



A WILDLANDS ADVOCATE

THE ALBERTA WILDERNESS ASSOCIATION JOURNAL

JUNE 2019



Get Out There

C O N T E N T S

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Features

- 4 A Sense of Place
- 8 Getting up close in Waterton Lakes National Park: Volunteering in a UNESCO World Heritage Site
- 11 Tying In: Ruminations on Climbing in Alberta
- 14 At First Light
- 15 Conservation as a Way of Life
- 18 Finding Wild Space in an Urban Place
- 22 A...“Climate”...ising to Alberta in the Dawn of the Anthropocene
- 26 Two Proposed Agreements for B.C. Southern Mountain Caribou

Association News

- 29 Charity Intelligence Canada gives AWA Four Stars and an “A”
- 30 28th Climb for Wilderness

Wilderness Watch

- 32 Updates

Departments

- 37 In Memoriam - Diana Horton
- 39 Louise Guy Poetry Corner

Cover Photo

Karen McKeown took this wonderful picture from Grizzly Peak in Kananaskis while she was on a June 2018 hike with Ed Hergott's Mountain Manics. PHOTO: © K. McKEOWN



Featured Art AWA is pleased to feature the art of Kathryn Bessie in this issue of the *Wild Lands Advocate*. Kathryn is a self-taught artist specializing in painting nature and landscapes using acrylic medium. Kathryn studied at the University of Alberta, specializing in Soil Science and became a well-known soil remediation/reclamation expert in Alberta. She lives north of Water Valley, Alberta with her husband Lyle in a log cabin in the beautiful foothills of Alberta. Surrounded by nature and their horses, Kathryn expresses the tranquility and joy she derives from nature in her paintings. Her art is available for purchase through shows in Mountain View County, Red Deer, and Calgary as well as from her website: www.kathrynbessie.com.

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ALBERTA WILDERNESS ASSOCIATION

“Defending Wild Alberta through Awareness and Action”

Dedicated to the conservation of wilderness and the completion of a protected areas network, **Alberta Wilderness Association** is a voice for the environment. Since 1965, AWA has inspired communities to care for Alberta's wild spaces through awareness and action. With a provincial office and library in Calgary, AWA has active members, volunteers, and sponsors throughout Alberta and beyond. AWA is a non-profit, federally registered, charitable society. Donations and financial support are greatly appreciated, please call 403 283-2025 or contribute online at AlbertaWilderness.ca

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Get Out There

It's more than 10 years since I started out as editor of *Wild Lands Advocate*. It's been a fulfilling decade for any number of reasons. But, I have to say that one of the greatest personal pleasures I get from this job is preparing and reading the June issue of the *Advocate*. Why? It's the "get out there" issue. It's the issue where we devote much of the space in our Features section to reflecting about why we care passionately for the natural world. It's the issue where we ask staff and supporters to write about particularly meaningful activities and experiences in the outdoors. And sometimes I hope those reflections and stories encourage our readers to try something different or look at the natural world through a different lens.

The legion of AWA volunteers always has impressed me with their enthusiasm and dedication. Ed Hergott is one of the outstanding members of that cohort so I asked him to share his thoughts about why he is so devoted to getting out there and, through the Mountain Manics, helping others to experience Alberta's mountains (and more). His essay "A Sense of Place" answers the question brilliantly. Lorne Fitch takes time off from analyzing policy to offer you a reflection inspired by his memory of a remarkable early morning scene. Nissa Petterson invites you to think about the value found in the "traditional" outdoor pursuits of hunting and fishing. It's a story of personal growth and accomplishment. Read it and tell me if you agree.

Lindsey Wallis reflects on an activity that has yet to be pulled out of my "and now for something completely different" file. She writes about her passion for rock climbing. Although she didn't quell all of the terror I associate with that sport, I have to say that seeing her daughter Karina on a steep rock face may encourage me to give it a try (please note... "may encourage").

If you've never considered rock climbing before, have you thought about experiencing the natural world by volunteering in a national park? Waterton Lakes National Park, in my opinion, has a superb volunteer program and I'm grateful to Dianne Pachal for finding time to tell us about some of their activities and plans for 2019.

I think Grace Wark's article about wilding urban spaces and spending time in our urban green spaces is a must-read. Most of us live in Alberta cities; most of those reading this will spend the bulk of their time in Alberta cities. If getting outside is good for our soul, then we should be concerned about and committed to ensuring that green spaces are front and centre in urban land management decision making. Calgary is blessed with parks such as Nose Hill, Edworthy, and the Inglewood Bird Sanctuary. One takeaway from Grace's piece is that we should encourage our city politicians and officials to increase the connections between our urban green spaces.

If you've met AWA's Joanna Skrajny at an event or at AWA's Calgary office on 12 Street

NW you know she's no Debbie Downer. But...her contribution to this issue's theme is sobering. She considers how climate change is affecting our outdoor experiences. Hopefully, it's an account that will help to convince policy makers that the need to address climate change seriously grows rapidly with each passing season.

If you have the itch to get out there you may want to check out the update on hikes you will find in the Wilderness Watch section. That update is joined by others on parks/caribou, the Bighorn, Forest Week, the Peace Country. Poetry and the art of Kathryn Bessie also await you in this issue.

In the Association News section two pieces describe well the stellar character of AWA. Charity Intelligence gave AWA its highest ranking and the 28th Climb for Wilderness was an outstanding event.

The issue ends on a somber note. Stellar and outstanding are adjectives we often use to characterize conservationists whose passing we mourn. Dr. Diana Horton was such an individual. Many long-time members will remember Diana from the campaign to protect the McClelland Lake wetland complex from tar sands mining. Diana passed away last summer and we mark that sad event in our In Memoriam section.

- Ian Urquhart



A Sense of Place

By Ed Hergott



Editor Ian asked me to reflect on my experience in nature: Why I spend so much time in it, put so much effort into creating opportunities for others, and why I find my experiences so rewarding.

Let's reflect for a moment on the word 'nature.' Had you asked me as a 10-year old

what I enjoyed about nature, I would have been puzzled. I grew up on a farm east of Saskatoon so fully immersed in 'nature' that the question would have seemed odd. Our lives depended on a successful relationship to nature's bounty. And we suffered when natural phenomena such as hailstorms, drought or pestilence visited us. I remem-

ber as an eight-year old watching with my Dad from the tractor shed as a particularly nasty hailstorm totally devastated a fine crop just before harvest. After it was over, he took me by the hand and we walked to the edge of a flattened wheat field. We stood in silence for a moment and then he simply said: "It'll make good feed" Nature



Beautiful July day on Little Hector, Banff Park. Hector Lake is in the background behind Manic Karen. PHOTO: © E. HERGOTT



A gathering of the Mountain Manics on Grizzly Peak, Kananaskis, June 2018. PHOTO: © E. HERGOTT

can be harsh. Its gifts and hardships were part of my daily life.

I lived a typical rural childhood. I got my first .22 rifle when I was eight and I carried it with me as I skied my trap line after school in the waning light. My prey was weasel. A good skin would fetch four or five dollars. That money was important to buy hockey sticks and .22 ammunition. The weasels certainly suffered some cruel deaths but life was raw so it wasn't unusual. Birth and death were constant companions as we raised and slaughtered what we needed for the table. When I was asked to chop the head off a chicken for Sunday dinner, it wasn't an option to say that I didn't like doing that. It was life, and I didn't separate 'nature' from it.

My first separation of nature from my life came when I left the farm for a boarding school in Grade XI and XII. Since I had an older brother who stayed on the farm and would obviously inherit it, my parents emphasized education for me. From an early age there was no doubt in my mind that I would go to university and earn a living unrelated to farming. As my life became increasingly urbanized, nature started to become just a place to go to: a lake cottage or

a fishing trip. Only in retrospect did I realize that there was a restlessness in me. **I lacked a sense of place.**

In the summer of 1963 my fiancé Mary Alice and I took a trip to Calgary to experience the Stampede. We had a spare day so our hostess suggested we drive to Banff. I had never seen the mountains. It was a beautiful day and as we crested Scott Lake Hill west of the city, the mountains came into view. I had a strong visceral reaction and a strong sense that I found my **place**. We did the usual tourist stuff, even saw a bear, and returned to our summer school studies in Saskatoon. The following Christmas break I drove to Calgary and interviewed for a teaching job. We were married in July 1964 and made Calgary our permanent home.

With work and a young family our mountain activities were limited to car camping and short hikes. The year 1967-68 changed all that. I was granted a year's study leave and chose a small graduate program in New York City. Recall New York in 1967. Just before I arrived for summer school (to find a place for us to live), East Harlem erupted. The riots there dramatically reflected a city throbbing with unrest. That winter there was a sanitation strike with mounds

of stinking, rat-infested garbage throughout the city. Anti-Vietnam war feelings were running high, especially among my younger classmates who were eligible for the draft. I was at a lecture near Harlem the night Martin Luther King was murdered in April 1968 and had to take the subway at a stop in Harlem. We sat up until about 3 am to ensure that the city would remain quiet. We lived just north of the Harlem River and we were ready to throw our two little ones in the car and head north to safety if any rioting started. Later that spring we were driving home somewhere in Illinois when we heard on the radio that Robert Kennedy had just been assassinated.

These were bleak times and I couldn't see the positive future for large urban centres. The urge to return to our home and the mountains became overpowering. So began my serious exploration of mountain terrain, which was intimidating and exciting at the same time. We started with backcountry skiing which was in its infancy in this area. There were no set tracks so we just used the summer hiking trails which led to some terrifying descents. Then came backpacking. Our first trip was four days in Kootenay National Park on the now famous

Rockwall trail from Floe Lake through to the Paint Pots. Wonderful memories. Soon my attention turned to rock climbing so I took a course from the Alpine Club, gathered gear, and looked for opportunities. About then I started teaching at the newly opened Bishop Carroll High School. It featured an innovative approach to student scheduling, abandoning the classic classroom structure.

I was approached by two students who found out that we were skiing every weekend and they wondered if they could come along. I couldn't say 'no.' Soon other students heard about it and I cajoled other teachers to help out. There seemed to be endless enthusiasm in the student body so we formed the Bishop Carroll Mountain Club and quickly bought 16 sets of boots, skis, and poles. In the fall of 1972 we introduced backpacking. It grew like Topsy and now, helped out by Lonnie Springer, an experienced mountaineer, we soon had a fine equipment room full of skiing, backpack-

ing, and climbing gear. The individualized student schedules allowed for extensive activity that was inter-curricular by design. So even if we were in the mountains, students were completing work in biology, history, literature, and philosophy.

Certainly a highlight of that time were two ascents of 11,453 ft Mt Athabasca on the Columbia Icefields. On each trip (one in September 1977, the second in September 1979) 12 students summited successfully. The second trip was especially memorable. We started up the lateral moraine in the dark, about 5:30 am. It was drizzling and cold. By the time we reached the crampon area, although the drizzle had stopped, our group was chilled and some of them would have had trouble doing up the crampon straps. We reluctantly turned back. When we had descended about a hundred metres I noticed a thin line of clearing to the north. We watched it for some minutes and it was advancing. Quickly we turned the kids around and hiked back up to the glacier.

The exercise warmed them and with crampons attached and roped up, we started out on the glacier. Within an hour the sun was on us and we had a glorious and safe day.

We ran the Mountain Club for 10 years and those years are the happiest of my teaching career. It came to an end when conflicts of time with my growing family became unbearable.

I retired in 1996. I knew I wanted to start a mountain group for retired folks but thought about it for about six months before launching it. That happened in January of 1997. It started small but in the 22 years since it has become quite large and active with many former and present members. I send out a monthly schedule...that would be about 265 of them so far. We're out every Tuesday...that would be about 1,100 days of activity to this point. In addition to the regular schedule we have cycled in Europe, kayaked on the West Coast, hiked in Arches National Park, and helicoptered into several mountain lodges.

Ian asked about the 'work' involved in this. Indeed, it is a lot of work but it is deeply rewarding. First of all, I still love getting out the guide books, maps or onto internet sites to research possible routes. That's only 'work' if I leave it too late so that I have to rush a decision. My ten years with the Mountain Club gave me considerable experience in leading groups so it's rarely stressful. And the rewards are too many to mention. Through this activity I have met many women and men who have become good friends. I'm reminded of an old quotation: "Friendship sneaks up on those who engage in worthwhile activity together" Certainly we have experienced that in spades. I still love introducing others to the mountain joys. And for those who come with their own strong backgrounds in mountain travel, it's fun to trade stories and route possibilities.

I never started in the mountains to stay fit or to philosophize. It was to explore an exciting environment. Fitness and deeper thoughts were by-products. Now that I'm in my late seventies, I can well appreciate what Wordsworth captured in the poem,



Manics Gerry and Tim on a cold day in January 2017 on North Kent Outlier Kananaskis.
PHOTO: © E. HERGOTT

Lines Composed a Few Miles above Tintern Abbey:

*Though changed, no doubt, from what I
was when first
I came among these hills; when like a roe
I bounded o'er the mountains, by the
sides
Of the deep rivers, and the lonely
streams,
Wherever nature led: more like a man
Flying from something that he dreads,
than one
Who sought the thing he loved....
.....For I have learned
To look on nature, not as in the hour
Of thoughtless youth; but hearing often-
times
The still sad music of humanity,
Nor harsh nor grating, though of ample
power
To chasten and subdue*

And the Alberta Wilderness Association? I had followed them for years, having newsletters from the early 1970s in my files. I didn't have time to get actively involved then but AWA seemed to represent my attitude toward wilderness and I was cheering for them from the sidelines. In September 1996, after retirement, I walked into the old school house on 12th Street and asked to speak to someone about volunteering. Christyann was the Executive Director at the time and I offered her one day a week. I did that every Thursday for a year. By then I took another job and time wouldn't permit a full day. While there I witnessed firsthand how dedicated the whole staff was. It impressed me enough that I committed to getting volunteer help for their major functions, such as the Tower Climb and the Casino. That continues to this day. A large contingent of our mountain group

was at the recent Climb for Wilderness at the Bow Tower.

I still have the visceral feeling that overwhelmed me in 1963, not as raw perhaps but still powerful. I used to envy those who had a profound sense of place, like my friends from the Maritimes. Life in the mountains has provided that. I don't want to be anywhere else. I found **my** place and I am gratefully home. 🏔️

Ed Hergott is an invaluable member of Alberta Wilderness Association. Ed received a Great Gray Owl award in 2011 in recognition of his outstanding volunteer contributions to our Association.



Hiking in March 2019 on Bull Creek Hills, Kananaskis PHOTO: © E. HERGOTT

Getting up close in Waterton Lakes National Park:

Volunteering in a UNESCO World Heritage Site

By Dianne Pachal, *Waterton/Bar-U Field Unit, Parks Canada*



The tradition of volunteering in Waterton Lakes National Park, the Canadian portion of the Waterton-Glacier International Peace Park World Heritage Site, is almost as long-standing as the park itself. Waterton is Canada's fourth national park, established in 1895. You too can get up close with the park, work behind the scenes with Parks Canada staff, meet new people, and make a difference in protecting this special place.

Volunteers share ideas, knowledge, talent and skills through the volunteer program to help achieve Parks Canada's mandate to protect and share national parks, national historic sites and marine conservation areas. There are more than 700 people on Waterton's active volunteer list. In 2018, they

generously contributed 7,300 hours of their time in a diverse array of projects. There are opportunities year-round, with the majority occurring from April through early October.

The annual volunteer season kick-off is held the last Saturday of May in conjunction with the spring flower count. That count contributes to tracking climate-driven changes in the number of plants flowering in the park, as part of an Alberta-wide snapshot compiled by the Alberta Native Plant Council.

Families, individuals, area residents and first-time visitors can all find rewarding volunteer activities in Waterton. Any organized group, from youth groups to family reunions or companies looking for a team building day in the outdoors, can contact the pro-

gram to book a group project. For example, the Johansen family, who have connections to the park since the early 1900s, have taken on a volunteer project for decades as part of their family reunions held every three years in Waterton.

Opportunities include citizen science projects, involving scientists and everyday volunteers working together on projects such as biological inventories and long-term monitoring. The goal is to generate meaningful, useful data that contributes to scientific understanding. In 2019 we will host the 20th anniversary of the annual Butterfly Count on Friday, July 19. The calendar year will wrap up with another citizen science project, the 43rd annual Christmas Bird Count on Sunday, December 15th.

