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Cover Photo

Gail Foster captured "Horsetail Reaching for Sun," this issue's cover image, and the other stunning photos that grace this issue of the Advocate during AWA's guided hide to the Garner orchid fen last July. PHOTO: © G. FOSTER

Featured Artist: Gail Foster

With Calgary, Alberta as her home base, Gail feels blessed to be surrounded by such a picturesque and diverse environment. When she is in nature, she feels inspired, and connected, completely absorbed with the landscape and quiet.

Landscape and nature photography is what Gail considers her second opportunity to pursue her passion for photography. After eighteen-years as a successful wedding and portrait photographer Gail changed course to study and work in accounting and computers. Now she has once again picked up her camera to resume her passion.

Gail hopes the viewer will take time to explore her images and feel a connection with nature. She strongly feels that we will work to preserve and protect what we connect with emotionally. Creating those connections and promoting that preservation and protection ethic is her ultimate goal.

More of Gail's work may be viewed on her website: http://gailfoster.ca

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There's A Chill In The Air...

No, I'm not talking about the cool, crisp mornings so many of us enjoy as the days shorten. I'm talking instead about a less welcome chill, one that threatens freedom of expression and fair comment. A group called the Friends of Science (FOS) objected strongly to the sidebar, "With Friends Like These...," I wrote for the June/July issue of Wild Lands Advocate. They demanded a retraction, public apology, and the immediate publication of their five-page response to my 188 words. If AWA didn't comply we would "face further action." FOS now has invited anyone who shares their concerns to visit the Canada Revenue Agency website "to get more information or send a letter of complaint." (my emphasis).

Perhaps coincidentally, in August the Ethical Oil Institute lodged a complaint against AWA with the Canada Revenue Agency. It has requested the CRA investigate to determine if AWA is violating the rules regarding registered charities and political activity. This institute has lodged similar complaints against other environmental/conservation organizations. Its targets include the Sierra Club of Canada and the David Suzuki Foundation.

Where does the AWA stand in the face of such chilly winds? AWA will not apologize for making fair comment. It will not use its resources to give the FOS or any other "climate change deniers" a platform to publicize their views. So I do not plan to provide them with any more ink. For me, this discussion ends here.

With respect to complaints lodged against AWA with the CRA the AWA is very confident that, while unwarranted, any audit would find nothing amiss. AWA has always been careful to comply with the political activity requirements that come with being a federally-registered charity.

Thank you for your continued support as we carry out AWA's mission in the face of these chilling tactics.

Ian Urquhart, Editor

Conserving the Greater Sage-Grouse:

Learning from our American cousins?

By Ian Urquhart

mpressive. Wherever you look the signs of a healthy sagebrush ecosystem meet your eyes. Knee to waste-high clumps of sagebrush dot the landscape near and far. At your feet the shrubs offer vital shelter to native grasses forcing their way skyward out of the scalelike pattern of dry, cracked soil typical of semi-arid lands. Far to the east at the edge of the horizon you can make out cattle black specks alternately appearing and vanishing as they move among the sagebrush and graze. To the west a four-point buck emerges from a dry creekbed only to be swallowed up by shoulder high sagebrush. This landscape is delivering on the promise of a brighter future for mule deer, greater sage-grouse, and the hundreds of other species relying on this sagebrush ecosystem.

What's more impressive than the scene above is the partnership that's making it possible. Sadly, I'm not talking about a Canadian partnership. Instead this partnership and the landscape I'm imagining is an American one. Government agencies have partnered with ranchers and conservationists across 11 states to try to halt the dramatic decline of greater sage-grouse populations in the western U.S. Sagegrouse numbers are estimated to have fallen 90 percent from where they were 100 years ago. The Sage Grouse Initiative, the partnership that's been formed to halt and reverse this decline on private lands, suggests that perhaps only 200,000 birds remain of the 16 million sage-grouse that strutted across western landscapes before settlement. Fifty-six percent of the bird's

historic range has been taken away by one face of human settlement or another.

