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COVER PHOTO

José Quiroz composed this remarkable photo in one of our Rocky Mountain National Parks. Surreal. Stunning. PHOTO: © J. QUIROZ

FEATURED ARTIST: ELISA SERENO-JANZ

Elisa Sereno-Janz is an artist and musician living in Calgary, Alberta. A professional violinist, fiddler and private music teacher for over thirty years, Elisa returned to school in 2010 to study for a BFA at the Alberta College of Art and Design and graduated with Distinction in 2014. A multimedia artist, she enjoys working with a variety of materials, including painting, fibre and new media. Much of her work involves the juxtaposition of traditional art forms with technology. Her new media project FiddleLights is a synthesis of her music and art making where she creates light based visualisations of the movement of the bow in fiddle tunes. In her Rivers of Alberta series, she uses satellite images as a starting point for abstraction in large format oil paintings on panel.

Elisa has always had a great appreciation for the land in all of its variety and from all points of view. She has walked along, canoed, and skated rivers. She has hiked and skied the high alpine passes and wandered desert canyons. The way that the stone and earth are shaped by water, wind and ice compels her to paint and share with others what she sees. When she paints a place, she feels that she knows that place more intimately.

Her first solo exhibition, Watermarks: The Rivers of Alberta, was just hosted by the Okotoks Art Gallery in Okotoks. The pieces featured in this issue of the Advocate are from that exhibition.

More of her work can be viewed on her website, elisaserenojanz.com.

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“It ain’t so, Madam Minister, is it?”: The Castle Parks

Baseball fans who appreciate the history of that game likely know about the Black Sox scandal – the allegations the Chicago White Sox threw the 1919 World Series. Legend has it that a young fan, outside the courthouse where the trial of the “Black” Sox players took place, went up to his disgraced hero, Shoeless Joe Jackson, and asked: “It ain’t so, Joe, is it?”

It’s a question I hope Minister Phillips will answer in light of quotes in the Pincher Creek Echo last October from Peter Swain, the Regional Director of Parks in Alberta’s South Region. His comments should raise a red flag for anyone concerned about what the government may think is compatible with its stated objective to “fully protect” the Castle area.

I think the Regional Director’s most troubling comment was this one: “This would be the only provincial park that actually has OHV use as a primary use.”

Why is the comment troubling? It’s troubling for both procedural and substantive reasons. The procedural concern questions the sincerity of the department’s public consultation process. The comment appears to have been made on October 7, 2015, less than two days after the government’s consultation window on the Castle Parks closed. If the Regional Director was prepared to say then that OHV use would be a primary use in the Castle provincial park what was the point of the government’s 30-day consultation process? That process invited Albertans, through a remarkably poorly designed survey, for their input on what activities should and should not be allowed in the new Provincial and Wildland Parks.

From the perspective of process, I also have to wonder what local conservationists in the Castle region think about the Regional Director’s statement. Did they imagine their many hours of collaboration would lead the government to go where no previous government had gone before – to endorsing OHV use as a primary use in a Provincial Park? I can’t believe they expected to ever see such a statement from a senior government official or that their commitment to consultation would deliver such a declaration.

Substantively, the comment is troubling for the lack of understanding it suggests about the relationship between recreation activities and the first two purposes of parks outlined in the Provincial Parks Act. Those purposes are: “the preservation of Alberta’s natural heritage” and “the conservation and management of flora and fauna.”

The Pincher Creek Echo article says the Regional Director joked that the Parks Act says “thou shalt doeth of recreation.” In the Castle Parks the government is breaking new, troubling ground when it comes to what this commandment means. People will be allowed to do all of the activities they’ve historically been allowed to “doeth” on these public lands.

Such a view – that all recreation activities promote the preservation and conservation purposes of parks as outlined in the Parks Act – is dead wrong. One hopes it doesn’t have much support among Alberta’s public servants because it’s so blinkered, so mistaken. It’s a view where only industrial activity threatens ecological integrity. AWA’s longstanding work and research in the Bighorn have shown year after year the damage irresponsible OHV use does to the land. To suggest that full protection of the Castle is compatible with a recreation activity such as OHV use turns a blind eye to that record.

Christyann Olson, AWA’s Executive Director, had the opportunity to meet with Minister Phillips in March. Christyann’s sense was one of cautious optimism that the Minister has not determined there will be OHV recreation in the Castle Parks and that she is more than aware of the precedents at risk, the risk to critical wildlife and prime protection zones, and the requirements under the westslope cutthroat trout critical habitat order.

I hope that’s the case and that the Minister will tell Albertans soon that the statements from last fall don’t reflect her government’s current policy preferences for the Castle. Please Madam Minister, tell Albertans it ain’t so. Tell them the Regional Director was mistaken in saying that OHV use would be a primary use in the Castle Provincial Park. Tell them there’s one aspect of the history of Alberta’s provincial parks you treasure and want to leave intact for future generations – the belief our provincial parks shouldn’t be places for hunters and OHV riders to enjoy themselves. If you’d like a venue for such a welcome statement Wildlands Advocate would be delighted to publish it in our June issue.

-Ian Urquhart, Editor
If you’ve grown up in Alberta I can guarantee you know somebody that hunts. For me, that somebody is my father. Our family has a long history of enjoying the outdoors and our history includes foraging and eating food that nature provides us with. Although I never hunted myself, I have had plenty of experience with foraging and fishing. As a kid, I cherished these trips and treated mushroom picking as an extreme game of hide and go seek. As I got older, I grew to realize that those long car trips to go fishing or foraging were just another excuse to spend a day together as a family outside. It was (and still is) humbling to go into this expansive wilderness and realize just how vulnerable and fragile you are, to realize just how easily you could get lost, or hurt, and be hundreds of miles from any sort of help. For my father, hunting is just another way to escape to the wilderness. Whenever he comes back with an animal, he carefully partitions the meat and gives it out to family and friends. I remember fondly the days when I would come home to a simmering pot of deer stew, usually made with some dried mushrooms that we had foraged the summer before. I would look forward to the fall when my father and his friends would come home from the hunt, hoping for some moose we could make jerky with. The meat was always much more flavourful and added a depth to every dish. The extra work and care it took to prepare a dish always made it taste that much better.

When I struck out to live on my own, I was shocked to learn that the majority of Albertans do not obtain their game meat by hunting. Rather, they purchased their “wild” game from a farm. To me, the practice of game farming seemed contrary to the very meaning of wildlife. Little did I know that this practice has already placed Albertans’ health and lives at risk and has serious implications for the preservation of our wildlife in the future.

The crux of the problem
Game farming is problematic for several reasons. Many aspects of it are unethical such as keeping animals which historically were dispersed over large expanses of land confined in unnatural densities. Keeping big game requires wildlife fences which blocks the movement and migratory habits of other animals. Wild animals are harder to handle and so tranquilizer use is common. The collection of body parts such as velvet antler requires tranquilizing the animals and sawing healthy live tissue off the animal. This is often done without the use of painkillers when consumers decide that drugs contaminate the final product.

However, one of the biggest concerns surrounding game farming is its threat to human health. This is because concentrating animals when they previously had been dispersed over large expanses of land drastically alters natural disease dynamics. Some 20 bacterial, viral, prion, and fungal diseases and approximately eight internal and external parasites are known to have affected game farmed animals; some of these are transmissible to humans. When game farming was legalized in Alberta in 1987 many of this new breed of farmers imported stock from other provinces and the United States. This importation introduced diseases into farmed populations of deer and elk. This has resulted in the spread of these diseases to wild populations of cervids (deer, elk, moose and caribou); this has the potential to spread to human populations as well. Chronic Wasting Disease (CWD) is one disease which, if spread to humans, would have devastating impacts on the general public.

Chronic Wasting Disease
Many people remember when the first case of “mad cow disease” or Bovine Spongiform Encephalopathy (BSE) was found in Alberta cattle in 2003. It belongs to a family of diseases known as transmissible spongiform encephalopathies (TSEs). These diseases wreak havoc on the nervous system by creating small pores in brain tissue. This family of diseases is linked to prions, which are misshapen small pieces of protein. Although humans cannot directly contract BSE, eating BSE-contaminated beef and nerve tissue can lead to Creutzfeldt-Jakob disease, which is the human version of the disease. Chronic Wasting Disease (CWD) is the elk, moose, and deer version of mad cow disease. CWD is fatal in all cases and there is no treatment or vaccine.

One of the most alarming aspects of
CWD is the manner in which the disease spreads. Unlike BSE, which can only be spread from the consumption of nerve tissue, both direct (animal-to-animal) and indirect environmental transmission of CWD is possible. Direct animal transmission occurs when the infectious agent is shed in faeces, urine, saliva and blood. Indirect transmission of CWD is also possible. Prions may enter the soil from dead animals or decomposing remains and can be preserved in soils. They hold onto clay particles so well that they can stay in surface soils for up to two decades and are available to re-infect deer as they graze.