Without question, volunteers support Waterton Lakes National Park. Salamander Byway Restoration and Clean Sweep for Wildlife took place in spring 2018 as a response to the aftermath of the 2017 Kenow Wildfire, which burned 39% of the park. On September 21, as part of the 2019 Waterton Wildlife Weekend, we will again do some habitat improvement work for salamanders focussed on providing escape and egg laying cover for the long-toed salamander; this species is listed as special concern in Alberta.

The Kenow Wildfire destroyed the functionality of the salamander byway system by burning the 750 metres of directional fencing. This led the long-toed salamanders, other amphibians and small mammals to four tunnels under the Waterton townsite Entrance Road. In 2018, volunteers installed temporary fencing in time for the spring movement of salamanders to



Volunteers on the hunt for butterflies during the July 2018 butterfly hunt. PHOTO: © PARKS CANADA



Looking for human debris as part of the Bertha Trail portion of the 2018 Clean Sweep
PHOTO: © PARKS CANADA

the lake to breed and lay their eggs. Then in August and mid-September, volunteers removed the temporary fencing and all burned debris from the original fencing.



Installing temporary fencing to aid the spring salamander migration. PHOTO: © PARKS CANADA

Parks Canada salvaged guardrail compromised by the wildfire and installed it as permanent fences leading salamanders to the wildlife crossing tunnels. In April 2019, volunteers returned to doing annual maintenance by filling any gaps the spring runoff caused under the fencing.

With the Clean Sweep for Wildlife project, volunteers picked up the glass, metal and other debris exposed by the wildfire, while also recording and leaving in place anything of potential historical or archeological value. Project managers for the post-fire conservation work and archeology team provided an orientation for the volunteers and worked alongside them. In the spring of 2018, volunteers picked up more than 680 kilograms of debris after decades of accumulation along the Red Rock Parkway, Bertha Lake and a portion of the Waterton Lakeshore trails. In April 2019, volunteers completed the sweep of the Red Rock Parkway, collecting another 340 kilograms of debris and recording more



Planting whitebark pine seedlings is part of Parks Canada's efforts to restore this endangered species. PHOTO: © PARKS CANADA

than 30 sites for further investigation by the archeology team.

Other popular volunteer opportunities are planting whitebark and limber pines, wildflowers and native grasses as part of the park's restoration projects. Volunteers assist the restoration crew with reclaiming old borrow pits used for road building materials, where together, the Agency will be planting wildflowers and grasses this September.

Limber and whitebark pines are endangered species. The biggest threat to their survival is white pine blister rust, an exotic disease, which killed many trees in the park and elsewhere in the Rocky Mountains. Parks Canada is working to substantially



Stellar's jay offering a delightful splash of the blues during the 2008 Christmas bird count.
PHOTO: © PARKS CANADA

increase the number of seedlings planted in order to achieve true conservation value in replacing individuals lost to blister rust.

Nature waters the new seedlings so there may only be a few days or a week's notice for

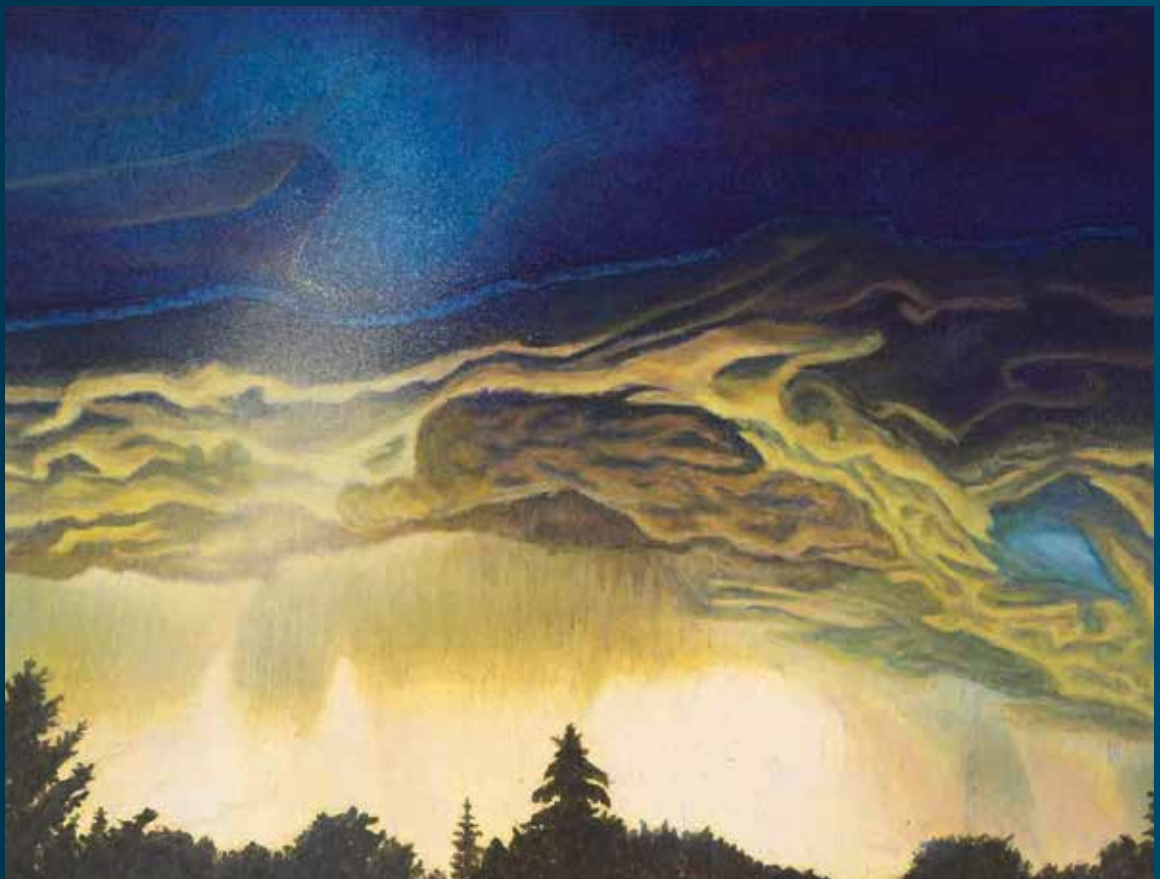
volunteers about the planting dates. Plantings are scheduled before precipitation is forecasted. Those interested in planting can email the park volunteer coordinator to be added to the contact list (see email address below).

The most popular volunteer activity in Waterton is helping the Parks Canada restoration crew controlling invasive species. Parks Canada anticipates developing future projects to help aquatic ecosystems as the park enters its second year of a new conservation and restoration project focused on aquatic and riparian ecosystems.

This is only a sample of what's awaiting you in 2019. So take a break, check out the volunteer webpages at www.parkscanada.gc.ca/waterton-volunteer and plan on joining fellow volunteers and Parks Canada staff for a project that sparks your interest or desire to help your national park while enjoying it too! You can sign up to be on Waterton's volunteer contact list from our website or by emailing pc.wlnp-volunteer.pc@canada.ca. You are also welcome to phone toll-free at 1-888-773-8888. 🐦

Dianne Pachal now pursues her lifelong passion for wild spaces in Alberta as a Public Outreach Education Officer in the Waterton/Bar-U Field Unit of Parks Canada.

Featured Artist Kathryn Bessie



Yellow Clouds Over Trees.
Acrylic on canvas,
84 x 60 inches.
PHOTO: © K. BESSIE

Tying In:

Ruminations on Climbing in Alberta

By Lindsey Wallis

The rock is warm under my fingers as I work my way up a crack in the limestone face. I slide a metal nut into a narrow spot in the crack where it sits perfectly. I take a moment to think about the ocean that was here millions of years ago and all the creatures and plants whose remains have formed the limestone cliff I am scaling. I can hear the knocking call of a raven and look down to see another soaring beneath me. The river snakes through the valley, a ribbon of blue-green against the deep green forest. My attention returns to the rock where I feel about for another handhold. Then one foot at a time steps up and I return to the rhythm of the rock, moving slowly, testing the rock for solidity, in touch with the movement of my body across the face. One small movement at a time, nothing but a speck in the vast sea of rock. I feel utterly insignificant, but at the same time, intimately connected to the landscape.

I love playing in wild places. Whether hiking, canoeing or on skis or snowshoes in the

winter, every activity offers a different way to interact with the landscape. When I am climbing my perspective is micro – I notice the cracks in the faces, the small fossils I pass as I make my way up, the differences in the rock colour and texture. When I take a break at the belay I can shift my attention outward to soak in the beautiful vista, before refocusing on the movement of my body and the tiny details of the stone once more. Climbing allows me vantage points above the landscape I wouldn't get otherwise. It is also a great way to spend a sunny day in the mountains with friends and family where everyone can challenge their own physical skills.

What does it mean to be a “climber”? These days there are so many varieties of climbing, from scaling bright plastic holds at a gym, to climbing on boulders with only a mat beneath you, to climbing bolted sport routes with a rope, to big alpine missions, and many shades between. Whether you are looking to test yourself physically, mentally or just have a pleasant day out in the mountains, there is a style of climbing for everyone.



A short history of climbing in the Bow Valley

The Bow Valley has been the epicentre of climbing activity in Alberta, beginning with Lawrence Grassi's 1925 ascent of First Sister. After a couple of quiet decades, the 1950s saw a spurt of boundary-pushing first ascents on Yamnuska, the iconic mountain guarding the eastern edge of the Rockies west of Calgary.

The first ascensionists were bold and adventurous as the following story from Chris Perry's guidebook *Bow Valley Rock* (2000) attests:

“We had no plans of really going anywhere. Leo [Grillmair] had brought a nylon utility rope with him, but we were only going to go up a little to see what it was like. We tied the rope around our chests, Leo in the front, me [Hans Gmoser] in the back, and Isobel Spreat, a young British girl, in the middle. Leo wore only crepe-soled street shoes, and by the time we were most of the way up the climb, they had huge holes right through to his socks. But he led the climb with no hesitation.’ This first ascent, up the great gash in the centre of the face, now known as Grillmair Chimneys, followed the Canadian ethic of the day—not a single piece of protection was even carried by the team—but only because the trio hadn't planned on the climb, and couldn't buy the pitons they were comfortable using in Europe.”



Long climbs with bolts for protection illustrate one of the many styles of climbing available in the Rockies. Pictured is the climb Beautiful Century near Exshaw.
PHOTO: © L. WALLIS

As sport climbing became more popular in the United States, routes with bolts began to appear in the canyons of the Bow Valley, such as Grotto and Heart Creek. Bolted routes proliferated during the 1970s and 1980s. Chris Perry, John Martin, Andy Genereux, Greg Tos, and Jon Jones are all names that climbers will recognize from guidebooks and all have been pioneers in the field in their own way. There are too many climb-

ers to name who have tirelessly developed areas so that we can enjoy climbing today. It is possible to find climbing at any difficulty and in many different styles throughout the Bow Valley as well as many other places in the Rockies and along the Eastern Slopes.

At the crag (an area with lots of climbs grouped together) one often sees families and folks of all ages enjoying the sunshine

and beautiful surroundings. The other weekend I visited Grassi Lakes, a popular early season climbing area, with my partner Kyle, some friends, and our three and a half year-old daughter Karina. It was incredible to climb alongside Karina as she pointed out things I take for granted: “cool holes” in the rock here, seams of sparkling white quartz there, tiny plants growing out of a crack in the rock, and the jewel-hued lake far below. For her, climbing is about the adventure and she changes my perspective on my surroundings as the things she notices can be so different from what I see. I love that this is another way I can share the beauty of the outdoors with her and in return she reminds me of the joy of discovery in nature.

Challenges ahead

Unfortunately, with so many people discovering the joys of climbing, our climbing community will soon have to address our impact on the landscape. Boot-beaten approach trails that used to see a trickle of climbers are now becoming eroded and braided as the trickle becomes a flood. There are no washroom facilities at many crags, which becomes a problem as the number of people using the area increases and not everyone is either educated about, or adheres to, the leave no trace ethic. Just look in the bushes at many popular crags and it is easy to find toilet paper clinging to the grass, or worse, colourful baggies of dog poop.

According to Ian Greant, a director of the Climbers' Access Society of Alberta (CASA) and Communications Officer for the Association of Bow Valley Climbers, the most significant measures that need to be taken involve creating infrastructure to help minimize the impact of climbers. This includes good parking areas, well-defined trails, human waste facilities, and infrastructure to minimize erosion, such as platforms at the base of some of the cliffs at Grassi Lakes.

Groups such as CASA and the Association of Bow Valley Rock Climbers (TABVAR) have been working with land managers for decades to advocate for access and infrastructure for climbing areas. Greant says: “While the government is typically recep-



Experiencing an introduction to climbing course led by the author in Kananaskis Country. Many companies in Calgary and Canmore offer opportunities to try climbing outdoors in a safe and fun environment.
PHOTO: © L. WALLIS

tive, it falls onto climbing organizations to encourage the government to engage in long term planning and maintenance of the areas. [The government] simply does not have the resources to actively manage/monitor all the various recreational user groups.”

Another challenge is creating a group of climbers who are educated and respectful of natural areas. As Greant says, “it doesn’t take very many people ignoring trail changes and continuing to tread on erosion-prone soil to ruin things for the rest of us.” Older, experienced climbers used to mentor those new to the sport and instilled certain ethics in their students. But the wealth of information on the internet may diminish that mentorship’s presence. Today so much information is available online but it doesn’t always include a course on “Leave No Trace.”

Different organizations are addressing this in different ways according to Greant. The Alpine Club of Canada offers many learning opportunities for new climbers, and guiding services now provide a broad range of entry level climbing courses. Even online publishers like Gripped are shifting their focus to

include more beginner-friendly content.

Every time I guide people climbing outdoors for the first time, or bring Karina with me to the crag I hope I am introducing more people to the beauty of our wild spaces, and doing my part to bring up a generation of citizens who love and respect our wild spaces and will have a fierce passion to protect them.

As a way forward for all of us recreating in Alberta’s natural spaces who want to continue in a sustainable way, Greant has some sage advice: “It is going to be up to the current and future community to accept responsibility for determining how climbing will look in their future... Sometimes the best results come from remembering the personal relationship that we all have with each other and with the land.” 🌲

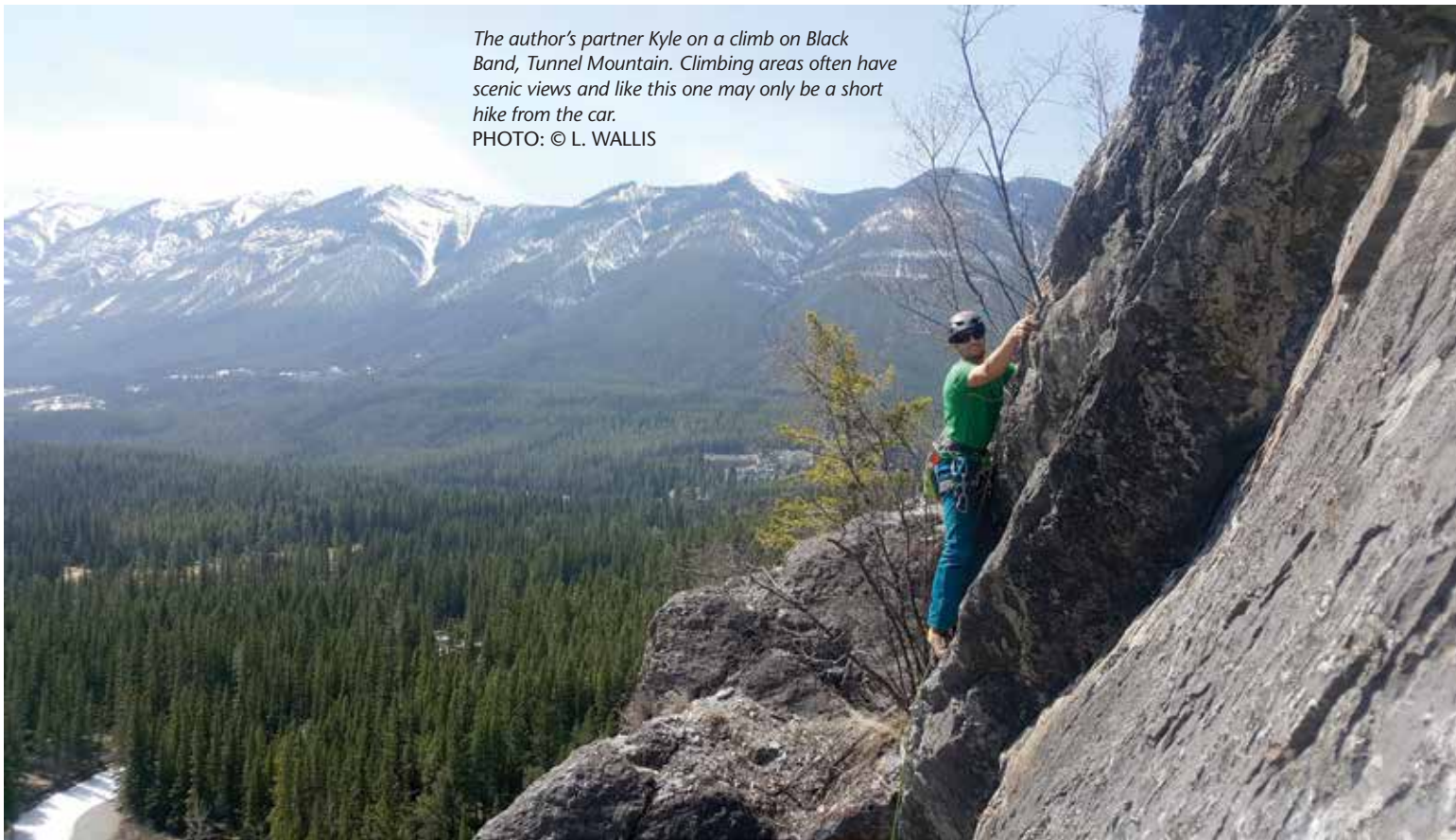
Relaxing at a belay stance on Mt. Rundle. If you are adventurous and have solid gear placement and routefinding skills you can still find places where you can have a mountain face to yourself for the day, even within walking distance from the Banff townsite.