Today's American sage-grouse population is more than bountiful compared to the puny remnants of the greater sagegrouse hanging on by a thread in southeastern Alberta. Nonetheless, what may appear as bountiful north of the 49th parallel wasn't seen that way by the U.S. government over four years ago. In March 2010 the U.S. Fish and Wildlife Service found that listing the greater sage-grouse under the federal Endangered Species Act was warranted but precluded. This meant that, while adequate grounds existed to list the bird, an endangered species listing was precluded by the need to deal with other, higher priority species. The greater sage-grouse became a candidate for listing. Subsequent litigation in the U.S. courts requires the Fish and Wildlife Service to decide the question of whether the greater sage-grouse should be listed under the ESA by September 2015.

The Birth of the Sage Grouse Initiative

To some private landowners in the U.S. the *Endangered Species Act* is dark magic. Washington D.C. is their Lord Voldemort and Washington regularly concocts laws such as the ESA and the *Federal Land Policy and Management Act* to destroy their traditional ways of life. Outrage over federal control of much of the West's public lands and the use of these laws to reduce grazing on those lands helped fuel the original Sagebrush Rebellion against Washington in the latter half of the 1970s.



"Sage grouse is probably the largest conservation experiment that's ever been conducted in the United States."

Dave Naugle, Natural Resources Conservation Service.

The fear of more dark magic swept across the western U.S. in the wake of the 2010 Fish and Wildlife Service decision. This fear was that the Fish and Wildlife Service would recommend listing the greater sagegrouse in 2015 and draconian restrictions on public and private land activities would follow. "A listing of sage-grouse potentially impacts agriculture in a very significant, meaningful way," explained Tim Griffiths of the U.S. Natural Resources Conservation Service (NRCS), "as so much of the regulations could potentially impact those producers." Building on the NRCS's pre-existing support for sustainable ranching fear of the ESA sparked the birth of the Sage Grouse Initiative (SGI). This initiative, led by the NRCS, envisions a suite of voluntary conservation measures, developed collaboratively with landowners, which will be implemented on private lands in the American West. These private lands constitute 31 percent of the sage-grouse's range; the federal government owns 64 percent of the bird's range lands; states own the remaining five percent. By contrast private lands



The iconic greater sage-grouse mating display. PHOTO: © C. OLSON

constitutes somewhere between 13 and 20 percent of sage-grouse range in southeastern Alberta.

The Initiative on the Ground

Since its birth in 2010 the SGI has sought to improve sagebrush habitats across more than 15,000 square kilometres (6,000 square miles) of private lands in the western U.S. More than 950 ranches have joined the program. More than two-thirds of the private lands now benefiting from the initiative have incorporated conservation practices into grazing plans. The goal is to improve sage-grouse nesting, rearing, and wintering habitats without sacrificing the needs of cattle. The respective habitat requirements of cattle and sage-grouse may be very complementary. "When we developed this list of all the threats to sage-grouse and we had another list of all the threats that are facing our sustainable ranching in the West," said Griffiths, "the

lists were really one and the same."

"What's good for the bird is good for theherd."

Tom Sharp, Chair, Oregon Cattlemen's Association

NRCS officials such as Tim Griffiths pride themselves in the Service's longstanding commitment to work with landowners. It began with soil conservation efforts during the Dust Bowl days of the Dirty Thirties to today's determination through the SGI to develop grazing plans where both profitability and sage-grouse conservation are furthered. In addition to sustainable grazing plans NRCS also helps landowners establish conservation easements, remove invasive conifer species, and remove, replace, and/or mark fencing posing high-risks to sage-grouse. By the end of 2013 the SGI could boast that more than

800 kilometres of fences responsible for nearly 3,000 collisions with sage-grouse had been marked or removed.

The experience of the Delaney 44 Ranch in central Montana offers one illustration of the "win-win" possibilities the SGI may deliver. New fencing, grazing plans, water wells, and pipelines figure prominently there. The SGI-approved grazing plan rests 20 percent of the ranch for up to two years at a time. Resting pastures produced impressive increases in pasture growth. These pasture improvements and modified grazing rotations have improved the health and manageability of the Delaney family's cattle. "They now graze about 75 fewer head of cattle," *Beef* magazine reported in August, "but with higher profitability."

National Public Radio reported a similar story from the southwest corner of Montana. In the Centennial Valley ranchers participating in the SGI now graze their cattle in tighter groups; they're using portable, sage-grouse friendly, fencing to manage



Fading or coming over the horizon? In Montana greater sage-grouse are doing the latter. PHOTO: © C. OLSON

their cattle this way. Resting larger areas from grazing is increasing the growth of the types of vegetation sage-grouse need.