There is also the concern as to what will happen when CWD jumps the species barrier again and becomes transmissible to cattle and/or humans. CWD has already jumped the species barrier to moose and has the potential to spread to other species. BSE (mad cow disease) was not known to infect humans until it jumped the species barrier some 20 years ago and killed over 200 people in Britain and Europe. If CWD is able to pass indirectly from animal to animal, what will happen when it passes onto the human population? The thought of a disease that has no cure or vaccination, can be passed on indirectly, and is fatal in all cases is frankly terrifying. The potential costs to our public health system and the burden to our society would be tremendous, perhaps insurmountable.

As of 2015, the Canadian Food Inspection Agency (CFIA) has declared the situation “out of control” in Alberta and Saskatchewan and apparently has pulled back from further attempts at eradication. This is an irresponsible decision to say the least. Professionally handled eradication that removes entire bodies and disposes entirely of any that indicate CWD must be implemented. We must also encourage culling CWD-infected animals by natural means. This requires redeveloping natural predator/prey relationships in infected areas. It would include stopping the wolf cull and reintroducing wolves into areas where they historically existed. This could remove infected animals at far less cost and possibly greater efficiency than through expensive culling programs. Regardless, immediate actions must be taken to prevent further spread of this epidemic before the potential risk of CWD spreading to humans becomes a tragic reality. I shudder to think what may happen if we don’t act now.

These two maps prepared by the National Wildlife Health Center, an agency of the US Geological Survey, illustrate the spread of chronic wasting disease in Canada and the United States between 2006 and 2014.
Beaver Hills Region:
A New UNESCO Biosphere Reserve

By Barb Collier

On March 19, 2016, Beaver Hills joined 16 other Canadian Biosphere Reserves internationally recognized by the United Nations Educational, Scientific and Cultural Organization. Beaver Hills Biosphere Reserve was added to the list of some 669 reserves in 120 countries worldwide. This process began in the early years of this century when a group of citizens concerned about the increased growth and economic activity in the Beaver Hills landscape east of Edmonton initiated discussions with three levels of government, the science and academic community, residents, industry, and non-governmental organizations.

Beaver Hills is a distinct geomorphological area covering 1,572 square kilometres centred roughly 50 kilometres east of Edmonton. It contains dry mixed wood boreal forest, aspen parkland with moraine features such as hummocky knob and kettle upland forests mixed in with low lying wetlands and lakes. This landscape supports both boreal forest species and parkland species including 48 mammals, 152 bird species, and 8 amphibian/reptile species. Approximately 40 percent of Beaver Hills remains a natural habitat and currently 25 percent of it is protected. It is home to a University of Alberta research station where researchers have conducted dozens of studies over the last 30 years ranging from wildlife and outdoor recreation to wetlands and land management.

Alberta Wilderness Association participated in the complicated nomination process through an invitation to a workshop in 2010 where we discussed tourism activities and opportunities including agricultural, heritage and nature-based tourism while fitting all these activities into an overall ecological framework.

A biosphere reserve is described as an area of terrestrial and/or coastal ecosystems promoting solutions to reconcile the conservation of biodiversity with its sustainable use. It is the only global designation recognizing excellence in sustainable development at a regional scale. Biosphere reserves support three interconnected functions: Conservation – conserving ecosystems, landscapes, species and cultural heritage; Development – fostering social, cultural and ecologically sustainable economic and human development; Capacity Building – supporting research, monitoring, education, and information exchange.

These three functions are fulfilled by preserving the region through core protected areas, buffer zones, and transition areas. The core areas of Beaver Hills Biosphere Reserve consist of Elk Island National Park and Miquelon Lake Provincial Park; the buffer zones include the Ministik Lake Game Bird Sanctuary, the Cooking Lake/Blackfoot Provincial Recreation Area, the Strathcona Wilderness Centre in Strathcona county, the Ukrainian Cultural Heritage Village and six Natural Areas; the transition area – the lived in and working landscape – accounts for 75 percent of the Biosphere area. The designation does not include any legal protection for the land nor does it restrict local government land-use decisions.

The Beaver Hills. MAP COURTESY OF BEAVER HILLS INITIATIVE
The Beaver Hills Initiative (BHI) process began in early 2000 in reaction to proposed oil and gas development close to Elk Island National Park. Parks staff initiated discussions with the five municipalities (Strathcona, Beaver, Leduc, Camrose, and Lamont Counties) surrounding the Park plus First Nations, landowners, government departments, and non-governmental organizations with the intent to develop a partnership to use proactive land-use planning within the Beaver Hills area. The first meeting of the BHI coordinating committee was held in 2002. Their vision statement recognizes the natural beauty and quality of life of the region and supports cooperative efforts to sustain the quality of water, land, air, natural resources, and community development through their mission statement. That statement calls for the parties to work together for a sustainable region through shared initiative and coordinated action. Now, some 30 volunteer partner organizations are part of the Beaver Hills Initiative.

Biosphere Reserves are fundamentally places of research and monitoring. Their priority is nature, not immediate commercial business. When Alberta Wilderness Association entered the process we were impressed with the belief in the ‘priority being nature not immediate commercial business.’ We supported the idea of private and public land management, including tourism, which fit into an overall ecological framework with impacts of activities being researched and monitored.

The Beaver Hills Biosphere Reserve is a discovery ground which will yield insights into global problems. It is a prime place to observe and record long-term environmental and ecological change including the effect of regional and global changes due to natural causes and human activities. One of the responsibilities of a Biosphere Reserve is that, when tourists come to visit, they go away with a message of global change and greater environmental and ecological concern. It remains to be seen whether this will translate into another stimulus for humans to act in ecologically appropriate ways in the future.

Alberta Wilderness Association took part in this process with the hope that the above message would become the mantra of Beaver Hills. Many individuals, organizations, governments and businesses have worked countless hours to make the Beaver Hills Biosphere Reserve become a reality. The hard work will continue. As Guy Swinnerton, professor emeritus in the Faculty of Physical Education and Recreation at the University of Alberta and Chair of the Beaver Hills Initiative Protective Areas Working Group, states: “It’s this total landscape approach that demonstrates how we have to work collectively to find balance between conservation and sustainable development.”

Barb Collier is a self-taught naturalist, volunteer, and citizen scientist concerned with all aspects of nature issues - protection, preservation, and educating all citizens about the importance of nature to their health.
Few scientists seek celebrity status. Fewer attain it. Dr. James Hansen is one scientist in the climate change field who certainly has attained celebrity. For more than thirty years Hansen was the director of the NASA Goddard Institute for Space Studies. Quite early in his NASA years Hansen testified before the U.S. Senate Committee on Energy and Natural Resources. He startled Senators with the conclusion from his research that he was virtually 100 percent certain that the global warming trend he was invited to testify about was man-made. It was due to the build-up of carbon dioxide and other “greenhouse” gases in the atmosphere.

The world then, 28 years ago now, was warmer than at any time in the history of our ability to measure temperatures. Hansen then had “a high degree of confidence” that the greenhouse effect was responsible for this warming (so did the other scientists appearing before the committee). He warned the committee members that this effect already was significant enough to increase the probability of extreme weather events.

When Hansen and his colleagues made their appeal to a Congressional committee in 1988 they hoped the Senators would accept their information and act on it. Dr. George Woodwell, director of the famous Woods Hole Research Center, and other witnesses said that planning needed to begin to reduce sharply the burning of fossil fuels. Reforestation efforts also were urged upon the Senators since trees absorb and store carbon dioxide.

Some Senators accepted Hansen’s science and called for action to reduce emissions and adapt to a changing climate; more Senators refused to listen to the testimony and evidence. Although we’ve had many more “warmest years ever” since then the U.S. Congress, like the Canadian Parliament, has refused to respond positively to the scientists’ call for legislation to address a changing climate.

Jump ahead to 2015. Hansen continues his quest to use science to persuade us that we must act immediately to reduce greenhouse gas emissions. There’s an important difference though between today’s efforts and those of 1988. Hansen’s appeal now is made much more directly to the people.

In spring of 2015, Dr. Hansen released a paper with 18 international co-authors directly to the internet. Under public scrutiny, his paper made headlines and flew onto the desktops of believers and non-believers, policy-makers and constituents. It opened a discussion not only about the content of the paper but on the entire scientific process, including publication and peer review. When faced with what he felt was an urgent need to act Hansen released his findings – this time to the world at large rather than to select members of the U.S. Congress.

The core of Hansen’s message and information has remained the same: the climate on planet Earth is changing. That means that all the weather we observe, every day, every year, over the course of decades, is going to be different in significant ways. And, he is saying this change has been caused by human activity.

Soon after, the paper, titled “Ice melt, sea level rise and superstorms: evidence from paleoclimatic data, climate modeling, and modern observations that 2°C global warming could be dangerous” got through the scientific peer review process (in which other scientists, whose privacy is protected to ensure non-biased feedback, repeatedly comb through all 50 pages of methods, results, and discussions). The paper was published in Atmospheric Chemistry and Physics on March 22, 2016. Its most controversial claim may be that an abrupt shift in the climate may just be decades, not centuries, away. The polar ice sheets will melt much more rapidly than most projections suggest and the earth’s coastal cities would be submerged in less than 100 years.