PHOTO: © L. WALLIS



The author’s partner Kyle on a climb on Black Band, Tunnel Mountain. Climbing areas often have scenic views and like this one may only be a short hike from the car.

PHOTO: © L. WALLIS



At First Light

By Lorne Fitch, *P. Biol*



No photograph could have captured it, although in my memory the nuances of light, dark, shadow, texture, and colour remain. A painter might have done a tolerable job. That assumes the palate was expressive enough to include the cerebral sense of warmth with sunrise, coupled with the visceral, bone chilling cold of an air temperature well below freezing. It would have been a curious juxtaposition if the oils had remained viscous or the watercolours unfrozen.

A video could have done some justice to the creeping potential of dawn and the explosion of light as the sun crested the ridge to the east. It might have encapsulated a segment, a vignette of motion and the sense of time. That is if the hands would have been steady enough, or the fingers sufficiently thawed and flexible to focus the camera. A big if, I think.

A photographic image or a painting can recall, like an imperfect sketch, what one saw. This gives rise to memory and a spark to our brain's hard drive to resurrect all of the senses of the scene. We then try to recreate not just what was seen, but the richer, multidimensional tapestry of what we felt and experienced.

It's best to be aware of our limitations with words and pictures. Despite our skills and the artifacts of our art we cannot hope to match, to recreate the throb of life, the panorama that unfolds before us and the intangible, un-capturable qualities of the phases, faces, and moods of the landscape.

I took no pictures, nor did I sketch the scene that cold, clear fall day at dawn. Sometimes it is a distraction to attempt to record a scene in deference to watching and participating in it.

Not only do we lack the technology to capture the essence of a scene, we can't often define or divine its meaning. There it is, and it is beautiful. That's enough. Better perhaps to be part of it all than to parse it into bits for analysis.

Only my memory contains all the indelible features, images, and sense of that morning. In the senescence of autumn the grass held variegated shades from gold through tan to brown. Each blade of grass was rimmed with frost, thick hoar frost layered to provide individual definition. Each frost crystal was an individual prism funneling, focusing, and refracting light. Rays of sunlight bent, and split into a kaleidoscope of colour with the jewelling of each frost particle as the sun washed over the field of grass. No wind betrayed this decoration.

No human ingenuity could have matched, paralleled, or eclipsed this scene. This reality offered real special effects, organic and natural. It's a time when you catch yourself forgetting to breathe. Scenes like it quicken the heart, like glimpsing the face of a lovely woman in a crowd. The encounter occurs in seconds, maybe less, but the heart is filled with wonder, delight, and joy.

You want these rare moments of sublime delight to endure, but they don't and that may be their virtue. For, if they lasted too long the risk increases they will become common, mundane, and not powerful enough to provoke a memory. A snap shot is what we get; if we are receptive and attentive that is reward enough.

On the eastern horizon clouds had lifted slightly, providing a window through which sunlight poured, bathing the scene. Light at dawn and dusk has a special quality; warmer, diffuse, oblique, and expressive. Maybe it's related to the anticipation of a day after a pe-

riod of darkness, or a day ending, soon to be plunged into gloom again that gives this brief period an intrinsic, but hard to describe feeling. Ephemeral and fleeting perhaps it was, but tangible to the eye.

Four whitetail does emerge or, more to the senses, materialize, apparate from a patch of aspen. Their backs are blanketed in frost, reminding me of the comfort of earlier wood heat and a down sleeping bag. As they cautiously advance their legs scatter jewels of ice and the sunlight bounces off puffs of frost dust. Deer eyes are brown, liquid, and reflect the catch light of the recently risen sun. Brown on white is the palate. The image is reminiscent of a ship on a wintry voyage – ice encrusted on top, rusty brown beneath, and white waves below the Plimsoll line.

All creation was embodied at that moment in those four deer. They could be an apt metaphor for the true grandeur of life, especially on such a morning. For it is on occasions such as this that there is a palpable sense of being part of it all and because of the connection, responsible.

They come closer, unsuspecting but alert. Evolution with predators gives them a constant aura of vigilance. Be still I think and ignore your toes that scream to move and allow some hot blood to circulate to them. Consciousness seeps into my mind at about the same rate of blood flow to my toes. It is about the wonder, promise and reward of being present at first light. 🌄

Lorne Fitch is a Professional Biologist, a retired Fish and Wildlife Biologist and an Adjunct Professor with the University of Calgary.

Conservation as a Way of Life

By Nissa Petterson, AWA Conservation Specialist



Moving to Calgary to go to university was a dramatic change for me; I was leaving my family's acreage in the much slower-moving cowpoke town of Innisfail, where everyone knew everyone, to a massive city of over a million people where I knew practically no one. At home, the view out my front window featured a mature aspen forest with a small meandering creek; from my basement suite in Calgary that forest became a car-packed street. Cars and asphalt for aspens and creeks. It was a difficult transition for me to leave my little piece of nature for a major metropolitan centre. To be honest, I may have been in denial for a good portion of it. I had to find ways to get back to where I felt

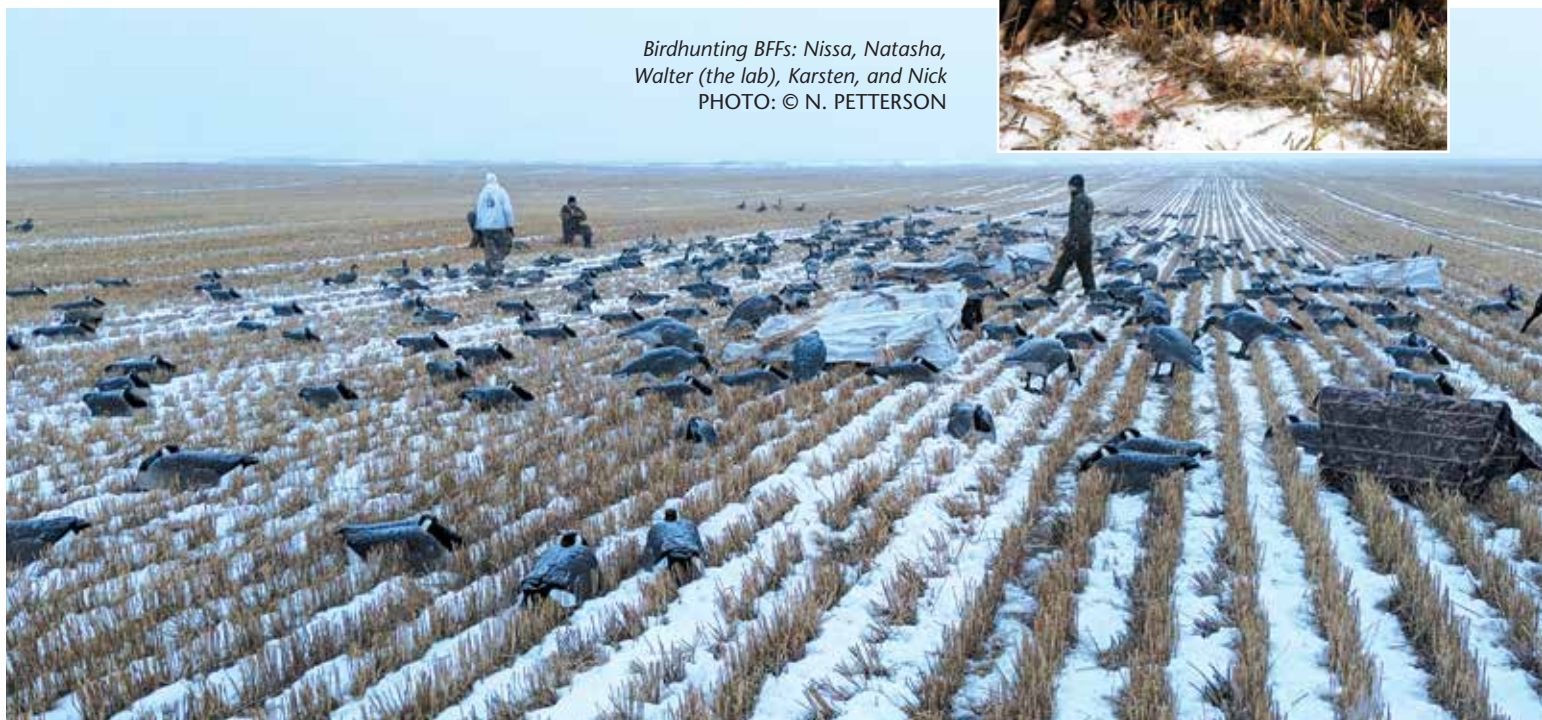
I belonged. I used the excuse of landing a lucrative bartending job at a local hotel near Innisfail, just so I could leave the city every weekend and go home. I sometimes wonder if I didn't spend more money on gas driving back and forth than I earned from working that job. A normal weekend at home for me was jam-packed; I would study throughout the day, and then bartend until the early hours of the next day. And if, by some lucky chance, I was not drowning in homework, I could spend the day with my parents helping around the acreage or make a quick daytrip out fishing in the West Country. However exhausting that cycle might have been at times, it was still worth it to me. Going home every weekend had a regenerative

power; I could recharge from a week in the city by sharing a space with nature along with people who I loved.

As time went on, life changed, and the nature retreat that was my family's acreage became nothing more than a memory. But life gave me some good fortune and I was introduced to a group of friends that shared my passion for nature. It was



Birdhunting BFFs: Nissa, Natasha, Walter (the lab), Karsten, and Nick
PHOTO: © N. PETTERSON



Early December morning set up of blinds and decoys for goose hunting. PHOTO: © N. PETTERSON



Nissa's first walleye PHOTO: © N. PINK

through these amazing friendships that I was able to, and continue to, fill my need to experience wilderness.

Most of our gatherings are centred around some kind of outdoor adventure. This past year, we've spent time hunting whitetail deer and mule deer, in addition to mallard ducks and geese with an outfitter. The bird hunt turned out to be somewhat of a surreal experience for me. We used layout blinds in the middle of cropland, and between the waves of birds and action, there were moments of complete calmness. As I stared up at the winter sky through the tall grasses shielding my blind, I felt entirely present.

The last few weeks of this year's bone-chilling winter were spent huddled around a hole in Sylvan Lake in what you could call the Taj Mahal of fishing huts. I caught my first walleye on one of those ice fishing trips; he was small (15 inches), but feisty. He eagerly grabbed my line that had only a flasher without any bait; I have nev-

er had that happen before and it was an awesome experience.

We even try to incorporate nature when we vacation together. In April of 2018, we travelled to Florida, where we spent days trying to spot gators, catching and frying up bass, and swimming with gentle sea cows otherwise known as manatees.

Nowadays, this is often how I choose to experience nature; these wilderness adventures I share with my friends allow me to escape the craziness of life. However, I would argue that the value of these outdoor excursions extends far beyond the superficial action of casting a lure or pulling a trigger. For me, Alberta's wilderness is a vehicle or channel for delivering more profound moments. Being in the outdoors brings me a sense of familiarity and belonging. It allows me to reconnect the with the version of myself I identify most strongly with. Sharing this time in the outdoors with friends has given me the capacity to fill a void that came from leaving my

family's acreage and a chance to rebuild community, however small it might be.

For me, a sense of accomplishment is an important byproduct of my hunting and fishing experiences; seeing the time and effort you have invested into developing a skill being rewarded by coming up with game is tremendously rewarding. It is a similar feeling to growing a beautiful and healthy vegetable garden. All of that back-killing work tilling the ground, and the endless weeding and watering seems a lot less grueling when you have your first taste of a fresh salad reaped entirely from your own garden. The sensation of harvesting from Mother Nature for sustenance is one beyond comparison. It is very grounding. It reminds me that things like food come to our tables with a lot more ease than they used to. In comparison to generations before us, we rarely have to work for our food; there is little skill or time requirements tied to the food we eat. Today, a lot of that responsibility falls

upon our surrounding rural communities that have to find methods to meet those demands.

All of these aspects of hunting and fishing in Alberta's wilderness have provided me with more than just food on my table. These outdoor pursuits have positive impacts on my physical and mental health, in addition to giving me a higher sense of social awareness. This overall positive state for my well-being is the reason why I pursue these opportunities. I engage with Alberta's wilder spaces in this capacity because it is a fulfilling part of my chosen lifestyle, as it is for many people in Alberta.

This lifestyle, however, is not without its challenges. Being able to have these opportunities, and ensure they are possible well into the future, requires thoughtful management on behalf of current generations. If we want to continue to harvest animals from Alberta's wilderness and allow this to be a lifestyle for future generations, sustainability has to be a priority.

We have organizations and frameworks in place like Alberta Conservation Association and Alberta Fish and Game Association that aid in monitoring wildlife populations, enforcement, and regulating how much hunting and fishing can occur season to season. However, a large piece of the puzzle for maintaining a sustainable wilderness for Alberta appears to be missing: land management. To date, we have seemingly overlooked the reality that land-use decisions and industrial and commercial management are equally contributors to the harvesting potential.

To quote a segment from an essay of Professor Lorne Fitch, *Two Fish, One Fish, No Fish - Alberta's Fish Crisis*, "If the changes in the Beaverlodge River and the loss of fish [Arctic Grayling] provide a lesson, it is that fisheries management — maintaining fish — often has little to do with how we manage fish, in terms of seasons, bag limits and harvest size. What dictates fish persistence or not is the integrity of the watershed and the elements that produce fish habitat."

Since beginning my work at AWA, I have shifted dramatically in the way I under-

stand and think about conservation within Alberta. Coming from an ecology background, I always thought about conservation in the sense of population dynamics; the growth or retraction of a species is dictated by processes such as birth and death rates, immigration, and emigration of individuals with respect to their environment. Understanding this dynamic system and how it relates to a minimum viable population size is having the capacity to predict the likelihood of extinction or extirpation, and while environmental conditions are a part of this type of analysis, the emphasis on how strongly people can influence these conditions was never really there. Generally, we influence the carrying capacity of an ecosystem as much, if not more, than any natural process, and yet we don't fully acknowledge it.

In order to preserve lifestyle choices and be able to continue to engage with Alberta's nature in this capacity, we as communities need to think more critically about how land-use decisions are a fundamental part of wildlife management and how they affect this ecological bottom-line. While current management strategies or species-specific conservation initiatives have positive impacts, we have to properly acknowledge and address how influential our activities are on these natural systems, both directly and indirectly.