Protecting Ranchers from the "Unthinkable"

Participating in the Sage Grouse Initiative also will protect private landowners from having to take additional conservation measures in the event the unthinkable happens and the greater sage-grouse is listed by the Fish and Wildlife Service next year. These guarantees appear in the form of Candidate Conservation Agreements with Assurances (CCAA). The "candidate" refers to a candidate species under the ESA (such as greater sage-grouse since 2010). "Assurances" is the key word for ranchers; these agreements offer assurances to those who sign and implement them that a future listing will not subject them to any additional conservation measures or restrictions. If sage-grouse are listed the rancher's conservation obligations will go no further than what she already had agreed to voluntarily through the CCAA. The only conservation measure all enrollees in a sage-grouse CCAA are obliged to implement is to "(m) aintain contiguous habitat by avoiding fragmentation (e.g., do not subdivide property, consider conservation easements)." Other

conservation measures are identified and agreed upon depending on each landowner's circumstances.

"As a rancher,
I am excited that
the Harney Soil and
Water Conservation
District and leaders
of Harney County
worked with U.S. Fish
& Wildlife Service to
develop a tool that
can help preserve the
cultural and economic
activities of our rural
communities while
meeting the habitat
needs of sage-grouse."

Stacy Davies, Manager, Roaring Springs Ranch Two umbrella Candidate Conservation Agreements with Assurances have been established so far - one in Wyoming and the other in Harney County, Oregon. In Harney County the umbrella CCAA covered over one million acres of the state's best sagegrouse environment. Thirty-nine landowners, holding more than 250,000 acres, stood ready to enroll their lands under the CCAA when the agreement was signed in May. The SGI set aside dollars in Oregon for these ranchers to use to improve sagegrouse habitat. When the sun rises on this iconic western landscape it rises on a more certain future for ranchers and a brighter future for sage-grouse.

That Other Key to Rancher Participation in the Sage Grouse Initiative

Money – other than the threat of a future ESA listing federal funds have motivated nearly 1,000 ranchers to jump aboard the sage-grouse conservation train. The U.S. "Farm Bill" is sweeping, multi-year legislation, passed roughly every five years, that earmarks hundreds of billions of dollars in agriculture-related spending. The Congressional Budget Office estimated that, under the 2008 Farm Bill, the federal government would spend \$284 BILLION over the 2008

to 2012 fiscal years. Twenty-four billion dollars from this pot of gold was slated for conservation. From 2010 to 2013 NRCS spent \$247 million on SGI projects; these projects received a further \$107 million in matching funds from landowners and other SGI partners. Over four years \$354 million was spent in the western U.S. on efforts to conserve sagebrush habitat and to increase the greater sage-grouse population.

Tim Griffiths identifies the Farm Bill as a powerful lever to encourage "land rich, cash poor" ranchers to participate in sage-grouse conservation. Banks are not necessarily enthusiastic about lending ranchers the money they need to build new water wells and pipelines. Ranchers too may be reluctant to finance such an investment from their operating budgets. Neither constituency may want to devote funds to projects that may take a decade or more just to break even. The NRCS, through the SGI, steps in as the primary financier. If the NRCS can develop a mutually agreeable sustainable grazing plan with a rancher then the SGI will cost share the expenses of the improvement with the landowner. Generally the costs are shared 75/25 with the Department of Agriculture agency paying the lion's share of the project. NRCS gets a commitment to long-term ranching sustainability, the sagegrouse get better, healthier habitats and the rancher gets a better chance at profitability

and the opportunity to see his children carry his legacy into the future.

Time to Transplant?

Gardening friends tell me that fall is an excellent season for transplanting perennials. Maybe it would be a good season to transplant an American program like the Sage Grouse Initiative and introduce it to the semi-arid landscape of southeastern Alberta.