Hansen and his co-authors took two paths to reach their very worrying conclusion. First, they looked through the history of our planet to find that, once upon a time but not too long ago, the Atlantic Ocean was the stage for massive superstorms that lifted, carried, and dumped boulders onto Caribbean Islands. Second, they included the critical circulation in the Atlantic Ocean in their model in order to account for the complex mixing of water based its density and temperature.

Hansen and his colleagues hope the public will actually respond to this extremely worrying conclusion and push governments to act. The Paris climate change agreement signed last December identified the need to limit the increase in global average temperature to less than 2°C but,
as the text box underlines, acknowledged that the policy commitments so far made will not deliver that objective. If immediate action isn’t taken many of the world’s great cities, with all their histories, will find themselves under water by the end of the century.

Emphasizing with serious concern the urgent need to address the significant gap between the aggregate effect of Parties’ mitigation pledges in terms of global annual emissions of greenhouse gases by 2020 and aggregate emission pathways consistent with holding the increase in the global average temperature to well below 2°C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5°C

- excerpt from the Paris Agreement on Climate Change, December 12, 2015.

Featured Artist:
Elisa Sereno-Janz

The Bow River Through Canmore, Alberta, oil on panel, 48” by 24”
Pembina River, North of Matthew’s Crossing Natural Area, Alberta, oil and conté on panel, 48” by 24”
The Eastern Slopes are in a state of disrepair. For too long, the Alberta Government’s policy has been “open unless closed” when it comes to access and use of our Eastern Slopes. Poor cumulative effects management has led to excessive linear disturbances in our mountains and foothills. These human-caused linear disturbances include industrial development, clearcuts, power lines, cut lines, off highway vehicle (OHV) trails, recreational trails, seismic lines, and roads.

Why is linear disturbance an issue?

Even when individual impacts and disturbances may not be significant, the overall impact of all of the physical disturbances on the landscape has widespread and damaging impacts. Especially concerning is motorized recreation, which often takes advantage of this linear disturbance network. With motorized recreation in place, native plants are not protected from invasive species, native fish populations are not protected from watercourse disruption, and native terrestrial populations are not protected from habitat fragmentation.

This is no clearer than when we examine the status of wildlife in Alberta’s mountains and foothills. Westslope cutthroat trout, bull trout, Athabasca rainbow trout, all listed as “threatened” under Alberta’s Wildlife Act, as well as mountain whitefish and arctic grayling have all suffered major population declines due to decades of inaction and excessive linear disturbance on the landscape. Other species at risk in the Eastern Slopes include grizzly bear and woodland caribou. Although OHV use is widespread throughout Alberta, only six percent of the population participates in motorized recreation. This is in direct contrast to the majority of Albertans that...
depend on the Eastern Slopes for their drinking water.

On December 4, 2015, a group of scientists and conservationists met in Calgary to discuss the future of our Eastern Slopes. A resulting communiqué was produced outlining the actions that are required to restore conservation and watershed protection as the top priority for Alberta’s Eastern Slopes. These include:

• Ban OHVs from protected areas in Alberta’s Eastern Slopes, including the new Castle Parks, and from areas identified by the province as Prime Protection and Critical Wildlife Zones. OHVs are a land-use which is incompatible with the purpose of Provincial Parks.

• Permanently close and decommission trails in Threatened westslope cutthroat trout critical habitat, the destruction of which is illegal under the recently issued Critical Habitat Order.

• Reduce the existing road and motorized trail density in Alberta’s Eastern Slopes to scientifically defensible levels.

The communiqué was sent to the Government of Alberta on January 13, 2016. The greater public in Alberta has been increasingly frustrated by the failure of past governments to exercise oversight and sustainable management of our public lands. We are long overdue for decisive actions which prioritize Albertans’ health and well-being, and properly value intact and healthy landscapes.
By Niki Wilson

In early April several years ago Geoff Skinner, my husband and a Parks Canada resource management officer, received a call from Jasper Park Lodge about a cougar that had taken down a cow elk at Mildred Lake. Geoff specializes in human/wildlife conflicts and responded to the Lodge’s call since this cougar kill posed a public safety concern for skaters and others in the area. At the same time three cougars, what looked like a mother with two young, were spotted successfully taking down sheep in the eastern part of Jasper National Park. A week later a local guide and his very lucky clients – it was their first day in Canada – spotted a cougar across Highway 16 from the Jasper transfer station about 10 kilometres east of Jasper. The cat was yawning and stretching on an elk carcass just beyond the tree margin. (The group later went on to watch three wolves hunt sheep – what a once in a lifetime holiday they had!).

These stories of cougar sightings reminded me that I’m a smallish woman who, around this time of the year, is renewing her love of running alone in the bush. This reminder that cougars are an important part of the Park’s ecosystem pushed me to do a little research, research I hoped would reassure me. How many cougars are there around Jasper? How likely is it that I’ll run, literally, into one? Might one of North America’s largest species of cat be perched on a branch as I ran by and I just don’t know it?

Alberta’s 2012 cougar management plan estimated that, in the foothills adjacent to Jasper and most of Banff National Park, cougar density ranged from 10 to 25 cougars per thousand square kilometres (about 386 square miles). This estimated density increased the further south you travelled. In the foothills southwest of Calgary to the U.S. border the estimated cougar density per thousand square kilometres was 35 to 40 animals. Specific studies have not been done in Jasper National Park, but Parks Canada’s remote wildlife cameras record cougars moving along the Athabasca River Valley. Cougars are attracted to where their prey is. In early spring, deer, elk and sheep seek out the snow-free grasses of the valley bottoms and cougars are nearby waiting for an opportunity to catch a meal. Research in the foothills east of Banff suggests cougars kill a large animal every week or two. At this time of year, many local prey are hanging out in view of highways, or near public facilities, making sightings more likely.

Although cougars favour large game for food, they are survivors. This carnivore will eat virtually anything – insects, rodents, small mammals, an unfortunate pet. When I was a child, an innovative female with damaged teeth took up residence under our neighbour’s trailer and had her kittens there. She took to making...
easy kills — neighbourhood pets — and her presence went undetected for weeks. The fact that a large cat could live and kill without notice in a densely populated trailer park is a testament to their stealth hunting ability and instinct to survive and protect their young. Needless to say, my sister and I weren’t allowed outside until the situation was resolved.

Due to their adaptability, cougars have the widest range of any large cat in the world. Historically they have occupied most of the Americas, ranging from the Pacific to the Atlantic coasts and from the southern tip of the Yukon to the southern tip of Chile. Today they are found primarily in the western third of North America, some Central American countries and the majority of South America. They live in a variety of habitats, from the swamps of Florida to our boreal forest. Decades ago hunting and human habitation eliminated them from the Eastern two-thirds of their range in North America, but cougars continue to fare better than many of the world’s big cats.

Cougars, like household cats, are fastidious. The elk kill my husband Geoff found at Jasper Park Lodge had been partially buried. This was the cougar’s attempt to reduce the odour and hide the carcass until it returned. Nearby was a ‘latrine site,’ used the same way a domestic cat uses a litter box to keep droppings away from food and living space. From the carcass, rounded, clawless tracks led to a bedding site nestled under a spruce tree. Nice and orderly.

The neat freak side of cougar behaviour fits well with their solitary, wary, and territorial nature. We rarely see them (or evidence of them), although they most certainly see us. A Jasper photographer famously took a picture of a family under a tree at a local resort, only to notice when developing the photo that a cougar was hanging out in the branches directly over their heads. They are experts at blending in and, if a cougar doesn’t want to be seen, it’s quite easy to walk by one in a wooded or grassy area and not know what you just passed.

Camouflage and stealth are critical to cougars; they survive as “ambush killers.” As solitary predators, they rely on the element of surprise to take down their prey. Although capable of sprinting, they tend to stalk prey quietly and undercover, before powerfully leaping upon them and delivering a suffocating bite to the neck. There is evidence they seek out prey that is more vulnerable. One study found that female members of the deer family accounted for a higher proportion of cougar diet in the spring, just prior to and after birthing. The proportion of male ungulates taken increased in the fall during the rut when males are more pre-occupied with fighting each other and trying to mate all the ladies.

With this knowledge, I’ve discovered my feelings on traveling in cougar country haven’t changed much. They’re out there, and I’m probably in their presence more than I like to think about. It is thousands of times more likely that harm will come to me in the form of a car accident, and I try to let this fact be the pole that guides my fear compass.

If you encounter a cougar:
• don’t run,
• reduce your apparent vulnerability by holding your jacket or sweater over your head, waving your arms, and maintaining eye contact with the cat,
• throw sticks and rocks at the animal,
• carry bear spray and use it.
Fight back if the encounter becomes an attack.
Do not play dead.

These days when I’m out on the trails in and around Jasper I carry bear spray, tuck my pony-tail into a bandana, and in the words of a friend who has tracked cougars, “remember to look up.”