A glaring example of where Alberta has failed to integrate this approach to conservation is the current predicament of woodland caribou. The Narraway and Redrock-Prairie Creek herds, both of which are southern mountain woodland caribou herds, have experienced a significant amount of habitat alterations and loss due to land-use activities such as logging and petroleum exploration. Alberta's Athabasca rainbow trout find themselves in a similar situation; this species of fish is an obligate resident of clear, cold flowing waters. Their future darkens when their aquatic habitats endure water withdrawals from resource development such as fracking; it darkens further from the increased sedimentation and water temperatures

produced by removing riparian or nearby forests through logging. Rather than identifying these sensitive areas and the effects of industrial activities occurring within them, we have skirted around the issue by resorting to stop-gap solutions such as angling closures, wolf culling, and pen rearing of caribou. Methods such as these absolutely have a place in the "conservation toolbox" and can be successful in slowing the decline of these species, but these should be among the last tools we reach for, not the first. Unfortunately, we have resorted to these methods as our primary conservation solutions rather than acknowledging our impacts on the land and changing our land-use practices accordingly.

In my opinion, these trends are doubly concerning. They affect our ability to continue to hunt and fish for generations to come. But they also damage the quality of life that comes with having access to the vital ecological services and goods provided by Alberta's wilderness. Given the current intensity and frequency with which we are developing and converting our wild spaces, the prospect that Alberta's wilderness will be able to continue to supply our communities with clean water and air depreciates considerably. It is short-sighted to think that, given these current land-use practices, Alberta's wilderness will be able to sustain wildlife populations, let alone us. Conservation in Alberta is not just about protecting our native species or natural features, it is about protecting our quality of life. If we strive to take care of our landscapes, we can continue to reap the benefits of healthy and biodiverse natural spaces that are resilient to change.

When I think about those days hunting and fishing with my friends, I feel happiness, but now more so than ever, I feel privileged because today I have a better understanding of what is at stake if we do not act. I understand that we are at risk of losing our home — and the time to save it is now. 🐾

Finding Wild Space in an Urban Place

By Grace Wark, *AWA Conservation Specialist*



With early summer here, I'm sure many of you are spending more time in your local parks, green spaces, and neighbourhood nature reserves. Following a particularly harsh winter, many of us are eager to light up the portable grill, dip our toes in a stream, or take a leisurely bike ride along the river pathway. After all, Alberta's cities boast a number of incredible parks and greenways: Botteril Bottom in Lethbridge, Weaselhead Flats in Calgary, Waskasoo in Red Deer and Edmonton's soon-to-be Big Island Provincial Park, among many more. These parks allow us to navigate our river corridors, get our 10,000 steps, and enjoy the outdoors in Alberta's narrow window of warm weather.

Thinking about Alberta's wilderness, city parks aren't likely to make many lists of "wilderness destinations." If you imagine a wild space, you're probably thinking about a mountain getaway, backcountry hike, or canyon scramble rather than a leisurely stroll through a city park. Urban spaces are often thought of as loud, busy, and bright, but this doesn't mean that they're wilderness-free. In fact, our parks and green spaces frequently offer sanctuary from the urban bustle to the benefit of both people and our wild urban counterparts.

Urban green spaces perform a number of important functions: small parks and city greenways offer wildlife connectivity; big parks give space for large city-dwelling mammals; urban forests absorb pollution and smog; and riverside parks and wetlands help to buffer spring floods. These spaces offer a multitude of benefits for city aesthetics,

physical and mental health, and play a critical role in helping us coexist with the other species in the urban jungle.

Conveniently for us, we've placed many of Alberta's cities along major river valleys – a necessity for travel in the years leading up to the early 1900s, and a necessity now for irrigation and potable water supply. Incidentally, these spaces are incredibly attractive to wildlife; river valleys funnel in nutrient rich waters, stimulating plant growth and subsequently attracting herbivorous grazers, shorebirds, nesting raptors, and denning carnivores.

Take for example, the City of Calgary, sitting at the confluence of the Bow and Elbow Rivers. Calgary has a substantial volume of wildlife movement, as they follow lush riverside vegetation and opportunistically seek out loose grain, food scraps, and grass seed. If you live in an urban area, you've likely spotted a rogue deer, coyote, hawk, or even the occasional moose wandering through your neighbourhood's yards and streets.

While roaming wildlife may seem ill-suited to an urban context, it may be the urban infrastructure that's out-of-place rather than the wildlife themselves. These sightings should serve as a reminder that while we've built structures, roads and an altogether new urban ecosystem in these places, we're still part of Alberta's existing, millennia old river valleys that will continue to serve as wildlife habitat if we let them.

This is where I seek to find "wild space" in an urban place. We're not the first inhabitants to have existed in Alberta's river corridors, and we won't be the last, but leaving green space in our cities is important to

conserving what wilderness is left in Alberta's settled landscapes, no matter how small those wilderness spaces may be.

In this article, I'd like to explore how cities challenge urban wildlife and how these challenges can be lessened by establishing a healthy network of city parks and green spaces. In valuing our parks as "wild spaces", we can remember the ecosystems that we're building within and seek to respect and accommodate our wild, urban co-habitants.

The great urban obstacle course

When I say urban obstacle course it sounds more like a fun-filled afternoon of urban parkour rather than a chaotic system of multi-lane highways, gridlock, windows, lights and sounds. This is what our urban wildlife are up against, an environment which has become increasingly not their own.

Wildlife in Alberta's national parks and provincial protected areas are frequently offered a number of protective luxuries such as wildlife crossings and large disturbance-free areas. Our urban wildlife aren't always so lucky. Lights, noises, buildings and roads are sensory and physical barriers to urban wildlife migration and dispersion. These disturbances make it difficult to move across cityscapes, diversify gene pools, hunt or feed as they could in more remote areas.

Now wildlife is more likely to receive some degree of consideration in urban planning, including the occasional environmental assessment or precautionary roadside fencing. But the norm remains that cities aren't



Making “wild space” in our cities is about acknowledging the natural habitat we’ve built upon and making space for those who have adapted to live among us.
Photo: © G. WARK

planned with wildlife as a first priority. Wildlife collisions are frequent and expensive. Between 2005 and 2014, two bears, three cougars, 48 moose, 772 coyotes and 5,152 deer were hit on Calgary’s roads and highways, incurring a not insignificant cost of \$45 million to drivers and taxpayers.

While many of these collisions can be attributed to the fact we build cities within migratory hot beds, city parks and greenways offer improved connectivity for migrating wildlife. Greenways are strips of undeveloped land in or near urban space designed to facilitate environmental protection and/or recreation. Ideally, city parks should be connected by greenways, especially in ar-

reas prone to heavy wildlife movement, to reduce the frequency of devastating, deadly highway collisions.

Some of Alberta’s major cities already have initiatives to establish greenways and strategize future green connectivity; however, greenways aren’t always planned with wildlife migration in mind. Take, for example, Calgary’s Rotary Mattamy Greenway. This is an impressive 138 km trail network, built by the City of Calgary and Calgary Parks Foundation to connect 12 city parks. While this network is highly desirable for uses like biking or marathon running, it doesn’t serve wildlife values well. Rather than weaving through the city, the Rotary Mattamy encir-

cles it, providing very little utility for wildlife seeking a path-of-least-resistance. On the other hand, Edmonton’s *Breathe* 30-year Strategic Plan intends to establish a network of ecological parks and green infrastructures through Edmonton’s river valley and ravine system, linked throughout by pathways and trails. If fulfilled, this greenway would align more with conserving wildlife-friendly space through a heavily disturbed area like Edmonton’s downtown core.

Keeping parks in Parkland

Another threat for urban and urban-adjacent wilderness is the extension of city boundaries further and further into existing



Urban wildlife are certainly unique, albeit occasionally territorial. With such limited resources in the concrete jungle, it's essential that we establish urban parks, greenways and nature reserves so that urban biodiversity can continue to thrive. Photo: © N. DOUGLAS

natural habitat. In 2018, Calgary city council approved the development of 14 new communities at the city's fringe. Council literally paved the way for further shrinking and conversion of Alberta's Parkland Natural Region. While Calgary has experienced significant growth in recent decades, there has been no pre-emptive land acquisition for new parks among Calgary's 198 neighbourhoods. This means that Calgary has not and will not see a proportional increase in green space as the city expands territorially.

Urban sprawl is a serious problem here in Alberta. Many of Alberta's cities are too eager to push their boundaries further and further from their historic centres – Edmonton's expansion to and beyond the Edmonton International Airport illustrates this all too well. If we wish to expand outwards, we face primarily privately owned agricultural lands and parcels of public land, which can be purchased and redeveloped. This means that there is minimal motivation to increased densification – to plan urban growth upward, rather than outward. The appetite for

new suburbs, big lots, and big single family homes seems insatiable.

This continual development is problematic. It should be confronted by eliminating urban expansion in favour of densification and creating parks that retain their natural character. Natural areas require less continual maintenance. For example, using native, drought resilient plants would reduce the need for irrigation, lawn maintenance, and pesticide. They also provide other critical ecosystem services such as buffering floods through storm water collection and retaining natural habitat for urban species. Many city parks in Alberta do this well. It's just a matter of supporting more thoughtful planning for urban parks and protected areas to counterbalance current trends in suburban growth.

Biodiver... city

Urban biodiversity is another essential component of the urban ecological puzzle. Biodiversity in cities differs vastly from the surrounding area, as urban wildlife must adapt to more disruptive conditions. Wildlife eager

to adapt tend to be generalist species, those who can survive in a multitude of ecosystems. This is why we don't see species like grouse or caribou within the city limits. Their habitat requirements are too specific to tolerate the level of disturbance and fragmentation from urban growth. We're all too familiar with our urban generalist species: the aggressive goose, the opportunistic coyote, the wandering deer and the prolific hare, to name a few. While these species can cause the occasional nuisance, their adaptability has allowed them to become a part of the existing biodiversity within our cities.

Where urban parks can contribute to the biodiversity equation is in providing the space and connectivity wildlife populations need to be abundant and resilient. One problem urban wildlife face is that their populations can often become isolated. This reduces the likelihood of new genetic material entering the pool, or the ability of individuals to pass on their genes through mating opportunities outside of their local populations. Wildlife

need to intermingle to remain resilient. But, without a dating app or an Uber to get north-west coyote A to southeast coyote B, their populations can become subject to inbreeding and its associated side-effects.

Solutions to this are larger parks, sustaining multiple populations, or greater connectivity. Connectivity doesn't necessarily mean greenways since they can be difficult to implement within an already built landscape. But, as Lepczyk et al noted in 2017, connectivity can be realized by using smaller parks and green spaces as "stepping-stones" between urban habitats.

Why go urban?

Contrary to everything I've been saying, some may argue that city parks are more for us than wildlife. This is a valid point. Off-leash dog areas, riverside cookouts, and soccer fields aren't the most wildlife-friendly spaces. However, I feel the net benefit of city parks is not only in setting aside deliberate wilderness spaces in highly developed urban areas, but in giving city-dwellers a place to develop a relationship with nature.

Many of our first memories with natural spaces are in our neighbourhood parks.

These spaces have taught us how to interact with nature, while working double-time to promote a healthy, active lifestyle, facilitate social gathering, and give us space for reflection. The connections we make in these spaces bring wilderness into our daily lives, rather than being a far, distant space without a visible impact to our health and well-being. We can then borrow what we've learned while exercising local conservation and apply it provincially.

Using these spaces can also lessen the burden on the provincial and federal parks that are currently bursting at the seams from tours and day-trips. Exploring your local natural areas will add depth to your understanding of the wilderness in your own backyard, while saving yourself and the atmosphere the gas you would have used to travel somewhere else.

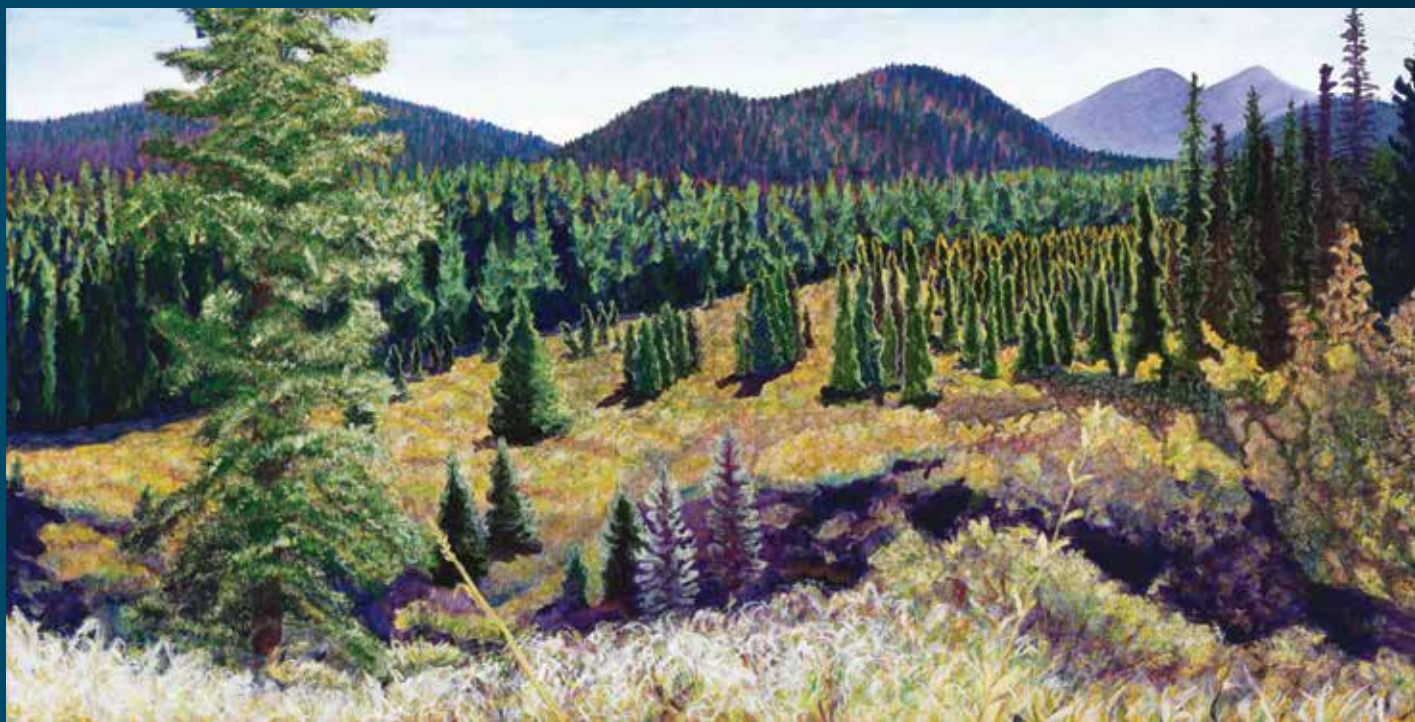
So I urge you to both enjoy your urban green spaces this summer and fiercely advocate for more. Our urban parks serve as a reminder that we need to leave space for wildlife and wilderness, whether in the backcountry or in our backyard.

Here are some resources to help you engage urban conservation this summer:

1) **Calgary Captured** is a citizen-science driven wildlife monitoring project coordinated by the City of Calgary. Through the Calgary Captured website (<https://www.zooniverse.org/projects/calgary-captured/calgary-captured>), you can upload photos of wildlife you've seen within the city and identify the species within the pictures others have taken.

2) During the provincial election period, the Government of Alberta committed to creating a new Provincial Park in the City of Edmonton, **Big Island Provincial Park**. Show your support for conserving urban green space by sending a letter to the new Minister of the Environment and Parks at aep.minister@gov.ab.ca 🐾

Featured Artist Kathryn Bessie



Hunter Valley. Acrylic on canvas, 20 x 40 inches. PHOTO: © K. BESSIE

A...“Climate”...ising to Alberta in the Dawn of the Anthropocene

By Joanna Skrajny, AWA Conservation Specialist



It was early May a couple of years ago and I was itching to get outside. The weather had been unseasonably warm, hot even, for most of April, so I laced up my boots and headed out to Banff. With sunny slopes, Castle Mountain is renowned as a good early-season hike, and I was prepared with my rain pants and long boots to wade through the snow in the underbrush.

To my surprise, I didn't find any snow. Instead, I found throngs of people in tank tops and shorts swarming the trail, all as eager to be outside as I was. At the top, finding a lunch spot was a challenge, so I made my way over to a grassy spot a little further from the crowd. It didn't take long to notice my pants were teeming with Rocky Mountain wood ticks. A scream nearby confirmed I was not the only one to have come across these unwelcome guests. I was suddenly very happy to be wearing long breathable layers.