I'm happy to offer a tip of my Stetson to the Sage Grouse Initiative. This proactive program and its wide-ranging partnership should be applauded. Blinkered thinking - the idea that all human activities must be prohibited or regulated strictly in order to restore greater sage-grouse - misses the mark entirely. First, it denies the possibility that sustainable ranching may be complementary to sage-grouse conservation. Second, it destroys any chance of building alliances and partnerships to pursue a shared vision of what the landscape should look like and what activities that landscape should host. Does AWA want ranchers off the land? Absolutely not. AWA recognizes, following the scientific research out of Montana, that grazing has an important positive role to play in the silver sagebrush ecosystem. This research, as AWA's Cliff Wallis emphasized, is "showing better productivity on grazed ranges than they are on ungrazed ranges." If we can't have bison doing the grazing, cattle are a good second choice.

Embracing the approach championed by the SGI means paying ranchers to conserve landscapes. Do you want your taxes spent this way? When private landowners pursue their livelihoods in ways delivering significant public or collective goods this strengthens the case for public financial support. Sage-grouse conservation is such a public good and the cost-sharing features of the SGI reflect this understanding of what the private interest/public good relationship could look like. Canadian governments should embrace sustainable ranching in southeastern Alberta and southwestern Saskatchewan that attacks habitat fragmentation.

"In stark contrast is the Canadian government's delay and minimal action."

Environmental lawyer Meredith James comparing American and Canadian efforts to conserve greater sage-grouse.

A baby brother to the SGI arguably already lives in Environment Canada. It's



Historically plains bison shared the sage-brush ecosystem with greater sage-grouse. PHOTO: © C. OLSON

the Habitat Stewardship Program for Species at Risk. Approximately \$10 million is spent annually across the country to support actions aimed to protect species at risk and enhance their habitats. The federal government's greater sage-grouse emergency protection order declared this would be one of the programs Canada will use to "promote and support effective voluntary stewardship measures." It's an opportunity for those ranchers who talk about sustainable ranching to walk that talk. From AWA's experience the federal government needs to make it much easier for interested parties to access the support that's available.

More generally, sage-grouse conservation is an opportunity to create what a recent book about conserving working landscapes in the U.S. called "sustainable working landscapes." Working landscapes are ones where renewable resources such as grass are the foundation for livelihoods. Sustainable means these landscapes are used in ways that allow the resources to renew themselves and do not compromise biological diversity or ecological integrity. The SGI and a beefed up Habitat Stewardship Program could help seize this opportunity.

But before urging government to steer tax dollars towards ranchers who will help craft these sustainable working landscapes in Canada's sage-grouse country I need, like ranchers in the U.S., assurances. My needed assurances are different though - I need to know the ranching operations we're going to help finance are really committed to sustainable ranching. Ranchers who nurse at the breast of the petroleum industry don't practice sustainable ranching. Those who take money from petroleum and pipeline companies operating on their private or leased lands benefit from the activities responsible for the noise and landscape fragmentation that's darkened the horizon for sage-grouse. They can't have it both ways.

As promising as the Sage Grouse Initiative might be it's too late to rely primarily

on voluntary stewardship in Canada. It's disingenuous to suggest that even a Canadian SGI flush with cash is all Alberta's puny sage-grouse population needs to be restored to a healthy, self-sustaining level. That counsel is stone-blind to reality; the Calgary Zoo pegs the entire Canadian population at less than 138 birds. So desperate is the situation here that we import birds from Montana and hope wistfully they will somehow survive in a landscape poisoned by fragmentation. The Calgary Zoo's captive breeding program also has been enlisted during these desperate times. It's trying to put more birds out onto the landscape that fragmentation has turned from friend to deadly foe. While the zoo is optimistic its breeding program can play a positive role in sage-grouse recovery this year's breeding program results don't appear to have been very encouraging. How many of the 11 chicks hatched earlier this year are still alive? All the zoo will say now is that they "have lost some chicks, however, it is too soon to comment with specifics." This unwillingness tells me the news won't be good. I hope I'm wrong.

Desperate times call for desperate measures. Maybe the U.S. doesn't need an ESA listing in order to brighten the future of greater sage-grouse. Canadian grouse, given their dire straits, certainly for years have needed an emergency protection order under the federal Species at Risk Act. Furthermore, it's long past time Canada's federal government started to show the financial commitment the U.S. federal government makes to the protection of endangered species. In the 2013 fiscal year Washington spent \$1.67 BILLION on endangered species; Ottawa spent a paltry annual average of \$17 million on species at risk programs over the 2008/09 to 2011/12 fiscal years. It's a shameful comparison.