A version of this article appeared in Jasper’s The Fitzhugh in the spring of 2011. It has been updated to include data from Alberta’s most recent cougar management plan. Niki Wilson is a multi-media science communicator and biologist living in Jasper. Visit her at www.nikiwilson.com.
Focus:

Alberta’s Species-at-Risk
Whitebark Pine

By Ian Urquhart

Interactions, inter-relationships. Those are the ideas I may find especially fascinating about ecology. Whitebark pine (*Pinus albicaulis*) is a species at risk that illustrates how vital interactions between species may be to their survival.

The Committee on the Status of Endangered Wildlife in Canada (COSEWIC) designated Whitebark Pine as endangered six years ago, in April 2016. This long-lived, five needled pine only is found at high elevations in British Columbia and Alberta. In Alberta, its range is found in a narrow band just east of the B.C. border stretching from the international border with the United States to approximately 150 kilometres north of Jasper. Together the whitebark pine forests of Canada’s two western provinces account for roughly 56 percent of the species' global range.

Whitebark pine is a very long-lived species. COSEWIC’s 2010 Assessment and Status Report noted the species often lives for more than 500 years with some individuals living for more than 1,000 years.

It's incredible to imagine that some whitebark pines in the Canadian Rockies were growing when William the Conqueror defeated and killed King Harold of England at the Battle of Hastings in 1066.

Today, whitebark pine face their own Battle of Hastings and the species’ probable fate, unless we lend vital help, sadly looks more likely to be Harold's. The species is “imminently and severely threatened.”

Four factors are responsible for its dire situation: white pine blister rust, mountain pine beetle, excluding fire from the management of the whitebark pine's ecosystem, and climate change.

Humans have influenced, to the detriment of whitebark pine, all of these factors. White pine blister rust was introduced into B.C. from France in 1910. The blister rust had infected a shipment of eastern white pine seedlings but was not discovered until 1921. By 1950, after spreading quickly, the blister rust was prevalent in all major white pine regions. Infected pines not killed by blister rust will suffer from reduced seed production.
Whitebark pine’s special significance

If we lose whitebark pine we lose more than “just another” species. COSEWIC judges this pine to be a “keystone species” in the alpine ecosystem. It’s the hub of the wheel in that landscape. Its seeds are a favoured food source for birds and mammals alike. Black bears and grizzly bears both benefit from their nutritional value. It’s the relationship between whitebark pine and Clark’s nutcracker that first fascinated me when I attended a workshop in Waterton National Park many years ago. In one of the sessions I learned the pine is completely dependent on Clark’s nutcracker for its regeneration. Whitebark pine cones do not open to release their seeds. The cones instead must be cracked open by the nutcrackers who then remove the seeds and cache them in the ground for a rainy day. The seeds that forgetful nutcrackers never retrieve germinate to become the next generation of whitebark pine. Without this essential dependence on the nutcracker the pine’s seeds would not be dispersed over a wider area and its odds of regeneration would range from slim to none. It’s an amazing example of interdependence between species.

Genetics: One Key to the Future of Whitebark Pine

Genetic research and resources represent one key to the survival of whitebark pine. Here researchers in the U.S. and Canada seek out blister rust resistant individual pines. Disease resistant individuals offer the potential to serve as seed banks and seed donors. As the Alberta Whitebark Pine Recovery Plan 2013-1018 stated, efforts to conserve genetic resources and to re-introduce rust-resistant whitebark pines into the landscape. Conserving genetic diversity and developing rust-resistant trees were two of the four objectives set by that strategy.
Banned in Alberta and Other Tales from the Conservation Trenches:
Sid Marty’s 2015 Martha Kostuch Annual Wilderness and Wildlife Lecture

By Ian Urquhart

Brilliant, inspiring artists are one of the blessings found on Alberta’s landscapes. It was AWAs privilege this past November to recognize Sid Marty, one of this province’s musical and literary treasures, and Gordon Petersen with Wilderness Defenders awards. During the November 20th award ceremony Sid delivered the Martha Kostuch Annual Wilderness and Wildlife Lecture to members and friends of AWA at Hillhurst Cottage School.

Sid’s talk focused on the Castle, the area that has been much on our minds since the Minister of Environment and Parks promised to “fully protect” the area in September 2015. He took his audience back nearly three years to the winter of 2012. In a speech laced with wit and irony he reflected on his experience as one of eight protesters who raised their voices against government-sanctioned clear-cut logging in the Castle. These protesters had a special quality. Their specialness rested in how the state rewarded them for taking their protests against clear-cutting in the Castle to ground zero, the cut block where Spray Lakes Sawmills would start to mow down trees. Their protests were rewarded either with their arrest or with a medieval-like ban. Sid, Diana Calder, Tim Grier, and Gordon Petersen, as well as those notorious radicals “John Doe,” “Jane Doe,” and “Persons Unknown,” were banned from setting foot on any public lands anywhere in Alberta unless they had received “authorization,” whatever that term meant. Rick Collier, Mike Judd, Jim Palmer, and Reynold Reimer were arrested and taken to jail in Pincher Creek.

**Inspiring**

Sid’s lecture was uplifting. Inspiration rested in his words about the actions of the protesters and the more than 150 people who joined them for a rally near the proposed logging site. My inner Howard Beale nodded approvingly in learning about the dedication and commitment of the protesters. Only people who care profoundly about nature, and who are voiceless in conventional politics and natural resources decision-making, would go the extraordinary length of setting up a protest camp when the mercury dipped to -35. For more than three weeks they frustrated the timber beasts and their feller bunchers.

What I also find uplifting about the story is the fact the protesters, the “point of the spear” as Sid described them in the lecture, reflected what the majority of people in the Castle region wanted. The people behind the “Stop the Castle Logging” campaign weren’t trying to impose their will on their neighbours. Instead, they spoke out on behalf of their neighbours, of the silent majority in the area; seventy-seven percent of respondents to a 2011 Praxis Group public opinion survey opposed commercial logging in the Castle. That Premier Redford received thousands of emails and letters opposing commercial logging in this special place testified to the widespread public opposition in the region to the future for the foothills forests imagined by Spray Lakes Sawmills and provincial forestry officials.

In this respect the protests of 2012 may have sprung from a growing ecological literacy in the public. This too may be an encouraging aspect of the struggle to stop commercial logging in the Castle. The overwhelming majority opposed to commercial logging in the area likely already believe or
are sympathetic to a new vision of forest management in Alberta. That vision would be one that includes the incalculable value of intact, healthy watersheds.

In this vein Marty suggested that, the government’s legal right to let companies clear-cut forests aside, the public may be increasingly reluctant to give companies a “social license to operate.” This phrase was coined in 1997 to describe the need for governments and companies to secure the consent of local residents for the exploitation resource companies carry out in and around their communities. “You cannot support a forestry department,” he said, “that will not give you the right to all that the forest offers us in terms of recreation, watershed protection, and wildlife habitat.”

Finally, inspiration may be found in Sid’s observation that, after hundreds of people protested in the bitter cold and thousands said commercial logging shouldn’t have a home in the Castle, a new government listened to them. Commercial logging is banned in the Castle parks. This is the one, concrete decision regarding the Castle the provincial government has so far made that merits some applause.

**Seven Alpine Poems (for the Castle Wilderness)**

*By Rick Collier* (this was the winning entry in the 2012 Louise Guy poetry competition. AWA thought it would be appropriate to reprint our late friend’s poetry here)

**I**

Is your true home
In thick, untrailed forests
And on the scree-strewn slopes
Of unnamed mountains?
This love transforms you utterly:
You are a mountaineer,
Not a teacher, nor an accountant, nor a clerk.
The bondage of ropes
On limestone ascents of the vertical desert
Are here likewise irrelevant:
The peaks themselves pull you upward,
Spontaneously, inexorably,
With no reason or reward
Than the tough scuffle heavenward itself.
Such devotion lifts beyond the summit
Its own mantra of prayers,
Of gratitude.

**II**

I have learned much
From books and from strangers
And even from the quotidian events
Of everyday life.
But only on flawless mountain days
Can I see far, far beyond the horizon.

**III**

No words tonight,
No poem possible,
All language silenced
By the tracery of cloud at twilight:
A high camp near Castle Crag

**IV**

Before dawn, I rouse myself,
Bivouacked
On the bare mountainside,
Dream
Mingled with the cool mountain night,
With thoughts of the day’s climbing ahead.
Do I wake or sleep?

**V**

The stove sputters, heating snow to water,
Fingers chilled cinching packstraps,
The craggy high places beckon . . .
And yet I linger,
Savouring the delicious anticipation
Of the day’s exertions —
Tangled forest,
Streams white with froth,
Soaring towers wind-scoured.
Above, a shooting star
Rips a zipper of fire across the sky;
A huddle of bright stars
Hangs over Castle Pass.
Once more
I am immersed in the moment.

**VI**

Up early,
And now in morning’s glimmer --
Forest, paternoster lakes, dusty scree
Arrayed exactly as they should be
For my delight
Alone
On this frosty October ascent.
Sun surprises me
As I crank up into
A couloir
Lined with plump boulders
Like sleepy sentries.