Alberta, along with the rest of Canada, is experiencing climate change at a faster rate than the rest of the world. According to Alberta Climate Records, average annual temperatures have increased by 1 to 2 °C in the southern half of the province, with northern regions experiencing 2 to 4 °C warming. Winter temperatures have increased by an average of 8 °C, whereas summer temperatures have increased by only 1 °C.

This has encouraged the spread of species that previously could not have survived Canada's harsh winters. As recently as 15 years ago, the possibility of acquiring Lyme disease from deer or black-legged ticks was not even on the radar of most Albertans. Now, a warming climate has made much of Southern Canada hospitable to species that carry the disease, dramatically increasing the number of reported Lyme disease cases from 144 in 2009 up to over 2,000 in 2017. While the disease has yet to be firmly established in Alberta, the trend suggests

that outcome is inevitable.

Ticks are also wreaking havoc on wildlife, especially moose populations. Due to milder winters, ticks are multiplying at an unprecedented rate and as a result, young moose are being inundated by thousands of ticks. Studies in the United States found that up to 70 to 80 percent of moose calves now can die in a mild winter from tick-induced hair loss, blood loss, and dehydration. This is compared to the 30 percent die-off typical in colder winters. These major moose die-offs can affect predator populations, the experience of hunters, and the ability of Indigenous Peoples to practice treaty rights.

As this example illustrates, we are only beginning to see how the climate crisis will affect our ecosystems and ways of life. One less discussed aspect is the impact that climate change is having on the outdoors and the ways in which we experience it.

Take an old Canadian joke about our four seasons: almost winter, winter, still winter, and construction season. I'd like to make a slight amendment, and suggest that instead we now have almost winter, winter, construction, and smoke season.

I'm not alone in thinking that forest fires in recent years have been absolutely brutal. From the devastating fire in Fort McMurray to B.C.'s record breaking wildfire seasons in 2017 and 2018, wildfires are getting larger and their impacts more pronounced. And while we certainly have had extensive forest fires in our history before, it is the frequency at which these larger fires are occurring that is creating cause for concern.



It's May 1, no snow in sight. Not pictured (?)... ticks. PHOTO: © J. SKRAJNY

Already B.C. has experienced an unusually dry spring. With May 1st snow packs generally below average levels throughout the province, there are grounds to fear that 2019 may produce another record-breaking wildfire season.

Wildfires, along with other extreme weather events, are beginning to exact a larger and larger financial toll. The Alberta Government reports that from 1983-2008, Alberta averaged \$100 million/year in losses due to extreme weather events. This increased to a staggering average of \$673 million/year from 2009- 2012. More recently the Government notes that “Alberta has experienced the two most costly disasters in the country’s history with the Fort McMurray wildfires at \$3.58 billion and the 2013 southern Alberta floods at \$1.7 billion.” Don Forgeron, President and CEO of the Insurance Bureau of Canada, pointed out that insurance companies continue “to see the devastating effects of this new era of an unpredictable, changing climate.” In 2018 the bill for insured

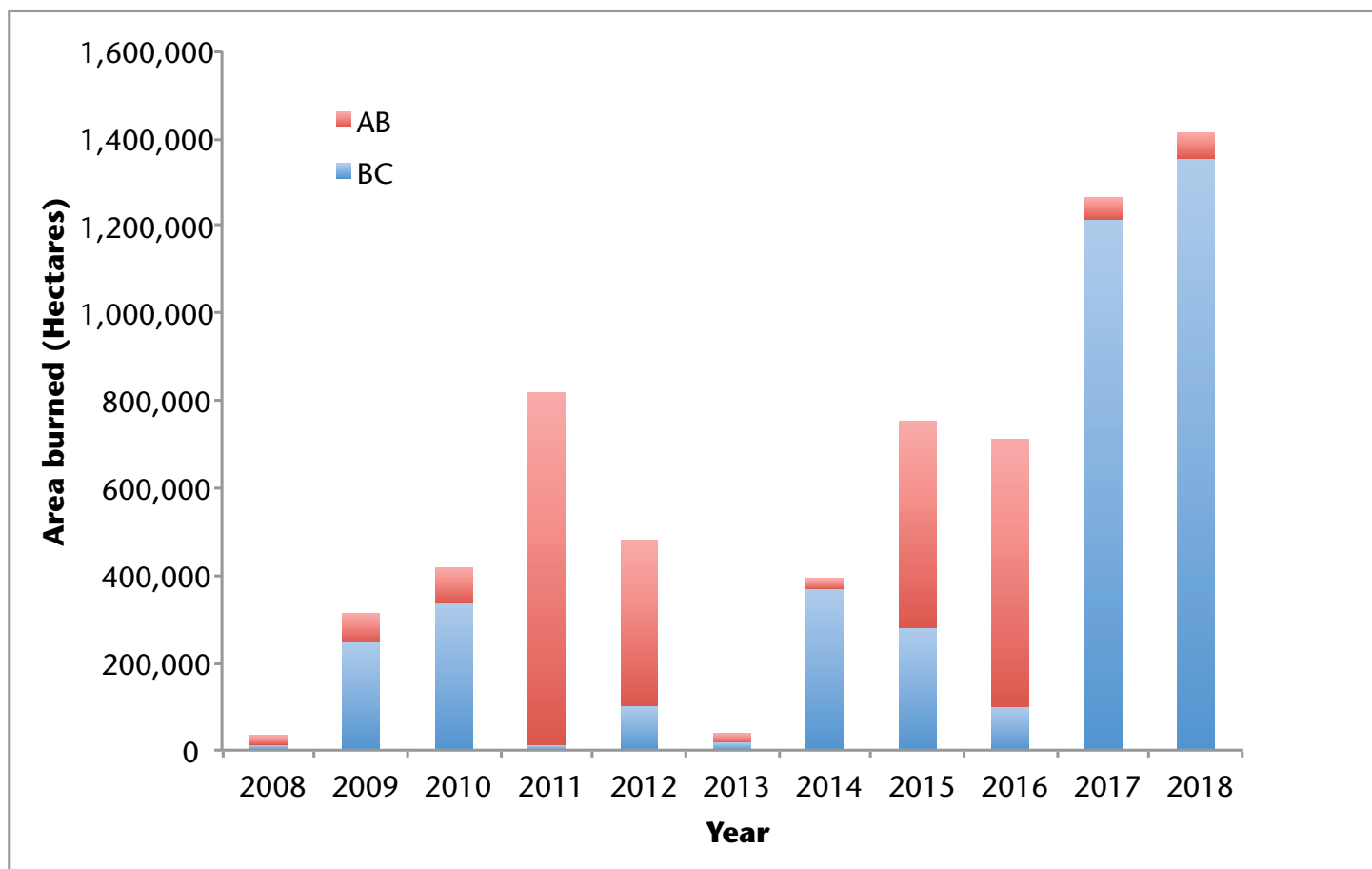
damages in Canada amounted to \$2 billion, the fourth highest total on record. And, this was a year that wasn’t marked by a major catastrophic event like the Fort McMurray wildfire. The increased probability of extreme weather events is likely to increase our insurance premiums.

The tolls of increased wildfires come not only in a financial form, but also damage to our health and well-being. The reprieve we once found outdoors from the cold and dark days of winter is now lost when we find refuge indoors from dark overcast skies and cloying smoke. The setting and mood in many places in Alberta and British Columbia last summer verged on the apocalyptic, with dark black and orange skies.

August was once my favourite time of year to be outside in Alberta, with the distant memories of July’s hail storms replaced by August’s picture-perfect blue skies and fluffy white clouds. I still haven’t re-calibrated to this “new August”, with sweltering heat spells and hazy smoke, only broken up by extreme wind storms and hail.

I made the mistake of booking my backpacking trips in the past few years in the month of August and my health has paid the price of these mistakes. What would have been a reasonable amount of elevation gain on a clear day instead produced irritated eyes, shortness of breath, and headaches. On a larger scale, wildfire smoke has been linked to increased risks of developing heart problems and certain cancers. Sales of air purifiers in Western Canada have been skyrocketing as many anticipate another summer spent indoors in order to get away from the smoke.

As larger and larger areas of our forests are burning, not all of them are going to regenerate. In Alberta’s boreal, it’s estimated that much of the southern portions will burn and be replaced by grasslands and some deciduous trees by the 2080s. This is obviously expected to cause major disruptions to wildlife populations. In particular, it’s expected to place huge, very unwelcome, new pressures on already threatened caribou. Caribou are highly specialized at



Area burned (in hectares) within the provinces of Alberta and British Columbia over the past 10 years. SOURCE: CANADIAN NATIONAL FIRE DATABASE.

avoiding predation in boreal ecosystems, with large hooves adapted to wading in deep snow, peatlands, and complex forests. Large open swaths of grasslands would stimulate increases in white-tailed deer populations, which in turn would increase wolf populations. The increased open expanses would also make it much easier for predators to hunt down caribou. Taken together, researchers estimate these changes “would severely compromise the long-term persistence of caribou in the boreal forest of Alberta.” The ability of caribou to escape from these new predation threats depends largely on the ongoing presence of peatlands on the landscape. These wetland complexes not only create unburned islands of forest, they would also act as complex refugia to harbor caribou from predators, along with other boreal species. Climate change threatens to reduce the footprint of peatlands in the boreal.

It seems likely, then, that grassland and

parkland species will be the “winners” in a warming future. One would think that habitats which are adapted to periods of drought will manage to persist in the future. In truth, the ability of parkland and grassland species to successfully adapt and migrate northward depends on many factors, including the ability of native species to take over new areas. It’s easy to imagine a scenario where agricultural crops and invasive species take over where the boreal once was. It’s also difficult for native parkland species to expand into new areas when so little natural parkland habitat remains. Species that depend on prairie pothole wetlands, including many waterfowl, may soon be disappointed to no longer find breeding grounds as they move northward. Trembling aspen, which thrive in cool and wet conditions, may experience increasing dieback as hot and dry conditions make them more susceptible to drought and attacks from forest tent

caterpillars. Even the composition of our grasslands is expected to shift, away from northern fescue prairies (found in moister regions) to shorter mixedgrass prairie. Farming in the Palliser Triangle, which already is nothing short of challenging, may become close to impossible.

In many ways, the actual severity of many potential climate change impacts will depend largely on the degree of “drying” we experience in the province. This is where climate modeling sends a bit of a mixed message on what we can expect in Alberta’s future. In southern Alberta, where we depend on our mountains and foothills to supply us with cool, clean water year-round, mountain snowpacks are expected to melt off earlier in the year. Coupled with increased precipitation in the spring, this is expected to cause higher spring runoff. In the summer, lower summer river flows and exacerbating droughts are expected to increase as temperatures rise, due to fewer



Thanks to the intense B.C. wildfires, what was supposed to be a stunning view at the top of a pass instead turned into a cough inducing and hazy view on my

summer rains and less snowmelt. Warmer creeks with less water volume will increase stresses on Alberta's already threatened coldwater fish species, such as bull trout and westslope cutthroat trout. In northern Alberta, increased flash flooding events are expected as precipitation increases and mature forests are lost to an increasing number of fires.

Taking stock of these predicted impacts together, it's hard not to paint a somber picture of our future. Are we doomed to an Alberta overrun by disease and invasive species and plagued by floods, droughts and fires? Maybe.

It's a tragedy that this conversation doesn't figure more prominently in the public sphere. On the day that a certain royal celebrity had a baby, the UN also released a report saying that one million species risk extinction unless we act now to save them. The first of these two events received outrageously more coverage de-

spite the obvious fact that the health of our future depends on the actions we take on the latter. How can we even begin to have a conversation about tradeoffs if we don't recognize and acknowledge what we are about to lose?

We don't know exactly where we are heading, but that shouldn't prevent us from taking action. I don't want an Alberta without caribou, without beautiful expanses of forests. Our children shouldn't have to be afraid to go outside, to worry about whether the air is safe to breathe, to wonder if there will be water when they turn on the taps. Yet these unhealthy possibilities are more and more plausible if we don't do anything.

It's also becoming clear that this is not an either-or debate between protecting our ecosystems and taking climate action. Climate change and our ecosystems are inextricably linked. If we don't take action on our climate, our ecosystems are going to

face massive challenges. Healthy ecosystems, in turn, are better able to buffer the impacts of climate change and continue to provide us with the essential services we rely on, such as clean air and water.

It's also important to remember that we are not isolated from these changes on the environment. Albertans have already been feeling the psychological, physical, and financial burdens that climate change impacts are having on our ecosystems. So let's have an honest conversation about where the future is taking us and what we can do about it.

I now want to turn the question to you, our readers. How has climate change been affecting your daily life? What actions have you been taking? We're interested in hearing what you have to say. Drop me a line at jskrajny@abwild.ca or send one to our editor iurquhart@abwild.ca. We may feature a few of your stories in our next issue! 🐾



most recent backpacking trip in Banff National Park last summer. PHOTO: © J. SKRAJNY

Two Proposed Agreements for B.C. Southern Mountain Caribou

By Carolyn Campbell, AWA Conservation Specialist



As noted in a later update, no Alberta-Canada woodland caribou conservation agreements have been agreed to. However, Albertans should know about two draft agreements out of B.C. released in March 2019 for public consultation, as well as the ensuing discussions they have generated. The agreements relate to southern mountain woodland caribou, whose home ranges in B.C. connect to mountain caribou ranges in west central Alberta, including those of the Narraway, Redrock Prairie Creek, Jasper, and A La Pêche populations.

Scientific advisors to the federal government assessed southern mountain caribou as Endangered in 2014. In May 2019, Environment and Climate Change Canada (ECCC) announced that Minister McKenna had determined there was an imminent threat to the recovery of southern mountain caribou. This finding obliges the minister under the *Species at Risk Act* (SARA) to recommend to the federal cabinet an emergency protection order for these ranges. The federal government has so far emphasized conservation agreements rather than habitat protection orders to take long-overdue actions to maintain and restore caribou critical habitat.

One draft agreement is a bilateral B.C.-Canada draft agreement covering all B.C. southern mountain populations. The second is the draft Intergovernmental Partnership Agreement between two northeast B.C. First Nations – Sauteau First Nations and West Moberly First Nations – Canada, and B.C.. It covers the ‘Central Group’ of southern mountain caribou. Both agreements were released in late March, with public consul-

tation periods extended to the end of May.

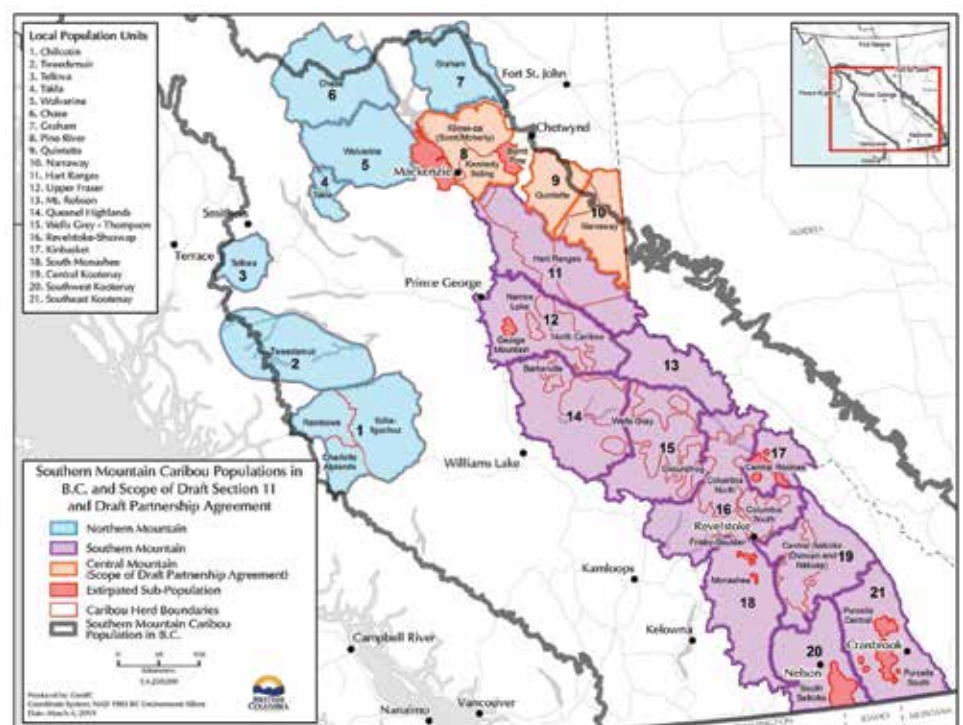
B.C.-Canada bilateral agreement

Unfortunately, the B.C.-Canada bilateral agreement as drafted is an unenforceable ‘plan to plan.’ It doesn’t offer a single interim measure to stop further habitat deterioration. B.C. and Canada espouse that “immediate action must be taken with the best available information.” The thrust of the agreement outlines intentions for future actions that are vulnerable to more back-sliding. Endangered mountain caribou deserve much better by this point.