When it comes to greater sage-grouse the accompanying sidebar suggests the emergency protection order's restrictions are entirely complementary to sustainable ranching on private and public lands. Given all the major accommodations the emergency protection order offers to ranchers it's hard to understand why some ranchers in southeastern Alberta met the order with howls of outrage.

Like the perennially disappointed drought-stricken farmer who hopes for rain, I've hoped year after year that someday we might see some semblance of balance on Alberta's landscapes. I've hoped we'd see some real commitment from our governments to make our working landscapes sustainable ones. If Ottawa and Edmonton would follow the lead of their American cousins and generously support voluntary stewardship as well as enforce the emergency protection order maybe this hope finally will be realized.

Why the Greater Sage-Grouse Emergency Protection Order Doesn't Threaten Sustainable Ranching...

Does the Emergency Protection Order apply to private lands?

NO

Does the Emergency Protection
Order prohibit ranchers from
grazing their cattle on public lands?

Does the Emergency Protection Order require ranchers to graze

Does the Emergency Protection
Order require ranchers to replace
existing fences with sage-grouse
friendly fencing?

their cattle differently?

this noise prohibition?

During the mating season the
Emergency Protection Order
imposes a noise prohibition from
dusk to dawn. Does the Order
exempt people traveling to and
from their residence or their
agricultural operations from

YES

Laws and Landscape Planning:

Canadian Examples for Woodland Caribou Management

By Carolyn Campbell, AWA Conservation Specialist

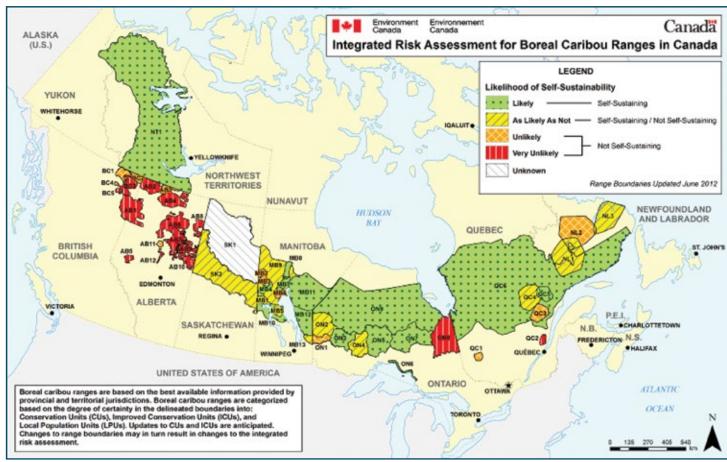


conditions are, strangely, not defined in Alberta law, but 'Endangered' generally means at imminent risk of local or general extinction, while 'Threatened' means a species is on the path to becoming endangered unless threats to its health are removed.

Woodland caribou status, unlike that of some other species, tells us a great deal about the health of the larger landscapes they traverse. They require intact old growth forests and peat wetlands. Caribou need large, relatively roadless areas within older forests so

that they can minimize the overlap of their range with those of deer, moose, elk, and predators such as wolves and bears. They are therefore a valuable indicator of ecosystem health in the boreal and foothills regions they inhabit.

The map below, from the 2012 federal boreal caribou recovery strategy, underlines that the sweeping band of boreal woodland caribou ranges across Canada is notably fragmented in Alberta. This is due both to historical and contemporary factors. Agricul-



The risk assessment map from Environment Canada's 2012 recovery strategy for Canada's boreal woodland caribou. Alberta's caribou ranges are the most fragmented and least likely to support self-sustaining caribou populations in Canada.

tural settlement in the Peace River corridor belongs to the first category while the growing footprint of forestry, oil, gas and oilsands looms very large in the second category. The map also reveals that Alberta populations are the least likely to be self-sustaining.

When it comes to increasing caribou survival prospects can we learn from what's happening on the ground elsewhere in Canada? Let's examine some of the caribou management approaches in place in other Canadian jurisdictions.

Provincial Species at Risk laws

Over half the provinces and territories with woodland caribou populations have their own 'species at risk' laws: Manitoba, Ontario, Quebec, Newfoundland & Labrador and the Northwest Territories. Each of these jurisdictions has listed the boreal woodland caribou as a species at risk under their law. Ontario also has an independent Environmental Commissioner office that reports directly to the legislature on the government's compliance with its own environmental laws.