**VII**

On the best of days
I am the bear I hope to meet,
Shambling through
The jumbled wilderness,
Or the deer that leaps through the bush,
A dancer perfect.
I pause at a rain-rotted log:
Brown moss like fur,
Turreted gray fungi.
My inner voices
Go silent.

**Troubling**

Some of what Sid Marty said in the 2015 Martha Kostuch lecture also was troubling to my ears. The Castle was described above as a “special place.” Nearly a generation ago now, in 1998, the Alberta government identified the Castle as such. The Castle was a special place that should be included in a “network of protected areas,” that should be “a major milestone in the preservation of Alberta’s natural heritage for future generations.” We knew then that the area was “critical wildlife habitat” for grizzly bears and that we were managing those lands in
a way that turned upside down the idea of what the term should demand. It was a mortality sink, terminal wildlife habitat, for grizzlies. It was a place where, as Sid said, “Montana bears come to die.”

What’s troubling here are the extremes reasonable people had to go to in order to be heard and to have government partially acknowledge what everyone knew – the Castle has a special character demanding protection.

It also was very disappointing to hear about the wall of silence that greeted a letter to the Premier, with copies to all members of the legislature. The letter protested the draconian edict ordering Albertans who opposed logging the Castle to stay off all Alberta public lands indefinitely. The only crack in that wall came from Laurie Blakeman, the then-Liberal MLA for Edmonton Centre. She was the only MLA from Alberta’s 83-member legislature who had the courtesy to respond to the letter. No one else from either the governing or the opposition parties could be bothered.

My ears also were troubled by some of what Sid had to say about the value of watersheds. They didn’t burn to hear that our watershed forests have much more value than what their fibre will fetch as lumber, fence posts, or mulch. What was concerning was the claim, one I don’t dispute, that we – meaning conservationists – are likely going to have to calculate the millions and millions of dollars in ecological services that healthy watersheds provide. First, is it really sane to demand putting a dollar value on these services? Second, if you insist on producing price tags, shouldn’t it be the job of government, as the steward of our forests to produce those numbers? Shouldn’t government calculate and compare the value of intact watersheds versus the dollars generated by cutting them down?

These questions fit well with what Sid recommended we tell the future as he brought his remarks to a close. If this and future generations of Albertans need air to breathe and water to drink, then it’s certainly time to stop relying so much on people like those who protested logging in the Castle to try to ensure that government provides those public goods. Politicians of all political parties need to hear that we won’t send them back to Edmonton if they continue to do little more than talk about their devotion to sustainability. “Alberta,” he said, “is a special and lofty land that deserves the very best from us.” It’s past time our politicians took that message to heart.

Gordon Petersen, dedicated defender of the Castle Wilderness, received the second Wilderness Defenders Award last fall. PHOTO: © K. MIHALCHEON

Protesters Opposed to Shell’s Prairie Bluff Gas Project in 1987. One of your editor’s first encounters with Sid Marty’s writing and his passion for defending Alberta’s landscapes came through the essay “Headlights at the Grizzly’s Den.” Part of that essay discusses the protests at Prairie Bluff. Your editor would like to imagine this photo might be of a scene described therein. PHOTO: © AWA
**2015 Louise Guy Poetry Winner**

AWA is pleased to share Ben Murray’s poem *Wilderness Pass* with you. Congratulations to Ben for winning the 2015 Louise Guy poetry contest!

*Wilderness Pass*  
*By Ben Murray*

woodpeckers knock and we enter wilderness of firs  
forget what’s left behind, nothing now but breath of bear sun’s sigh bark eternity  
our tracks pace yesterday’s moose, we walk its shaggy shadow  
listen: quiet only woods can make, our whispers rustling leaves  
your boondock smile another shimmer of sun, I share it with the trees  
backpack sweat and stiffened limbs, a day wandering in wonder  
under green canopy, under eye of tonight’s moon we rest upon pine needle beds  
arms open, we embrace a visible forest of stars

**Introducing...Andrea Johancsik, AWA Conservation Specialist**

Hello! I am excited to be joining AWA as a Conservation Specialist. I have enjoyed learning the nitty-gritty of environmental issues since studying Environmental Sciences at Queen’s University. With my degree in the rear-view mirror, I am thrilled to start a career that supports this learning in the context of Alberta. While at Queen’s I was able to see the Canadian Shield and limestone landscapes throughout southern Ontario. Although they were fun to explore, my heart (and summer jobs) could always be found in Alberta.

Most recently, I worked as an interpreter at Dinosaur Provincial Park. But I’ve also had jobs as a Waste & Recycling Educator for the City of Calgary and a Water Technologist for Alberta Environment and Sustainable Resource Development (ESRD). It’s still a toss-up what my favourite or most exciting experiences in those jobs were:

- driving a bus, diverting waste (read: sorting garbage) at the Calgary Stampede breakfasts, or seeing the 2013 flood unfold from inside government offices.
- Aside from those jobs, my foray into environmental activism began full-steam ahead when I attended the People’s Climate March in New York City in September 2014. After discovering this was as much an excuse to visit the Big Apple as it was to demand climate justice, I admitted to myself that a subtler advocacy suits me better. You are now more likely to find me leading by example with an environmentally conscious lifestyle than waving my sign in a protest (although, I won’t count that option out!).
- I am now two years into the upkeep of my vermicompost, make all my own lotions and lip balms, and recently returned from a cycling tour in New Brunswick and Nova Scotia with the charitable organization The Otesha Project.

My favourite place in Alberta is our family cabin near Cold Lake. However, the mountain parks and badlands are recent contenders – there’s something so uniquely gratifying about straddling a ridge atop Mt. Lady MacDonald or finding late Cretaceous fossils at Dinosaur Provincial Park. I have grown to respect and love wild Alberta and I look forward to making a positive difference by writing, collaborating, and working hard for the environmental community on behalf of AWA. See you around!

*Andrea Johancsik*
"You’ll take on the mine file, which is important because it is endangering the weslocuthroh trout habitat."

"...OK."

I moved to Calgary in August 2014. Full disclosure: the first time I came this far west in Canada was two weeks prior, in August 2014. Before that, I was a geography student at McGill University in Montreal, a kid raised in New Haven, Connecticut, and a baby born in Moscow, Russia. The different places I’ve lived vary as much as the different places I’ve worked, especially as an undergraduate research assistant: in a bog recently reclaimed by beavers, on a rock locally called a mountain, and in the trenches (a.k.a. a laboratory). After I graduated, I moved out to Calgary and worked as a planetarium technician, programming fulldome shows about space.

I took on the task of learning how to be a Conservation Specialist at the same time as learning what or where weslocuthroh was. Perhaps I could find the fish somewhere in the mountains, where I’ve spent many a night wishing I knew more about wolves? Or somewhere in the badlands, a name I have yet to understand? Or... a new fish from Athabasca, a by-product of the industry? There is a lot that makes Alberta unique, and my short time here has made me understand the power of the Rockies, the beauty of the plains, and the complexity of the economy.

Turns out, weslocuthroh trout live very close to my new home. “West-slope-cutthroat-trout,” I read out loud on my first day here. A strange, beautiful by-product of the unique conditions of the clear headwaters of the Oldman River, older than the tradition to fish them itself. By protecting the trout, I know we will be fighting for the land, its history, and our future. This value reaches beyond the Eastern Slopes here and the East Coast where I grew up– my experiences help me understand that this work is valued around the world.

Soon, I’ll be rhyming off the names of runaway rivers and coordinates of rangeland from radar data. I’ll be making posters and maps to visualize what matters to us and writing letters to give a reasonable voice to wilderness and wildlife. For now, you can find me nested among the geraniums in the downtown Calgary office, putting places and animals on my mental map of Alberta, working to protect what we know needs it most: the wild.

Esther Bogorov

And Meet Esther Bogorov, a second new Member of AWA’s Conservation Specialist Team

Featured Artist: Elisa Sereno-Janz

North Saskatchewan River, through West Edmonton, Alberta, oil on panel, 36” by 36”

Pembina River, North of Barrhead, Alberta, oil on panel, 36” by 36”
Autumn Splendour 2015

Autumn leaves and crisp clean air at the Snow Valley ski club in Edmonton gave a welcoming embrace as we arrived to set up for our annual evening of conversation and celebration with Edmonton area members, supporters, and friends of AWA. Guests began arriving early, looking forward to enjoying great food, a little wine, and a chance for lively conversation with old friends and new acquaintances. It was an evening for conservation, folks we hadn’t seen for some time were excited by some of the decisions of the new provincial government but still concerned about the future for conservation in Alberta. Lively discussions took place as folks mingled and took the opportunity to enjoy a moment or two with people such as Richard Secord, our president, and AWA’s amazing team of board members and staff. Volunteers raised funds for AWA with balloon pops, clinking of glasses and more than a little spirited bidding during the silent and live auctions. We reviewed AWA’s 50 Years of Conservation and the positive impact we’ve had thanks to the dedicated efforts of past and current staff alike. We talked optimistically about our hopes for the future. Guests lingered long after the bidding was over and the food was finished and left hopeful and supportive of AWA – the only conservation association working towards a network of protected landscapes throughout Alberta that will serve the full spectrum of wildlife and ecosystem needs and ensure we have a healthy, biodiverse environment in years to come.

