think the label applied to him; his first reaction to that suggestion was that he was just a person who liked bears, and had liked them for a very long time.

Later in that interview Russell offered more insight into why he didn't see himself as a bear whisperer. That insight shone a light onto his humility. Louisa Wilcox asked him for his reflections on their friend Timothy Treadwell, someone who reportedly gloried in being called a bear whisperer. Treadwell and his girlfriend Amie Huguenard were mauled and killed by a grizzly bear in Alaska's Katmai National Park in 2003 (Treadwell was the subject of the Werner Herzog documentary *The Grizzly Man*). Russell felt that Treadwell's knowledge about bears bred a false sense of security. Treadwell felt he was immune to harm from bears. Unlike Treadwell, Russell was never blinded to the possibility that he would encounter bears that could harm him. Russell rejected the dangerous, possibly life-threatening, sense of immunity and hubris that comes with seeing yourself as a bear whisperer. It was why Russell carried bear spray and recommended that anyone in bear country, especially in places where we have taught bears not to like people, should carry bear spray too.

Not surprisingly, the humility characterizing Russell's view of his relationship to indi-

vidual bears also animated his larger world view. Our species needs to be much more humble about our place in the world. For the decade he spent in Kamchatka Russell lived a schizophrenic existence. In order to return each year to the natural beauty of Kamchatka and its bears he had to raise money in our "weird world" where "we seem to think that we can live despite nature."

The bears and his experiences in Kamchatka taught him then about much more than bear behaviour. They taught him about the essence of what our brand of civilization demands. He may have put this best when Wilcox asked him a question about delisting grizzly bears as an endangered species in the lower 48 states of the U.S. He hoped grizzlies wouldn't be delisted because:

part of the problem that we are in is that we think we are so separate from nature that we can just kill animals. We can just do what we want to do – and we chose an economic model that requires continuous growth. There is nothing like that in nature. Nature just doesn't provide a situation where we can do that forever. So, it has put us in a place where we always have to be looking at profits.

Russell's outlook on relationships was one that, whether at the level of individuals or species, demands what the German sociologist Max Weber called an "ethic of responsibility." This ethic asks that we be aware of our responsibility to others (including other species) for the consequences of our conduct. Society today needs this ethic as much as it ever has and will miss dearly Charlie Russell – one of its champions.

- Ian Urquhart

For a touching tribute to Charlie Russell from many who were privileged to call him their friend please see the commemoration to his life held during the 2018 Waterton Wildflower Festival: <https://www.youtube.com/watch?v=YldHgzLSHp0>

People Showing They Care About Caribou



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