Alberta has no species at risk law of its own, and needs one. University of Calgary environmental law professor Shaun Fluker wrote in March 2010: "In my opinion, anyone who seeks effective legislative protection for endangered species in Alberta must advocate for provincial legislation. This is because wildlife and its habitat are by and large property of the provincial Crown, and it is a general principle of constitutional law in Canada that the federal government cannot in substance legislate over provincial property under the guise of a regulatory scheme.... any meaningful attempt to protect an endangered species will impact provincial property and necessarily requires effective provincial legislation."

Fluker went on to write that Alberta's Wild-life Act doesn't create any legal obligations to implement the most common approaches to protecting endangered species such as critical habitat protection and recovery strategies. "[T]he absence of legal rules governing endangered species under the Wildlife Act means little transparency, no predictability,

and no accountability in government decisions pertaining to protecting endangered species in Alberta," he added.

Federal direction

In the absence of an effective Alberta law for species at risk, the federal *Species at Risk Act* (SARA) is the strongest legal support for Alberta's caribou. Unlike Alberta's *Wildlife Act*, SARA defines 'Endangered' and 'Threatened.' Under SARA, the *boreal* woodland caribou populations of northern and central Alberta, as part of a broader cross-Canada boreal population, are designated as 'Threatened.' In May 2014, the *mountain* woodland caribou that live in the foothills and mountains of west central Alberta and central interior BC were assessed by SARA scientist advisors as 'Endangered,' though officially they still are listed as 'Threatened.'

SARA demands a federal recovery strategy using the best available science to manage endangered and threatened species with a goal to recovery, where technically and biologically feasible. The recovery strategy should identify threats, critical habitat, and establish a timeline for range and action plans.

Scientists have determined woodland caribou populations in Canada to be technically and biologically feasible to recover. Politicians haven't shown the will to follow expeditiously this scientific advice. The federal boreal woodland caribou recovery strategy was released five years *after* mandated deadlines within the Act. It was released only after AWA and other groups took concerted legal action. We finally secured its release in October 2012. Now that it is out, it provides important direction for both federal and provincial authorities using best available science on the habitat disturbance thresholds we need to implement in caribou ranges.

The recovery strategy directs provinces to develop range plans on provincial lands within three to five years. The range plans will outline how the given range will be managed to maintain or attain a minimum percentage of undisturbed habitat over time. Habitat disturbance includes natural fire disturbance, as well as human disturbance buffered by 500 metres. The buffering of human

disturbance accounts for two circumstances: the increased likelihood of predation, as the disturbed habitat stimulates alternate prey species and creates predator access, and observed caribou stress and avoidance behaviour near human activity and linear features such as roads.

The recovery strategy management target set by Environment Canada is a minimum of 65 percent of total range disturbance. Some conservation groups, including AWA, saw this target as regrettably risky: according to the best available science, this habitat disturbance level only gives caribou a 60 percent chance of being self-sustaining. An 80 percent threshold for undisturbed range would have been preferable, giving caribou an 80 percent chance of being self-sustaining. Nonetheless, by setting maximum range habitat disturbance levels, the federal recovery strategy is a valuable step forward in a cumulative effects-based caribou management approach. It should guide all the provinces and territories in their next management

Manitoba's approach – best potential?

Manitoba's caribou approach likely has the best potential now, though it is not without concerns. Boreal woodland caribou still inhabit most of their historic range in Manitoba. The only significant exception is a section of their southern range lost due to human disturbance. Boreal caribou were listed as threatened in Manitoba in 2006 under their *Endangered Species Act*.

A draft Manitoba boreal woodland caribou recovery strategy was released for public comment in April 2014; public consultation wrapped up in early August and the final plan has not yet been released. The draft plan includes a declaration to protect and manage for 65 to 80 percent intact suitable boreal caribou habitat in each caribou management unit. This is a strong and positive commitment.