Christyann Olson

AWA Board members Richard Secord and Clint Docken took charge of the ice-breaking contest we’ll call “Last One Standing” – a label we hope we’ll never have to use in describing Alberta’s range of flora and fauna.

AWA was very pleased to have Linda Duncan, MP for Edmonton Strathcona, join us for Autumn Splendour. Linda is pictured here with Cliff Wallis, AWA’s Secretary Treasurer.

A few of the attractive and valuable items donated for the evening’s silent auction.

Posy Johnston’s vocals and guitar provided a delightful musical background for the evening’s conversations.

The crowd at the Edmonton Snow Club heard about some of the AWA’s past achievements and future plans during the Autumn Splendour event.
Updates

**FSC Canada’s National Forest Management Standard**

Changes are on the horizon for Canada’s premiere forest stewardship certification program. The Forest Stewardship Council (FSC) is an international multi-stakeholder non-profit that promotes responsible forest management through standard setting, certification, and forest product labelling. In 2012, FSC International approved its revised Principles and Criteria – these are essential rules or elements of forest stewardship and are international core documents (they can’t be revised at the national level). In order to update the current Canadian Forest Management Standards to align with these new Principles and Criteria, FSC Canada has developed one National Standard which will replace the current four regional standards: National Boreal, Maritime, B.C. and Great Lakes-St. Lawrence. Alberta forests have been evaluated under the National Boreal Standard. The first draft available for public comment was released on December 01, 2015 with a 60-day consultation period. AWA was involved in this public comment period and submitted a letter outlining our concerns and areas of support. A second draft and subsequent consultation period is scheduled for summer 2016, with the final draft scheduled for December 2016.

There are many positive developments within the new National Standard. They include the requirement to use independent qualified specialists to assess High Conservation Values and to develop plans for managing habitat frequented by species at risk.

However, the development of this singular National Standard to replace the current regional standards definitely raises some concerns. For example, forests such as Alberta’s southwestern Eastern Slopes forests should realistically not be subject to industrial harvest at all, FSC or no FSC; restoring their intactness to protect Alberta’s source waters and biodiversity should be paramount. These forests are thin, have poor soils, do not regenerate readily (due to strong winds blowing away seeds and hampering the growth of young trees), and are already heavily fragmented by roads, trails, and communities. Yet there are no provisions to refuse/revoke FSC Certification in forests due to multiple cumulative land use impacts from industrial and recreational uses. These cumulative impacts characterize much of Alberta’s forests outside protected areas.

Another concern arises regarding landscapes hit by a major natural disturbance such as a pest infestation, disease, or a large fire. The proposed National Standard actually recommends that “the level of harvest may be greater” in these areas. This is problematic because salvage logging exacerbates the negative effects of these disturbances and hinders the natural regeneration of a forest. Salvage logging is especially inappropriate in the habitat of species at risk such as caribou, native fish, or grizzly bears. Roads in species at risk habitat are a major vector for habitat loss, increased predation, and/or human poaching. Furthermore, many species still use forests impacted by natural disturbances. For example, caribou still use mountain pine beetle-affected forested areas.

The proposed National Standard includes an entire indicator dedicated to caribou. This should signal a significant step forward in precautionary forest management, given that Alberta’s caribou populations were assessed as endangered in 2010. Despite this, the new National Standard would still permit further near-term forestry “disturbance” in caribou ranges with decreasing populations. Canada’s Federal Recovery Strategy for woodland caribou notes that even with 65 percent undisturbed habitat in the range, there is a significant (40 percent) risk that local populations will not be self-sustaining. However, the proposed National Standard doesn’t require a halt to logging in areas where undisturbed habitat is less than 65 percent. The only requirement is that habitat recovery and restoration would be in progress with the objective of lowering the extent of cumulative disturbance in the caribou range. This might seem acceptable – until you read the explanatory notes. Those notes state that after 40 years a forest is considered recovered and therefore is no longer considered “disturbed.” Caribou depend on old-growth forest conditions, which include the growth of lichen, the main forage of caribou. When these older forest stands are logged, it can take more than four decades before conditions are suitable for caribou to return, and there is no guarantee that caribou re-occupancy in these forests will occur. Therefore, a forest should be considered recovered based on the ability of the forest to support caribou survival and recovery, rather than on age alone.

Despite these problems, it is evident that FSC Canada intends to have a strong National Standard. However, there is still a lot of work to do in order to ensure that this Standard is as progressive as possible and provides reasonable management of our forests and species at risk.

- Joanna Skrajny

**Cochrane Research Institute Conference: Wilderness, Wildlife and Human Interaction**

Imagine a truckload of six bison being transported through 16th Avenue in busy north Calgary – just don’t think what would happen if the bison got loose. Fortunately for Dan Fox of the Kainai First Nation, their instinct to run didn’t kick in during the drive when the preferred route through Bragg Creek was closed. His stories and images portrayed the importance of bringing bison back to First Nations lands while also bringing laughter to an audience of con-
中国文化，作者陈秋华，讲述了春节，节日习俗和美食。文章指出，春节是一个重要的节日，用于庆祝新年的到来。作者提到，春节的庆祝活动包括家庭团聚，互赠礼物和吃年夜饭。文章还强调了春节对中国家庭的重要性。

作者还提到了春节的食物文化，如年夜饭中的饺子，象征着一整年的幸福和繁荣。作者指出，春节的食物选择和准备是家庭成员之间交流和表达爱意的方式。

通过这篇文章，读者可以更深入地理解中国文化中的春节庆祝活动和食物文化。
cils (WPACs) operating under Alberta's Water for Life strategy. WPACs across Alberta are mandated to work collaboratively with residents and stakeholders to assess the state of their watershed and develop and implement ‘integrated watershed management plans’ (IWMPs). These plans do not have regulatory authority, they are aspirational. Despite this limitation IWMPs can have important effects. First, they can educate. Second, some of their elements, such as water quality parameters, may be adopted and incorporated into policies and regulations of municipalities or the provincial government.

The Athabasca Watershed Council Initiators Group agreed on strong ecologically-based and inclusive principles to guide the Council. The Council’s vision statement is: “the Athbasca watershed is ecologically healthy, diverse and dynamic.” Its Mission is: “the Athabasca Watershed Council promotes, fosters respect, and plans for an ecologically healthy watershed by demonstrating leadership and facilitating informed decision-making to ensure environmental, economic and social sustainability.”

In addition, encouraging grassroots and aboriginal participation has been a priority in the Council’s work. This is reflected by some of the Council’s strong Values statements; these statements are emphasized in the Terms of Reference of the Board and guide every Council Committee. These values include: “We respect all points of view. Water is a blessing and gift and is essential for the environment, society, the economy and the spirit. We respect the environment and people. We value and respect the aboriginal communities, culture, and knowledge in the Athabasca watershed. We value inclusivity.” The Council is rightly proud of the fact that there are two First Nations members on its Board, including the Vice Chair. And there are over 100 active individual members who ensure their voice is heard in governance matters.

The Athabasca is Alberta’s second largest river (after the Peace), and the largest Alberta river with natural flows essentially unaffected by dams. From Jasper Park north to Lake Athabasca, the lands gathering the snow and rain that drains into the Athabasca River and Lake Athabasca cover fully a quarter of our province. In the upper watershed, forestry, oil and gas, tourism, and coal mining are key industries. In the middle watershed, agricultural settlement is important, while in the lower watershed, oil sands and forestry are the main industries affecting Athabasca watershed lands.

It is an enormous undertaking for the Athabasca Watershed Council to engage with watershed residents and stakeholders, report on the state of the watershed and...
generate watershed plans. There have been four State of the Watershed (SoW) reports prepared by Council to date. These are intended to provide baseline information and identify data gaps: the first SoW phase and report was a scoping study; the second focused on land use condition and pressure indicators, and the third and fourth dealt with aspects of water quantity and quality. In addition to publishing online reports, Council made SoW Phase 2 and Phase 3 findings accessible in an online “Interactive Atlas” website hosted by Athabasca University; the user can assemble data layers of interest and view the results on a map detailing the 31 smaller sub-watersheds within the overall watershed.

Monitoring gaps and concerns have been an issue. For example, in the Phase 2 State of the Watershed report completed in 2012, data and data modelling gaps meant that 18 of the intended 32 indicators were excluded, and identified only as “aspirational” until more resources became available. For the 2013 Phase 3 SoW, reporting on water quality and sediment-dwelling insect communities (a key food web element) used available information from the 2007 to 2011 period. Amongst many recommendations, the Phase 3 SoW authors suggested “that the Provincial government strengthen their role in environmental monitoring in the Athabasca Watershed to ensure...a watershed-wide water monitoring program that is comprehensive, coordinated, and effective, with representative sampling in space and time that acknowledges the natural variations in the landscape from the headwaters to the Peace-Athabasca delta.”

A similar recommendation for coordinated monitoring programs was made in the Phase 4 SoW report; the authors also noted that the 2014 creation of the Alberta Environmental Monitoring, Evaluation and Reporting Agency (AEMERA) was intended to integrate environmental monitoring throughout Alberta.