B.C. and Canada state they will take “Conservation and Recovery Measures” with the

long-term goal to reach self-sustaining populations. Intentions are outlined, but they appear fragile. B.C. commits to “incrementally increase Southern Mountain Caribou Habitat over the course of this Agreement via a range of measures including restoration, incremental habitat protection, and habitat offsetting.” B.C. also promises to finalize the Provincial Caribou Recovery Plan in summer 2019 and to complete Southern Mountain Herd plans within two years of the agreement. Canada will provide funding to support the Measures as well as support Indigenous communities to participate in developing and implementing the Measures. There are no backstop actions outlined if these intentions fail.

Other than items from the four-party Part-



The two draft agreements focus on B.C. southern mountain woodland caribou ranges, which are important for adjacent Alberta caribou populations.

nership Agreement, which will be discussed in more detail below, the only specifics in the bilateral agreement for protecting more current intact habitat is for an 80 km² South Selkirk area project by Nature Conservancy of Canada. This is a laudable initiative, but standing alone it's not nearly enough from B.C. given the dire situation facing mountain caribou. Vital protection measures such as deferring new disturbance and new tenures are nowhere to be found. By now such deferrals should be built into 'plans to plan.' They are needed to motivate timely completion of collaborative range-specific plans outlining how minimum habitat disturbance thresholds will be met. In this agreement, there is no end to recreational hunting or recreational disturbance. There are, however, plenty of wildlife manipulation actions such as wolf culls and maternity penning. In AWA's opinion these actions cannot possibly be justified unless accompanied by strong measures to address the critical habitat declines that are driving predation.

There are also large escape hatches: the Agreement can be terminated by B.C. or Canada on 90 days-notice, and "this Agreement does not and is not intended to create legally-binding obligations between Canada and British Columbia." Agreed-upon measures are subject to "respective priorities and budgetary constraints." These convenient escape hatches for governments darken the clouds further over the future of caribou.

AWA believes this agreement is too weak. It very likely will not enable the timely, comprehensive transition to sustainable forest management needed to achieve regional economies compatible with caribou survival and recovery.

Four Nation Partnership Agreement

The Partnership Agreement with Canada, B.C., Saulteau First Nations and West Moberly First Nations is much more concrete and powerful for dealing with cumulative land use impacts to caribou ranges. It covers three local populations in the so-called 'Central Group' of southern mountain caribou, including the Pine, Quintette and

Narraway (see map). These ranges are important to other caribou populations: they are adjacent to Northern Group and Southern Group populations and the Narraway has a part of its range in Alberta. Southern Group ranges in B.C. in turn are connected to Alberta's Redrock-Creek, A La Pêche, and Jasper ranges.

One of the General Terms rightly [states a point AWA has made over and over: "Time is of the essence." It is refreshing that the Partnership Agreement's other terms seem to concur. There is a solid Shared Recovery Objective: "The purpose of this Partnership Agreement is to set out and confirm the actions that the Parties have agreed to take in order to achieve their shared objective of immediately stabilizing and expeditiously growing the population of the Central Group to levels that are self-sustaining and support traditional aboriginal harvesting activities, consistent with existing Aboriginal and Treaty rights."

The Partnership Agreement uses zoning for different land use goals and includes up-front land-use actions to start to deliver on its stated goals. One objective is to establish new conservation measures and protected areas in some zones to support the Shared Recovery Objective, using best available scientific and traditional knowledge on caribou and caribou recovery. These zones include a deferral on new resource development applications to buy time for planning and for conservation areas. This deferral, lacking in the bilateral agreement, is an important element to encourage timely follow-through on other intended actions. Another positive element is that conservation measures in any zone "will not be offset by an increase in activities that are detrimental to caribou in other areas" covered by the Partnership Agreement.

Other zones are for 'sustainable resource activities' but in those areas there will be greater emphasis on habitat maintenance and recovery. B.C. in its decisions will "take into consideration that any adverse effects on caribou or caribou habitat may be incapable of being fully mitigated ... [will] effectively avoid, minimize, restore, or offset to the greatest extent possible the potential impacts

with a view to achieving a net benefit for caribou and caribou habitat [and....] with respect to potential impacts on caribou, provide for deep consultation with Saulteau and West Moberly, and consultation with any other directly affected First Nation, as appropriate." There are real safeguards for caribou habitat in this arrangement.

As well, and very importantly, the Partnership Agreement would be legally binding. It is intended to last for 30 years. It creates a collaborative process that is difficult to extinguish for at least five years and includes layers of dispute resolution mechanisms to stay on course. Canada and B.C. also agree "to seek adequate funding" to implement the Agreement.

A Technical Working group will be set up with timelines to develop Caribou Recovery Related Land Use Objectives for the Parties. In describing the terms of reference, there are some really important statements related to local industry and caribou recovery that Alberta plans should also reflect: "... the Parties recognize that: a. The forest industry and the local and regional economies are affected by factors and trends unrelated to caribou recovery; and b. Caribou recovery and restoration measures can stimulate innovation, have positive economic effects, and be compatible with regional economic development."

Predator management (wolf cull) and maternity penning are included in the Partnership Agreement to support caribou recovery while habitat improves. At least these measures to prop up caribou survival are part of a comprehensive approach to address habitat, so that there is a foreseeable end to drastic wildlife manipulations.

The public engagement on the draft Partnership Agreement has been turbulent. Misinformation on exaggerated potential impacts of the Agreement has polarized discussions in B.C. communities. As *Alaska Highway News* reported April 17, the chiefs of Saulteau and West Moberly spoke up about the divisiveness: "We also appreciate hearing Premier Horgan say that the provincial government denounces the racist comments and conspiracy theories that have been cir-

culating. ... Reductions to annual allowable cuts to forestry companies will amount to 300,000 cubic metres ...those reductions are limited and manageable between the companies operating in the area, the chiefs said. "We can't control what Canfor or West Fraser do with their mills. But if they drop a shift or close the doors, it won't be because of the caribou," [West Moberly First Nations Chief] Willson said. "It won't be because of these agreements. The grandstanding has to stop. It's not factual and it's not productive. The people of the Peace deserve better."

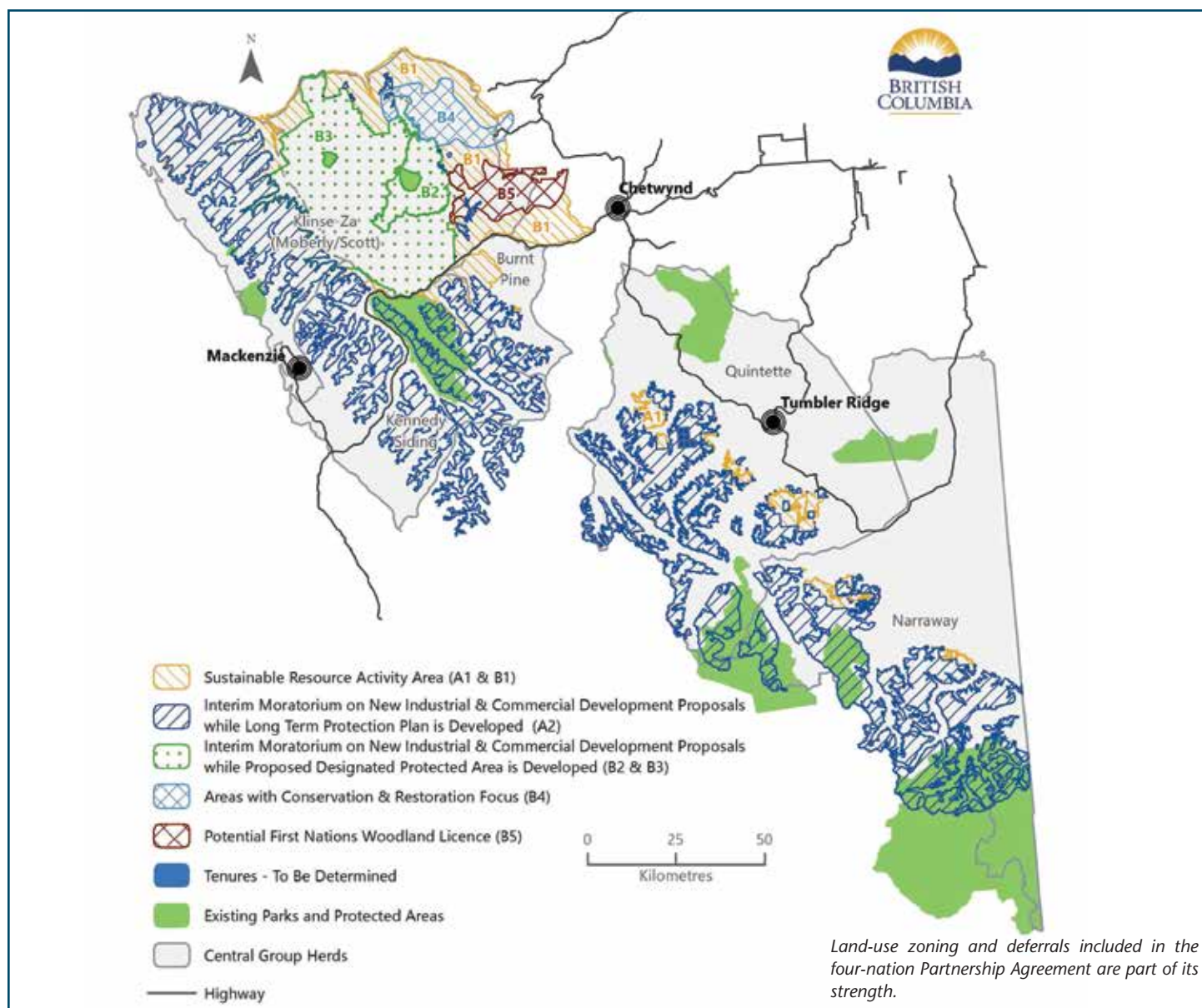
On April 26, 2019, ECCC's parliamentary secretary MP Sean Fraser stated that, while Ottawa and B.C. are working to address community concerns about caribou protection measures, "It's clear to all parties involved

that, if we don't act now, we could lose the caribou forever ... In particular, the Saulteau and West Moberly First Nations have shown critical leadership in working with B.C. and Canada on solutions to protect the southern mountain caribou. I am profoundly disappointed that some individuals are trying to spread misinformation and stoke division and discrimination in an effort to block action to protect caribou in the region."

On May 16, ECCC Minister McKenna wrote to B.C. and the two First Nations with further support for the agreements. According to the *Globe and Mail* coverage, McKenna wrote: "While we support the province's decision to extend the period for public feedback, we need to move forward with these agreements in a timely way," she said in the letter.

"Although land management is a provincial responsibility, the federal government has a legal obligation to protect species at risk ... an [emergency] order is a blunt tool that risks making it much more challenging to effectively support local economies and collaborative caribou recovery efforts," she added.

Public consultation on the two agreements ended on May 31. Recognizing the cross-boundary relevance of these agreements, the B.C. consultation engagement portal provides for Alberta citizens and groups to participate. AWA will be supporting the Partnership Agreement and calling for a stronger bilateral Conservation Agreement to set an example for Alberta for more responsible land-use planning towards a society and economy compatible with caribou. ▲



Charity Intelligence Canada gives AWA Four Stars and an “A”

I would be surprised if you told me Alberta Wilderness Association is the only non-profit charity you support, the only non-profit that asks you for financial support. We've always been proud of the work we do with the donations we receive from the individuals who support our conservation ambitions. We've always thought that we've delivered

“value for money” when it comes to the fit between our donations and our actions.

We're very pleased to tell you that Charity Intelligence Canada agrees. The mission of Charity Intelligence is: “To provide Canadian donors with information that helps them

make informed and intelligent giving decisions to have the greatest impact.”

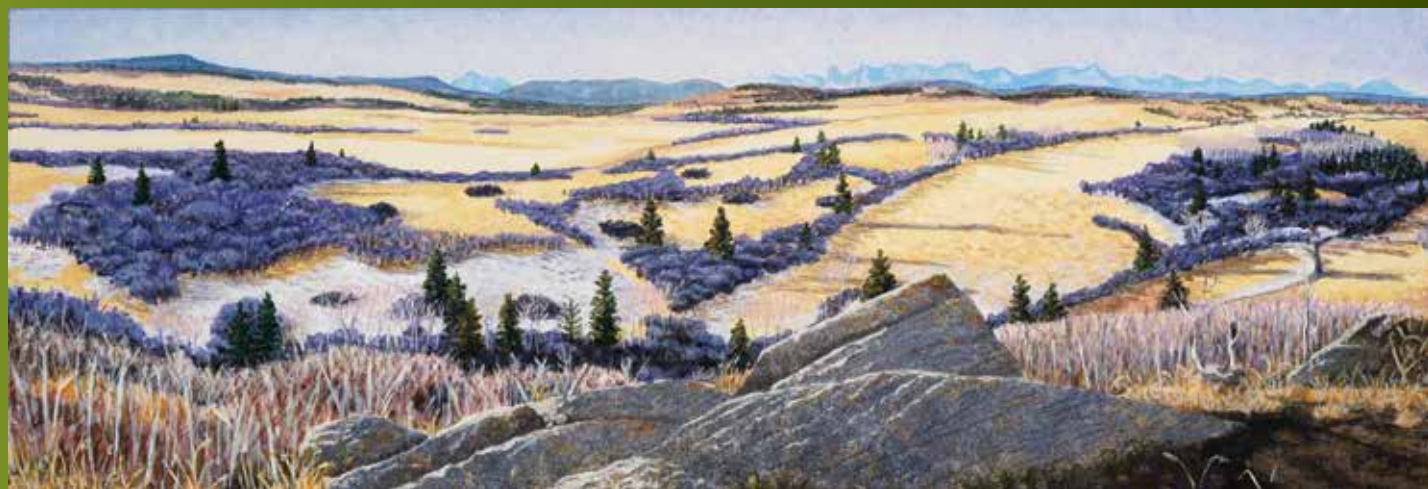
In March 2019 Charity Intelligence profiled AWA. It gave AWA its highest, four-star rating and an A grade. Our record of devoting 81 cents of every donated dollar to our cause is above the 75 cents average in our sector. It's a percentage Charity Intelligence thinks is reasonable. At AWA, the percentage of donations devoted to our cause has increased in each of the last three years.

AWA also was recognized for transparency. Our annual reports and financial statements for the past five years are easily accessible on our website. I thought you would want to know that the investment you make in AWA, our staff, volunteers, and our conservation/outreach programs is a solid and sound one. Charity Intelligence, a group recognized for its forthright and important work in helping donors give wisely, agrees. 🌱

- Christyann Olson, Executive Director



Featured Artist Kathryn Bessie



Bateman Ranch Acrylic on canvas, 12 x 36 inches. PHOTO: © K. BESSIE

28th Climb for Wilderness



1. This year centenarian Richard Guy climbed 15 flights of stairs in the Bow Tower.



2. The Hadden family...getting some last minute advice from KC – AWA's mascot.

On April 27th, your wilderness association held its annual Climb for Wilderness for the 28th time! This year we had 831 people participate in the Climb at the Bow Tower. More than 700 people registered as climbers for the 2019 Climb. Their efforts were supported by 125 volunteers, security staff, and onlookers.

Each year we seem to be increasing the number of teams that register for the Climb. This year saw a record-breaking 65 teams register to climb in the name of wilderness conservation. The top fundraising teams were the Math Mountains and Memories of Louise team and the Overend-Dibski team. Together they raised nearly \$13,000.

More than 1,400 donors propelled our fundraising total to nearly \$90,000. AWA will invest those gifts well in its efforts to protect the landscapes that species such as the greater sage-grouse – this year's symbol for the Climb – depend on.



5. AWA's bear, Little Smoky (aka Nathan Schmidt) warmed hearts and gave "bear" hugs all through the climb.



4. Faithful climbers and supporters these folks like so many others make the Climb for Wilderness event a tradition!

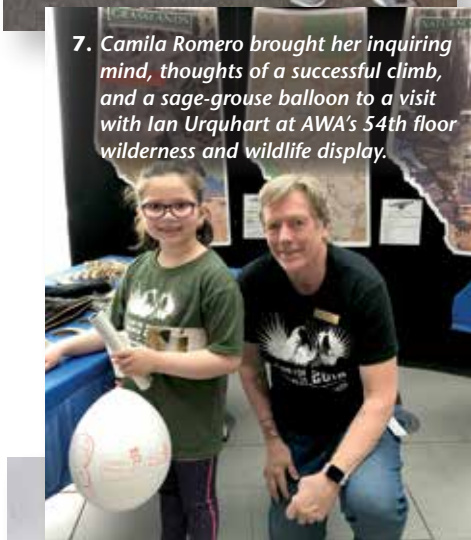


3. Some of the more than 700 people who climbed the Bow Tower in April.

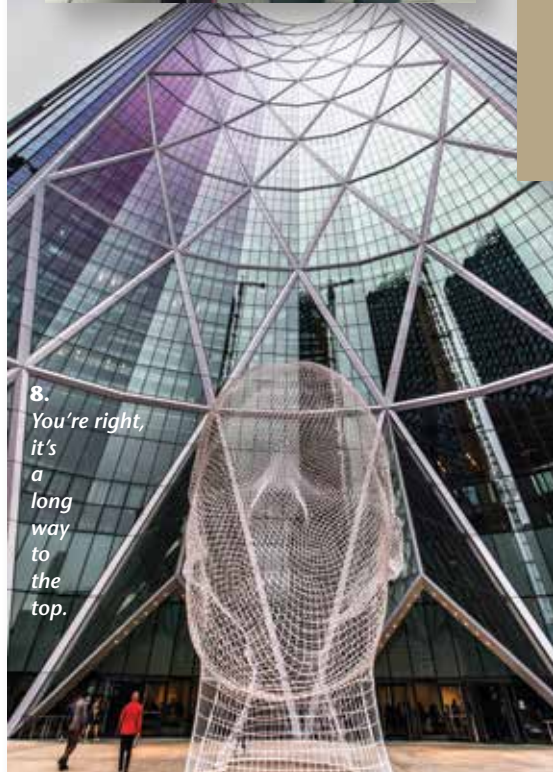
PHOTOS 1 & 7: © C. OLSON; PHOTOS 2, 4, 6, 11 & 12: © K. MIHALCHEON; PHOTOS 3, 5, 8 & 10: © D. MORASCH



6. It's a good thing KC isn't a fan of bananas... climber Dave Wodelet, a top C4W fundraiser wears his VIP shirt and enjoys a well earned reward at the end of the climb.



7. Camila Romero brought her inquiring mind, thoughts of a successful climb, and a sage-grouse balloon to a visit with Ian Urquhart at AWA's 54th floor wilderness and wildlife display.

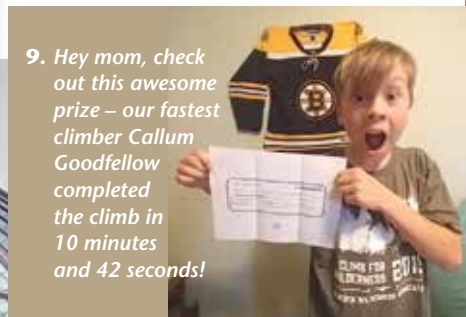


8. You're right, it's a long way to the top.

To me, the most heart-warming feature of the Climb is seeing the diversity among those who come out to support AWA's efforts. It certainly is one of Calgary's best "all ages" event; and, in addition, the Climb also showcases the growing ethnic and socio-economic diversity of those who treasure Alberta's natural legacies. The three-year old I met at our wildlife display on the 54th floor last year was there again this year to see if the owl talons were still as sharp as they were in 2018. The young Indo-Canadian girl who scrutinized each part of the wildlife display so closely last year was there again to make sure we hadn't left anything out. The families... and then there's Dr. Richard Guy who, at 102 years young, climbed 15 flights of stairs and raised more than \$5,000 for AWA.

Next year we hope you'll help us make the 29th Climb for Wilderness even more successful. Attend the Climb as a climber or a volunteer and see if, like me, you come away from the Climb with an encouraging sense of optimism and enthusiasm.

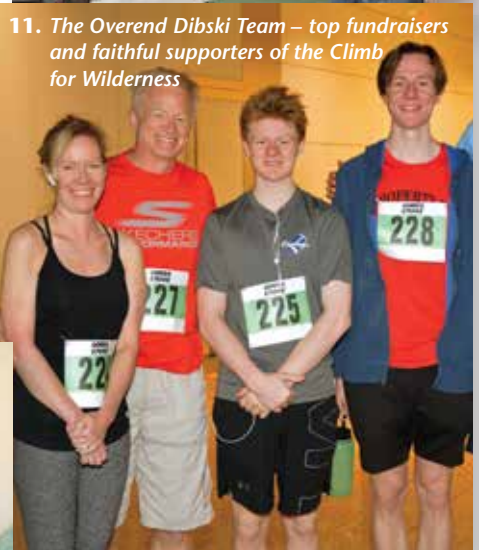
- Ian Urquhart



9. Hey mom, check out this awesome prize - our fastest climber Callum Goodfellow completed the climb in 10 minutes and 42 seconds!



12. AWA's Carolyn Campbell spreading the good news about the Climb for Wilderness in a Radio-Canada interview.



11. The Overend Dibski Team - top fundraisers and faithful supporters of the Climb for Wilderness



10. Heather McEachern, who led the Climb's social media campaign, helps young supporters learn about Sage grouse and their habitat while creating a take home reminder of their conversations.

Updates

AWA Summer Hikes

If you are looking for a way to explore some new territory, enjoy the outdoors with like-minded people, or learn more about Alberta's wilderness, then AWA's hiking program is definitely for you! Every spring and summer, AWA organizes a series of hikes throughout the central and southern parts of our province. Our goal? To offer members and potential members an opportunity to get their boots on the ground and to promote active, healthy lifestyle choices. AWA's hikes program is also an opportunity to observe the diversity and uniqueness of the landscapes that surround and support most of our communities. Our hikes program is made possible through the help of many dedicated volunteers who guide and offer their expertise and knowledge about the wild spaces we explore. AWA hopes that through our hikes program we can educate Albertans about the importance of our wilderness, and identify/understand the conservation challenges we face. AWA's 2019 hike season is already in progress, and was kick-started with an exploration with naturalist Gus Yaki of Calgary's natural gem – Nose Hill Park. We hope to keep the great momentum going all spring and summer long: June will be full of beautiful wildflowers as AWA volunteers Vivian Pharis and Nick Pink guide us through the Porcupine Hills and the Whaleback respectively. AWA will also be making a stewardship trip to Plateau Mountain in late June. In July Heinz Unger will be taking us on an exploration of Ram ridge in Bighorn country. There is no need to worry if your summer is already booked up, because AWA plans to be hiking well into September. Keep an eye on our events page and social media throughout the summer for more details... you won't want to miss out!

- Nissa Petterson

Bighorn Déjà Vu

The new provincial government will not implement the Bighorn Country concept proposed by the Notley government. In early May, Environment and Parks Minister Jason Nixon confirmed that the United Conservative Party government will instead return to the North Saskatchewan Regional Planning process.

What does this mean? While it's impossible to know exactly, we can compare the Bighorn Country proposal and the progress made on the North Saskatchewan Regional Plan to glean some important inferences.

As some readers may be aware, the North Saskatchewan Regional Plan is part of the Land-use Framework. That Framework launched a process in 2008 to split up the province by major watersheds in order to attempt to manage cumulative effects within each region. Advisory councils composed of local citizens and groups provide advice, which together with public feedback, helps to guide the future of the region.

In 2014, the North Saskatchewan Regional Advisory Council produced a report with a number of recommendations for the region, including consensus agreement on the conservation of the Bighorn. It's important to note the wide range of interests a previous Progressive Conservative government included on this advisory council. It contained local ranchers, farmers, officials from the forestry and oil & gas industries, and outfitters. The Progressive Conservatives also included the Reeves of Clearwater and Beaver County plus an Edmonton city councilor on the Council.

This group recommended the Progressive Conservative government protect much of the region west of the Forestry Trunk Road as a Wildland Provincial Park. This 2014 recommendation aligned with the NDP's Bighorn Country proposal. However, the Bighorn Country proposal went further and proposed the establishment of an extensive Public Land Use Zone (PLUZ) east of the Forestry Trunk Road in order to help man-

age the impacts of multiple recreational uses on the landscape. It would have designated trails for off-highway vehicles. The PLUZ would not have regulated forestry and oil & gas at all (much misinformation suggesting otherwise plagued the debate surrounding the Bighorn Country proposal).

One of the reasons touted by the new government for changing tack was that a socio-economic analysis had not been conducted on the Bighorn Country proposal. This concern doesn't pay enough attention to the fact a Wildland Provincial Park in the Bighorn (again, the Wildland Provincial Park would only have been created west of Highway 940) would not impact industry. There is little to no industrial activity within the proposed wildland park thanks to the 1984 Eastern Slopes Policy and protective notations. There are, in fact, multiple potential economic benefits to be gained from protecting the Bighorn, including increased economic diversification and protecting the source of 90 percent of Edmonton's drinking water.

On public lands east of the Forestry Trunk Road, a new Public Land Use Zone wouldn't impede industry at all. In fact, it would provide more certainty for industry. Certainly there would be new regulations for recreational users. But these regulations also should be seen as providing certainty and promoting responsible land use.

Regardless, AWA plans to participate in any new processes or public consultations that unfold. In the meantime, as our newly elected officials begin their term, we hope you will take this as an opportunity to introduce yourself to your MLA and the Premier (premier@gov.ab.ca). Please let them know that you support protection of the Bighorn. Write a letter, schedule a meeting or just drop into your MLA's constituency office.

We thank you for following the Bighorn and AWA's 50-year quest to have the Bighorn Wildland protected with legislation. To be continued...

- Joanna Skrajny

Caribou: New Wildland Park, Missing Conservation Agreement, New Provincial Government

Before going down to defeat in the April provincial election, the Notley government offered some good news for a couple of Alberta's woodland caribou populations. In mid-March the government decided to establish the Kitaskino Nuwenêné Wildland Provincial Park. Better protection of the Ronald Lake wood bison population was a central goal of this protected area, located on two parcels of land south of Wood Buffalo National Park. The Red Earth and Richardson woodland caribou populations also will receive some additional protected territory through this new park.

AWA congratulated the First Nations, Alberta government, and industry for collaborating to create Kitaskino Nuwenêné Wildland Provincial Park. We also urged implementing a 'Phase 2' process to add additional lands to the Park that would further connect and protect important wood bison, woodland caribou, and migratory bird habitat.

By now we had hoped to be able to describe to readers an Alberta-Canada draft conservation agreement for woodland caribou. Since 2017, the federal government has talked up the conservation agreements it was negotiating with provinces under section 11 of the *Species at Risk Act* (SARA). This was apparently their fall-back plan. It was needed because Alberta and other provinces failed to develop habitat-focused range plans under the federal government's 2012 woodland caribou recovery strategy; the recovery strategy itself was five years overdue from SARA 'mandatory' timelines.

In its December 2018 progress report on steps taken to protect critical habitat for boreal woodland caribou, Environment and Climate Change Canada stated that section 11 conservation agreements "aim to codify incremental concrete measures to support the conservation of the species and the protection of its critical habitat". Even with that modest goal, the previous government failed to put forward an Alberta conservation

agreement for public consultation.

Provinces have the responsibility to manage wildlife and natural resources, and the federal government has the responsibility to protect species-at-risk habitat if provinces fail to do so. That is why in January 2019, Ecojustice lawyers, acting on behalf of the Athabasca Chipewyan First Nation, Mikisew Cree First Nation, Alberta Wilderness Association, and David Suzuki Foundation, filed a lawsuit against the federal minister of environment and climate change. In the absence of adequate measures from the province, the groups are arguing that the federal minister must step in and recommend federal protections for the five herds under the *Species at Risk Act*.

From Alberta's newly elected government, we have a mixture of policy indications. The United Conservative Party included these caribou-relevant replies in the Alberta Environmental Network's election period survey of major Alberta parties, released April 9: "We will restore Alberta's reputation as a world leader in developing resources responsibly" and "A United Conservative government will address the continuing decline of wildlife populations, namely the [woodland] caribou. We recognize the federally-mandated need to propose a caribou range protection plan, but this must be done in close collaboration with all who are affected, and must be based on science and common-sense conservation policies."

Most of the intact older forests and peatlands habitat that Alberta caribou depend upon have no limits on intensive cumulative development impacts. These forests and peatlands continue to be fragmented and degraded by a myriad of overlapping industrial and recreation pressures. This is not responsible development. Alberta caribou continue to be in real peril; other valued wildlife species such as native fish, furbearers and migratory birds that rely on intact older forests will also greatly benefit if Alberta caribou can recover to be self-sustaining. AWA will continue to advocate for the responsible forest management solutions compatible with caribou recovery that are within reach.

- Carolyn Campbell

United Conservative Party Environmental Priorities

The UCP replied to the Alberta Environmental Network's election period survey of major Alberta parties. The results were released in early April 2019. Here is the full text of two of the party's responses.

"1. What are your party's top 5 environmental priorities?"

A United Conservative government would propose a Common-Sense Conservation Plan that recognizes that recreation, economic use, and conservation can and should support each other.

The United Conservative Party's top five environmental priorities are:

1. We will restore Alberta's reputation as a world leader in developing resources responsibly and as a leader in predictable and efficient regulation by completing a review of Alberta Energy Regulator (AER) and establish clear performance benchmarks;
2. Review Alberta Environment and Parks legislation to modernize it for the 21 century;
3. Improve data collection on environmental outcomes relating to parks and public lands to ensure these lands meet the needs of Albertans in the 21st century in an environmentally sustainable way;
4. Ensure that in the future, all major environmental protection proposals will be subject to mandatory social-economic impact assessments to allow the government to strike the appropriate balance between economic growth and environmental protection; and
5. Ensure that more department staff work in the outdoors and with local stakeholders, including facilitating visitor enjoyment of the back country and conducting environmental monitoring.

2. Alberta is home to a number of species at risk. What are your party's plans to halt the continuing decline of wildlife populations? Will you commit to implementing recovery plans that include

substantial habitat protection for Alberta's species at risk, such as threatened native fish species, woodland caribou or whoop-ing cranes?

A United Conservative government will address the continuing decline of wildlife populations, namely the wildland caribou. We recognize the federally-mandated need to propose a caribou range protection plan, but this must be done in close collaboration with all who are affected, and must be based on science and common-sense conservation policies.”

A United Conservative government will reverse four years of reductions in the fight against the Mountain Pine Beetle by increasing funding by \$5 million to \$30 million annually. We will immediately form a Caribou Range Task Force of local municipal governments, the Northwest Species at Risk Committee, forestry and other industries, Indigenous representatives, and habitat scientists to review the Alberta Caribou Draft Plan.”

- Carolyn Campbell

Reflection on Alberta Forest Week

This May, the Government of Alberta celebrated another Alberta Forest Week, a week dedicated to recognizing the importance of Alberta's forests and their contributions to Albertans. Alberta's forested lands make up over 60 percent of our province, stretching from the southernmost tip of Alberta's Eastern Slopes northward into the vast expanse of boreal forest.

Devin Dreesen, the newly-minted Minister of Agriculture and Forestry celebrated the week by visiting schools, educating students on the importance of sustainable forest management, and handing out lodgepole saplings as inspiration. As is often the case with commemorative days, this was primarily an opportunity to applaud contributions from the Alberta's forestry sector and advertise Alberta as first in class for sustainable management. The end goal? Not a version of sustainable management privileging biodiversity, as one might

assume, but to ensure Alberta receives its “proper national share of trade-allocated export quotas” and improves “export opportunities, especially in Asia.”

If you only skimmed the hashtags on Twitter during Alberta Forest week, you would be under the impression that the future is bright for timber production in and exports from Alberta. However, if you've spent any amount of time in Alberta's forested public lands, you'll know that not all is well in the woods.

Alberta's forest industry has seen a 600 percent increase in forest harvest since 1961. But we haven't seen the same increases in efforts to replenish stands. Without attention to that side of the forestry ledger we've seen the rapid decline of viable forest habitat, severely reduced water quality and fish habitat, and a substantial decrease in carbon storage.