In 2015, Council’s work included strengthening ties with other relevant collaborative processes and groups. Athabasca University has an Athabasca River Basin Research Institute (ARBRI) that is a clearing house of information about past and present research relevant to the watershed. The University of Alberta is developing an Athabasca collaborative research network that will engage with aboriginal communities and other residents to understand their water concerns with the goal of influencing research and informing water policy. Alberta WaterSmart is facilitating multi-stakeholder scenario discussions on land use impacts on water quantity. And the Alberta government is consulting on diverse aspects of the Lower Athabasca regional plan, including a biodiversity management framework with a significant aquatics component, and sub-regional landscape management plans.

In 2016, the Athabasca Watershed Council will extend its involvement in these processes. Also on the agenda is further outreach on the findings and recommendations of its SoW reports completed a few years earlier. Community and stakeholder views on watershed priorities gathered through these many processes will drive development of a Terms of Reference to set the stage for IWMP development. AWA looks forward to the success of these many initiatives in promoting the ecological health of this globally significant watershed.

-Alberta Ecotrust 2016 Environmental Gathering: Change the Climate

The first annual Environmental Gathering, organized by Alberta Ecotrust, was held with the intention of setting the stage for environmental work in Alberta and to help solidify and create a more cohesive environmental community. I attended on behalf of AWA with a goal of developing a deeper understanding of the current work that is occurring in Alberta and to identify some of the opportunities that AWA may have with regards to collaborating with and learning from others.

The opening keynote was from Minister Phillips of Alberta Environment and Parks. Her address included some information about the government’s intentions with regards to parks and protected areas. Here she declared that her department is attempting to meet international targets to protect at least 17 percent of land and freshwater in the province by 2020. Although this announcement was met with applause from the environmental community, it filled me with trepidation.

As you may know, AWA has been concerned about the current proposal that could allow OHV activity within the Castle Parks. It’s especially concerning as this permitted activity would set a dangerous precedent which would potentially allow motorized recreation in all provincial parks. If we engage in a process where parks are quickly designated under a 17 percent goal without legal, scientific, or public support, we will inevitably lose. We will end up with parks that lack any meaningful protection of our headwaters, are unable to sustain species at risk, and will disappoint future generations of conservationists.

As conservationist and author Kevin Van Tighem mentioned in the Environmental Panel, we have policy direction in place for support of our headwaters— but we need to act. As he said, history has not been kind to our ecosystems and the future of species such as our at-risk native trout are at the mercy of the decisions we make now. Watershed health must become the guiding principle with which we make policy and land use planning decisions.

Even though our society values headwaters protection, it is sometimes hard to see how this would translate to positive on-the-ground action. Here is where the presenters and attendees of the gathering outdid themselves in terms of providing potential solutions. From Norine Ambrose of Cows and Fish demonstrating on-the-ground work, to Dr. Joe Vipond of AB Coal Phase-Out explaining their successes in ensuring a coal-free future for Alberta, we can identify many people who are successfully implementing positive changes in Alberta. This was nicely summarized by the closing speaker, Dr. David Boyd, who highlighted some of the world’s major environmental
wins and emphasized the importance of remaining optimistic.

I left the event feeling motivated. It was so inspiring to be surrounded by such a large group of people who share a common goal – keeping Alberta sustainable and wild for future generations. I look forward to seeing what’s in store for Alberta in the future and hope we will move in the right direction.

- Joanna Shrajny

**Alberta Grizzlies Continue to Die; 28 in 2015**

Grizzly bears continue to die at one of their highest rates since the legal hunt was stopped in 2006. Mortality numbers released by Alberta Environment and Parks in January indicate that 28 grizzlies were known to have met their end in 2015 – 24 by human-related causes – the second-highest annual number since 2003.

Twenty-eight mortalities in a single year is very significant, especially from a total provincial population of only around 700 animals. This is especially true when considering the low reproduction rates of grizzlies in parts of the province (such as Banff National Park), which are among the lowest for grizzlies anywhere in the world. And, don’t forget that the numbers mentioned above only account for known mortalities; estimates such as those by researcher and Alberta Grizzly Bear Recovery Plan co-author Gordon Stenhouse indicate the true number may be twice as high.

Although some recent stories in the media have implied significant increases in bear populations in some parts of Alberta, AWA believes there is reason to be highly sceptical of these stories. While the study referenced by these studies found more bears than a previous one done in the same small area, it is also an area into which several bears were relocated in the intervening time (no follow-up monitoring data was collected by Alberta Environment in the meantime). As a result, the remaining marginal increase falls well into the wide margin of error resulting from differing methodologies between the two studies; the small sample size means that any results cannot be realistically generalized to outside the study area.

This case typifies what we know (or don’t know) about grizzlies in this province. While many claims are often made, based on shaky extrapolation and stretched inferences, what we know is that we only have a small, threatened population of bears in the province. And this population is under extreme pressure from habitat loss and disruption and the incursion of humans into the remaining shrinking habitat.

This is what the science tells us, as was made clear in the 2008 Recovery Plan. That plan noted, with emphasis, that: “Human use of access (specifically, motorized vehicle routes) is one of the primary threats to grizzly bear persistence.” While that 5-year recovery plan expired at the end of 2013, it is still de-facto in place pending a long-awaited update which AWA anticipates finally may be released this year.

AWA hopes this updated Recovery Plan will mandate enforceable limits on access, specifically motorized and Off-Highway Vehicle (OHV) access, to our sensitive mountain and foothills wilderness areas. We are encouraged in this hope by a number of enlightened statements made five years ago by the then-opposition MLA Rachel Notley.

In June of 2010, after the grizzly was declared a threatened species, Premier Notley declared a threatened species, Premier Notley said that without meaningful protection for grizzly habitat, such declarations were just “dragging out the process and continuing to fail to take real action.” At the same time, she also addressed the issue of access management in grizzly habitat by saying: “We can designate grizzly bears threatened, we can suspend the hunt, but until we take real action to limit contact with these animals, they will continue to be killed unnecessarily.”

AWA couldn’t agree more with these statements; we believe they are just as true today.

For too long we have been “dragging out the process” as Notley so aptly put it in 2010, constantly deferring any hard decisions to some future plan, only ever making “plans to plan.” By doing so we have failed not only to “take real action” but we have also failed our wilderness areas and the wild species that live there. Not only grizzly bears, but other species such as the westslope cutthroat trout – the beneficiary of a recent federal critical habitat order – are greatly threatened by this unceasing intrusion.

As Government of Alberta scientists recognized in 2008, and our current premier recognized in 2010, it is long past time to take meaningful action and put a stop to OHV activity in wilderness habitat such as that for the grizzly, the westslope cutthroat trout and other Eastern Slopes species.

- Sean Nichols

**More Problems for Bears Create More “Problem Bears”**

In 2015 Alberta Environment and Parks documented 28 grizzly bear deaths, nine more than the 19 bear fatalities recorded
the year before. This number marks a decided turn of events for the worse for the species. Back in 2013, when 31 bear deaths were reported, some thought this many deaths might be an anomaly for the threatened species. Now, with two of the past three recording deaths totals well above the average 19 bear deaths per year, we worry that an anomaly may be becoming a new normal. The future of grizzlies in Alberta remains a real concern. When the Alberta Grizzly Bear Recovery Plan was written in 2008, it estimated there were fewer than 700 grizzlies remaining in the province. Since that time, a total of 173 bear deaths have been documented – a whopping 25 percent of that population estimate. The vast majority of these deaths, 153 out of 173, have been caused by humans. The major causes of grizzly bear mortality since 2008 have been illegal kills (i.e. poaching) as well as accidental deaths (i.e. road kills). Roughly 50 percent of reported deaths fall into these two categories.

Recently, we have also seen an increase in the number of human/bear conflicts that result in “problem bears” being killed. Historically, the problem bear death tally was between zero and two bears per year. This last year saw four problem bears killed alone. Of course, it's important to mention that one of the major problems of categorizing bears as “problem bears” is that these conflicts are often human caused. Giving bears more room to live and roam and getting humans re-habituated to living with bears is what's desperately needed to avoid these senseless deaths.

The Recovery Plan emphasizes that “human use of access (specifically, motorized vehicle routes) is one of the primary threats to grizzly bear persistence.” Increasing access into grizzly habitat increases the number of human/bear conflicts and fragments the habitat. The Recovery Plan recommends that the amount of access (roads, railroads, trails, pipelines, cut lines and so forth) not exceed 0.6km of access for every square kilometre in core grizzly habitat. Access densities even lower than this are required to maintain and ultimately recover bear populations. Unfortunately, we are far from any reasonable access thresholds for grizzlies; the fatality and problem bears numbers may be seen as a reflection of the situation we are in. The amount of access into the backcountry has only increased since the release of the Recovery Plan in 2008. Unless we get serious about protecting grizzly habitat and properly managing our public lands, we compromise whatever chance they may have for recovery in Alberta.