The same week in May, *The Narwhal* published an article confirming that, contrary to popular belief, Canada's forests are now a net source of carbon emissions. Trees are dying at two to four times the rate prior to 2000. Since 2001, the impacts of drought, fire, and pests means that Canada's forests are emitting substantially more carbon into

the atmosphere than they are sequestering.

For Alberta, global climate change likely means mega-fires, pest outbreaks, and premature tree deaths are only going to become more prevalent. This demands rethinking what constitutes the acceptable standard of “sustainable forest management.”

In addition to focusing on potential markets, Alberta's Forest Week should also be an opportunity to take a more holistic view of our forests and the benefits they provide us. How is industry considering impacts across the landscape and watershed in forest harvest? Are clearcuts really a “first in class” sustainable method of forest harvest? And importantly, how can we ensure that Alberta's forests become carbon sinks?

Before next year's Forest Week, I would like you to consider these questions and even send a letter to Minister Dreesen (af.minister.m@gov.ab.ca) with your thoughts on what a sustainable forest looks like. The viability of our future forests, whether for habitat, source water, or economic well-being, depends on us having the self-awareness necessary to acknowledge that forest health is declining and the foresight to do something about it.



Habitat fragmentation, sediment-loading and carbon storage loss are among the side-effects of Alberta's current "sustainable" forest management regime. PHOTO © N. DOUGLAS

Peace Country

In late May, Carolyn Campbell and I were fortunate enough to travel to the northwestern part of Alberta to connect with some members, colleagues, and communities for updates on ongoing land-use concerns and to explore new areas. The first part of our journey took us near the proposed location of the Amisk Dam, west of Fairview. Aside from getting an opportunity to take in the majesty of the Peace River and its valley in person, we visited a local family who toured us around their farm. They shared their deep love, history, and knowledge of the land and their concerns of why the dam could potentially destroy some of the fragile sandy topography of the area and ultimately change the ecology of the landscape. We learned that recent low Peace River water levels and flows have facilitated the crossing of larger wildlife species such as elk and moose. The local wilderness still seems to be teeming with life; the family recounted sightings of large flocks of sandhill cranes, black bears, and numerous fishers that have apparently have been of great assistance keeping the mice at bay. They even observed a grizzly mother and her cubs further upstream in the Valley this year.

We traveled next to the town of Peace River to attend the Mighty Peace Watershed Alliance's AGM. This opportunity allowed us to learn more about the watershed council's projects that were launched or completed within the last year, and to learn more about what the group plans to prioritize and focus on for the foreseeable future within the watershed.

Our travels then took us further north to Fort Vermilion, which was hosting many evacuees from High Level and the Dene Tha' First Nation because of the wildfires. As our days progressed, so did the evacuations of more communities. Locals from Fort Vermilion were commenting on how the population had essentially tripled in a matter of days, with a scarcity of available lodging. In some cases, low fresh food supplies created more challenges. It

was saddening to witness such dire straits. However, there was no lack of helping hands; many locals banded together to help displaced families by volunteering their time to cook food or help set up cots at the local arena.

Our visit to Fort Vermilion focused around connecting with the Hungry Bend Sandhills Society. This local grassroots organization has long advocated for increased protection of the sensitive wilderness within the exceptionally diverse local sandhill formations along the north bank of the Peace River. We were toured around farms and the Machesis Lake Provincial Recreation Area to see the current state

of the landscape and the beautiful natural features that makes this part of the Peace River region so notable.

Our trip was a tremendous opportunity to see firsthand the current land-use practices and demands, in addition to gaining an improved sense of how to best support communities in sustaining ecologically valuable areas. Our experiences and interactions with locals will also help shape our approach to advocating and educating the public on how conserving Alberta's northern wilderness has inherent values for all Albertans.

- Nissa Petterson

Featured Artist Kathryn Bessie



Birch Tree Acrylic on canvas, 24 x 48 inches. PHOTO: © K. BESSIE

Reader's Corner

Edward Struzik, *Firestorm: How Wildfire Will Shape Our Future*

(Washington: Earth Island Press, 2017),
257 pp.

Reviewed by Ian Urquhart

The timing was impeccable, but sadly so. Edward Struzik's book *Firestorm: How Wildfire Will Shape Our Future* hit bookshelves while the memories of the tragic Horse River Fire were all too fresh. That fire, nicknamed "The Beast," burned approximately 1.5 million acres and devastated Fort McMurray in the spring of 2016. The Beast destroyed thousands of homes, helping to make the Horse Lake Fire the costliest natural disaster in Canadian history. The fire garnered international attention and sympathy. Queen Elizabeth offered her condolences; Pope Francis prayed for the tens of thousands of people harmed and otherwise affected by the fire.

In its first chapter *Firestorm* offers a gripping account of what happened in Fort McMurray in 2016. It's a story of confusion and chaos, of heroism and hubris. Its account underlines just how miraculous it was that nobody died.

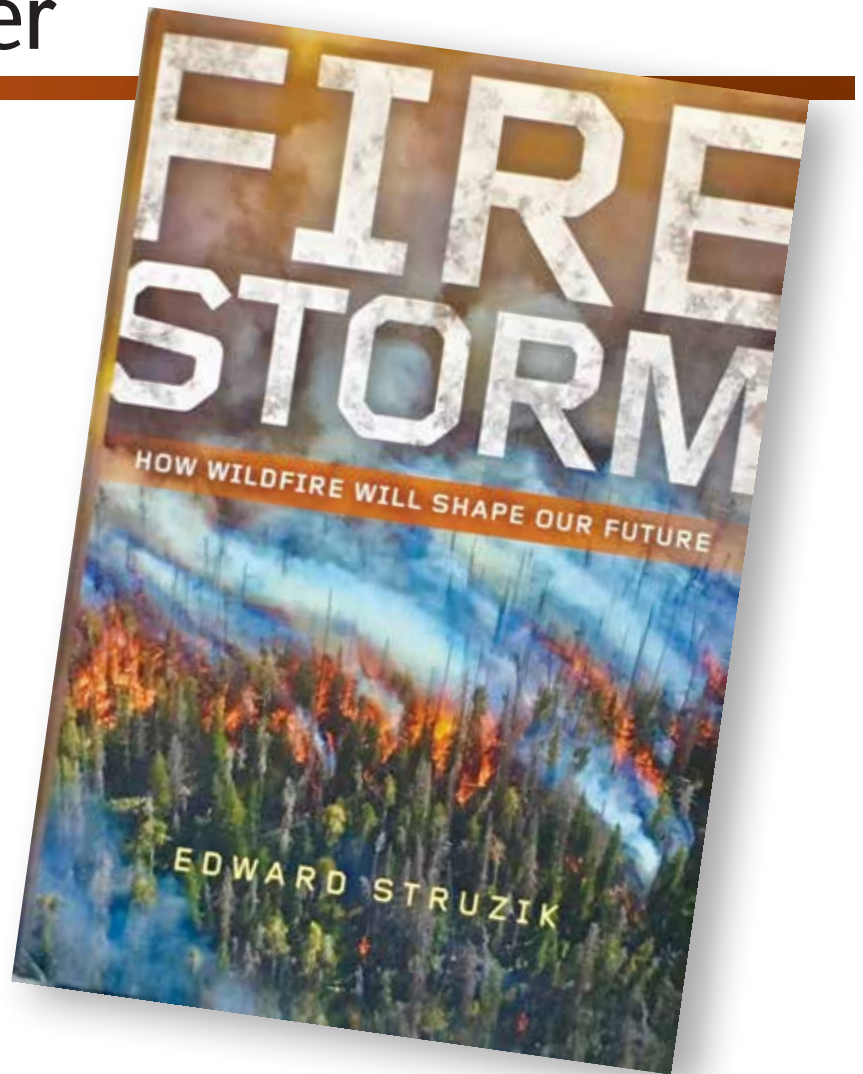
Some may want to buy *Firestorm* just to read Struzik's dramatic account of the Horse Lake Fire. But this is a book about much more than one unimaginable fire. *Firestorm* is about what the Horse Lake Fire underlined so emphatically – we very likely have crossed the threshold of a new wildfire paradigm, that of the megafire. Megafire is a relatively new label used to describe fires greater than 100,000 acres or 40,468 hectares. As I write this review, four megafires are consuming 634,000 hectares of the Alberta's northern forests. Megafires aren't new. The 1950 Chinchaga fire made the front pages of the *New York Times* and its smoke turned day into night. On August 27, 1981 – a day dubbed "Black Thursday" – approximately 376,000 hectares of Alberta's boreal forest exploded into flames in less than seven hours. But what is different now is that, in Struzik's words,

"megafires are occurring more often, displacing more and more people, and reshaping forest and tundra ecosystems in ways that scientists don't fully understand."

Throughout *Firestorm* Struzik treats his readers to the exceptional analysis and exposition distinguishing him as one of our best science/environment/nature writers. If the timing of the book was impeccable, so was the research that went into it. Those with an appetite for solid historical research will appreciate what Struzik delivers. In these pages you will learn about the Big Burn of 1910 and how that mammoth wildfire catalyzed American policy makers to embrace fire suppression, the need to fight virtually all fires in the woods. Canada followed the American lead and the 20th Century was one where the fire suppression ethic dominated. But, as Struzik's historical research illustrates, more than fifty years ago some

argued that prescribed burning should be a forestry management tool since fire was crucial to the ability of species like sequoias, jack pine, and lodgepole pine to regenerate. In this book you'll meet the variety of factors that have made it so difficult to supplant or supplement one ethic with another.

If your tastes run more in the direction of craving expert opinion, Struzik delivers here as well. The insights of dozens of fire science, forest management, hydrology and other experts inform Struzik's writing. Those insights are enriched by the author's own on-the-ground experiences in the company of researchers. Alberta readers may be particularly interested here in Struzik's description of the research that Uldis Silins and Monica Emelko are doing at the site of the Lost Creek Fire. Lost Creek forced the evacuation of several thousand people from the Crowsnest Pass in 2003. In part their research focuses



on the vital issue of how wildfire affects the hydrology, water quality, and aquatic ecology of headwater streams in the front range of the Rockies.

The research of Silins, Emelko, and others studying with them at Lost Creek highlights a more general point of Struzik's argument: wildfire impacts are not uniformly bad. Certainly wildfire delivers important consequences that raise serious causes for concern. Water quality may be most important here. Since most municipalities get their drinking water from forested headwaters, fires like that at Lost Creek may require improvements to municipal water treatment systems. But, the post-fire injection of nitrogen and phosphorous into nutrient-poor mountain streams increases the presence of algae, insects, and macroinvertebrates. This in turn is a benefit for trout and other fish. For me, the complexity of wildfire's impacts was particularly evident in the book's penultimate chapter. There you read about how wildfires will

threaten some populations of flora and fauna while benefiting others. Wildfires and prescribed burning may contribute positively to biodiversity if we can discover ways to better understand and manage fire on the land.

Better understanding and management – those are the essential goals Struzik sets if we are to adapt to the growing importance of wildfire in our future. Climate change, as fire scientists such as Mike Flannigan conclude, guarantees the conditions for megafires in western Canada will remain, if not intensify. The northern forest climate change scenarios developed by Flannigan and many others “point to wildfires continuing to burn bigger, hotter, and faster in ways that will result in dramatic landscape changes and ecological and social challenges.” But, our ability to adjust and adapt to the demands of this new wildfire paradigm is frustrated by our allegiance to the management emphases and strategies of the established paradigm. We invest a pittance in fire science, forest man-

agement, and conservation, a situation created in part by the sharply escalating costs governments pay to combat megafires.

What we should do is becoming clearer and clearer; we need the political will to act. The recent past isn't encouraging from the political will perspective. Wildfire experts developed a wildlands fire strategy for the Canadian Council of Forest Ministers in 2005. It recommended “more fire, more science, more education, and better funded FireSmart-type programs...” Government ministers balked at accepting this call for policy change. Little has improved on the management side of the ledger since then.

Edward Struzik's *Firestorm: How Wildfire Will Shape Our Future* is a magnificent book. It's a must-read for anyone wanting to learn about our past relationship with wildfire, for anyone looking for suggestions about what needs to be done to retain some influence over how wildfire will figure in our future.

In Memoriam

Dr. Diana Horton March 6, 1949 – June 24, 2018



Dr. Diana Horton passed away suddenly at her home in Vancouver, Washington last June. After completing her PhD in Botany at the University of Alberta in 1981 Diana joined the Department of Botany at the University of Iowa. She taught there for over 25 years and retired as a Professor Emeritus.

I didn't know Diana well but was fortunate to meet her in Fort McMurray in 2006. Then I was part of the AWA team (with Shirley Bray and Joyce Hildebrand) that was working on the McClelland Lake wetland complex issue. In looking over the notes from our meeting it's obvious that Diana's knowledge about McClelland Lake was the focal point for much of our discussion.

Diana's obituary spoke of her expertise in the taxonomy and ecology of bryophytes (mosses) and “her unflinching belief in the importance of fighting for environmental causes.” In my own work on the politics of exploiting Alberta's tar sands I had benefited from both of these attributes. Diana's knowledge figured importantly in the 2002 Alberta Energy and Utilities Board hearings into the application by TrueNorth Energy to construct and operate what is now effectively the Suncor Fort

Hills oil sands mine. Her testimony during those hearings reflected her commitment to fight for environmental causes.

The testimony she gave then is as relevant now as it was 17 years ago. The wetland complex is “exceptional” and is “one of the largest and most spectacular patterned fens in the province, rivaling the natural beauty of sites in the Canadian Rockies.” Removing part of the fen would compromise its ecological integrity and the aesthetic value of its unusual reticulated pattern. She urged the Board to reject the company's application or to prohibit mining throughout the McClelland Lake drainage. The Board rejected her arguments and Diana joined the list of the many ecological experts whose advice was cast aside in favour of unfettered exploitation.

Memorial gifts may be made to the University of Alberta, Department of Biology. To arrange a memorial gift in Diana's name please contact the University at giving@ualberta.ca or by telephone at 780-492-7400 or 1-888-799-9899. Please be sure to identify that your donation is in memory of Diana Horton to support the Department of Biology.

- Ian Urquhart

Featured Artist Kathryn Bessie



Reflections Acrylic on canvas, 24 x 36 inches.
PHOTO: © K. BESSIE



Sundre poppies
Acrylic on canvas,
12 x 24 inches.
PHOTO: © K. BESSIE



Louise Guy Poetry Corner

June offers you three poems. Elise Arsenault is a storyteller and songwriter living in Hamilton, Ontario. Having just finished university, she's floating around the weird, transient land of "what now?" Where she'll learn to

HEAD STRONG

Mike just killed a snake. He calls
for Dad, sinking the shovel
in the sand and pulling half the body
up by its tail.

"Look! It has eggs in it," hanging
bunched and glossy, fixed
and dripping. Thrown

into shallow lakewater, it
writhes under waves, loose in
a liquid mausoleum. "I feel
kind of bad," he says.

The same snake had watched me yesterday, its head
strong, hovering between slabs of shale
and limestone as I whipper-snipped tall
grasses and nicked myself in the ankle.
Its companion—half as long—had
stayed under the dock, treading.

Mike sends the dog after it now.
The dog mauls a birch branch jutting
from the fire pit. Coaxing persists
until I see my brother's feet
pivot in the sand, thud
up the porch steps, halt
when he is safe behind the storm
door.

The dog is unmoved—drooling on birchbark.
The snake is still—its chin on a muddy ledge.
"There was a bee," Mike says.

Its venom could kill him
in minutes.

make herself at home. You'll find two of her poems, "Head Strong" and "Pool Fly," below. T. Kallhovd is a man of mystery. His poem, "Chuckegg Creek," also appears below.

POOL FLY

Both feet in chlorinated droplets,
forehead bright as grass blades backlit
by sun, you stand still
on my knuckle.

I run my fingernail
beneath a wing stuck to itself.
I slide the other between
pinched fingers and you
let me.

Vibration. Soft and sharp. Movement
without takeoff. I lift you to my eyes
and (I swear) you face me,
leaning forward as

those back legs, quick and sure,
glide up and down—level your wings
in their veined translucence,
refract light.

Thank you. For the invitation to a long look

though all six legs
worked fine.

CHUCKEGG CREEK

Boreal burning,
The hubris of humankind,
One thousand kilometres away.

Smoke smothering,
The aroma of May lilacs,
Three feet away.



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