- Joanna Skrajny

Grizzly in the Highwood PHOTO: © D. OLSON

The Milk River, East of Writing on Stone Provincial Park, oil on panel, 18” by 36”

Featured Artist: Elisa Sereno-Janz

**Cost $25, Available at [https://www.nswa.ab.ca/content/living-shed-0](https://www.nswa.ab.ca/content/living-shed-0)**

Reviewed by Joanna Skrajny

*Living in the SHED* is a new publication from the North Saskatchewan Watershed Alliance. It hopes to help people become involved in the landscape where their drinking water comes from. In it, Billie Milholland takes you on a journey throughout the North Saskatchewan Watershed, beginning at the headwaters of the North Saskatchewan River (the Cline subwatershed) and travelling east down the length of the river, discussing each subwatershed separately. Each subwatershed chapter contains information about natural features, natural resources, as well as the history of the area. Interpersed throughout the book are interesting educational and historical materials which are applicable to all of Alberta, as well as the etymology behind common names and places. For example, I learned that bison is a Latin word meaning ox-like animal, and that the town of Leduc was named after a Roman Catholic priest. Throughout the book you will also find interesting anecdotes such as recipes to make Spruce Beer or Saskatoon berry pie, the life histories of bumblebees, which bird feathers make the best quills, and the best time to harvest berries and rose hips.

What strikes me most about this book is how the author manages to make each subwatershed unique and interesting to the reader. It revitalized my interest in exploring central Alberta and has introduced me to a number of natural areas I previously wasn’t aware of. Descriptions of Alberta flora and fauna such as native plant, animal, bird, and insect species also help to familiarize the reader with what makes Alberta so unique and special. For example, the book explains that within the Sturgeon subwatershed you will find Big Lake, which is home to over 235 bird species. This subwatershed also contains Wagner Natural Area, which contains unique vegetation such as native Alberta orchids. Of course, the gorgeous photographs that are included of both wildlife and wild areas only help to draw the reader in.

Another positive element of this book is the way in which it manages to make the watershed personal. The inclusion of the history, lifestyles, and struggles of the early trappers and settlers depicts well how people depended on and connected with the land. It was interesting to see to what extent settlers utilized the land for game, berries, and fish to supplement their diets, especially during the Great Depression when resources were scarce. The book also offers an important reality check. Through it we see how widespread development and the over-hunting of game such as bison drastically changed the livelihoods and threatened the cultures of First Nations people in the area. The history behind how some of the watershed’s major cities and towns were founded was some of the most interesting material in the book. It was fascinating to see why people settled where they did and how towns grew and developed.

The introduction to the book states that “because urbanization came so quickly to the North Saskatchewan River watershed, not many people contain roots in surrounding rural landscapes.” Throughout the book, it becomes abundantly clear just how recent Alberta’s history in the
watershed really is and just what a huge impact we have made on the watershed in such a short amount of time. Most of Alberta's urbanization and industrialization has taken place since the early years of the 20th Century; many major cities and towns are around 100 years old, and many are even younger than this. Development within cities and towns has changed drastically as well over this past century. A map included in the book outlining the creeks and wetlands that have been lost since 1925 in the City of Edmonton was quite staggering.

Overall, this book offers a thoughtful and captivating story of the North Saskatchewan watershed. I found myself wanting to bookmark pages and write down facts so I could remember them for the next time I visited the area. As someone who has spent time primarily in south-central Alberta, it has really helped me to appreciate the beauty of an unfamiliar part of Alberta. I would recommend this for anyone interested in knowing more about the North Saskatchewan watershed or who has a general interest in Alberta's history and the nature found within our landscapes. It is also an inspiring resource for discovering new places to visit and explore. It offers important insights about the land and water on which we live, work, and play.

Letters to the Editor

Attn. Editor Wildlands Advocate

Thank you for Lorne Fitch's excellent article on "Alberta's Fish Crisis" in the October issue of your magazine.

Please pass on my poem "Paddle River Blues" which decries the demise of Arctic grayling in Paddle River three decades ago.

Unheeded calls for action are pleas for action now.

Sincerely,
Cal

Editor's reply:
Dear Cal:

Thank you very much for your positive response to Lorne Fitch's excellent look at the dire circumstances faced by Alberta's fish species.

Your last point is poignant and powerful.

Rather than share your poem only with Lorne I'm reprinting it below so all of our readers can appreciate it.

Ian Urquhart
Editor

Paddle River Blues (1996)
by C.B. Sikstrom

Little bluefish are gone up the Paddle River no more but a small pool remains damned by idle testament to politics and small minded self-centered greed.

I'm here today kneeling on a wet grassy bank downstream of a roadway culvert. A marquisette seine net lies in front of me. I'm holding a juvenile Arctic grayling in the net, a pretty little bluefish, the largest of four which are the only grayling caught in two hundred eighty-five specimens this summer.

Where are all the adults? Are there any?

I hold the bluefish in my hands. A delicate sail-like dorsal fin expands revealing...

Vacuity in a Minister's riding. A small insignificant stream named a river in some vain hope that someday it would move
men’s mind and vessels and further man’s progress in this Alberta centreland.

A dam to stop downstream flooding in a valley meant for water’s renewal of land each spring. Politicians, farmers and business men benefit: Rochfort, Mayerthorpe, Sangudo beneficiaries of a Minister’s munificence ---with other people’s money.

He says with no conscience: “This dam has nothing to do with your little bluefish.”

And I must reply: “This is not true and it is because of you.” Farmers mine the land. Loggers strip the land, and politicians dam this land into oblivion.

We simians do God’s duty in the land of grizzly and Sasquatch and man’s imagination for hairy things but we do not balance the scales of justice for our pretty little friend the bluefish.

And it is not just you Minister: I, in my small way, am responsible too. The last little bluefish of Paddle River is in a specimen bottle because of you and you and you and me too.

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**Letter regarding the October 2015 editorial “Letting the Fox Guard the Henhouse.”**

Hello Ian,

I was very disappointed when reading your editorial “Letting the Fox Guard the Henhouse” in the October issue of the Wildlands Advocate. It reads as though the Alberta Wilderness Association is alone in seeking to preserve the environmental integrity of our foothills country. Your snide allusions to the Alberta Off-Highway Vehicle Association are not worthy of your publication.

The Clear Water Landcare organization has selected Cal Rakach, President of the AOHVA as the recipient of their Environmental Stewardship Award in 2015. For justification of this decision I suggest that you learn of Cal’s activism on behalf of both ATV riders …and the environment, with simple browsing on the internet.

There is a need for better control of ATV activities in the wildlands. A need which has been recognized by the AOHVA. From a physical point of view they have worked at trail improvements, creek crossings and other features aimed at minimizing environmental impacts.

They have been co-operating with Clearwater County in designating optimum camping sites and posting signs calling for responsible use of the trail systems. AESRD has been active in clamping down on unauthorized motorized creek crossings, but otherwise control of damaging activities lacks clout.

Before dispensing with the AOHVA proposal in such a cavalier manner I would highly recommend some cooperative discussion involving AWA and AOHVA.

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**Editor’s reply**

Dear Mr. Mainland:

I am sorry if you misread my October editorial to suggest that I believe Alberta Wilderness Association is the sole champion of protecting and restoring the landscapes we are privileged to know and appreciate in Alberta. That wasn’t my intent and not my belief. Instead, I made two simple points. First, the Alberta Off-Highway Vehicle Association’s proposal that the provincial government give the Association the authority to manage and develop backcountry vehicle trails and camping areas abdicates the government’s duty to manage public lands. Second, such abdication or privatization of the stewardship duty will not promote the goal of ensuring that public land management respects the variety of interests and objectives any good policy should consider.

There was no allusion in my comments – the Alberta Off-Highway Vehicle Association and its dream of controlling a Delegated Administration Organization clearly were the focus of my comments.

You speak of “a need for better control of ATV activities in the wildlands.” I agree. That control should begin with establishing boundaries on the landscape for OHV use and respecting those boundaries. In January AWA, along with representatives from four other conservation organizations, reiterated my Association’s position that OHVs should be prohibited from operating in provincial parks, wildland parks, and Prime Protection/Critical Wildlife zones.

When the Alberta Off-Highway Vehicle Association also subscribes to that position I would be quite confident there will be the basis for the “cooperative discussion” you recommend. Then we can address the issue of where, in the remainder of Alberta’s magnificent landscapes, OHVs may be operated and under what conditions.

**Ian Urquhart**

*Editor*
The flood of 2013 remains ever-present in our minds as the decisions and land-use planning that have followed find many of us questioning large-infrastructure mitigation approaches.

Are an economic downturn and the continued increase in losses from disaster events, making us think differently? Eva Bogdan’s presentation explores findings on decision-making and land-use planning in a town with a history of flooding, High River Alberta, one of the communities most impacted by the 2013 floods.

Eva Bogdan has been studying and practicing at the cross-section of society and environment for 15 years, with all of its complexities and wonders, by which she continues to be fascinated and challenged. Eva is currently in her second year of PhD studies at the University of Alberta.

Stay tuned…a list of our summer hikes and other events will appear in the next issue of the Advocate.