How well Manitoba will fulfill that pledge is less certain. Manitoba proposes to introduce landscape zones. It will be crucial to see how large the more protective zones are and



Mountain caribou, Jasper National Park PHOTO: © P. SUTHERLAND

how all the zones are actually managed. The key statement on zones in Manitoba's draft policy is: "Manitoba will ensure that protection and forest management planning supports conservation of large suitable areas of caribou habitat through the development of dynamic caribou habitat plans within management units along with large core areas where forestry does not occur. Forest management planning must provide for a sufficient amount and arrangement of currently suitable habitat and future habitat." It's worth considering these phrases carefully, because they may soon appear in Alberta.

The commitment to 'core areas without forestry' is crucial. In these areas, caribou habitat recovery should be the undisputed management priority. Before human settlement and industrial activities, woodland caribou moved within large overlapping home ranges based on the changing mosaic of a largely roadless boreal forest Fire, insects, and flood disturbances drove their move-

ments. AWA's view, noting Alberta's situation of highly disturbed caribou ranges, is that the whole range should be designated as a 'core area without forestry.' As well, minimum 20 kilometre-wide buffer zones should be established around the smaller ranges. Why do we take this position? Because Alberta caribou have nowhere but these remnant range areas to move within: potentially suitable areas outside their range are far more disturbed and fragmented. These core areas should be managed primarily towards maintaining relatively roadless older forests and wetlands. These areas would benefit many other old-growth-forest-reliant and wetland-reliant species. In the foothills and the boreal this would benefit threatened native fish such as bull trout.

It will also be crucial to see what other industrial activities Manitoba permits within these core protected areas: the goal should be to steadily reduce the footprint to achieve a maximum 20 percent total

disturbance level. In Alberta, oil and gas leases are regrettably grandparented into provincial parks and wildland parks. Even with this major compromise in protection, a path forward is possible. Alberta's landmark Hay-Zama Wildland Park agreement demonstrates that the petroleum industry's footprint in a highly sensitive wetland complex can be aggregated and reduced, then phased out, in an orderly way.

The 'dynamic caribou habitat plans' zone designation in the Manitoba draft plan may be a slippery term. It suggests zones where industrial-scale logging moves around and where caribou occupy the older habitat pieces within those zones. For this to work, it's crucial to have large areas where logged forests are left for well over 50 years. They must not be logged as soon as they become usable by caribou. Also, if the core protected zones are small, then young logged forests adjacent to them will stimulate alternate prey and predator populations and dynamics. This

will nullify the effect of the core area.

It is unknown how successfully caribou will recover in previously logged and roaded areas; it's risky to rely too heavily on these 'dynamic habitat' areas for caribou recovery. To soundly conclude that caribou habitat is recovered, caribou populations should be demonstrated to be actually recovering towards or maintaining self-sustaining levels. At its worst, this approach would facilitate moving logging too quickly throughout the range, all the while increasing cumulative habitat disturbance. Unfortunately, ENGO colleagues have told us that this latter outcome seems to be the intent of a similarly phrased policy being adopted in Ontario. We urge Manitoba (and Alberta in its turn) to do better.

Ontario – Badly Backsliding

Speaking of Ontario, before last summer it would probably have been considered the Canadian leader in caribou conservation. It passed a widely praised *Endangered Species Act* (ESA) in 2007. In 2009 its caribou conservation plan pledged to manage cumulative disturbance on caribou ranges using a precautionary approach to land use and resource development decisions.

But in July 2013 a major retreat occurred. Ontario approved companion regulations to its ESA that offered significant permanent and extended transition exemptions for industries and activities. In September 2013, several environmental organizations launched a lawsuit against the Ontario government on the grounds that the regulatory exemptions unlawfully undermine the ESA's very purpos-

es and do not adequately consider the regulations' impact on the ESA's listed species. In November 2013, Ontario's Environmental Commissioner issued a report called *Laying Siege to the Last Line of Defence: A Review of Ontario's Weakened Protections for Species at Risk.* The report outlined many concerns with these regulations. For the sake of Canada's woodland caribou and other at-risk species, we hope this backlash against Ontario's recent rollback of protection will encourage the new Liberal majority government to help restore Ontario as a more exemplary environmental manager.

British Columbia's Muskwa-Kechika still sets the standard

The landscape-level cumulative effects management approach of B.C.'s Muskwa-Ke-



Alberta's woodland caribou urgently need a genuine cumulative effects management approach such as that enacted in law for BC's Muskwa-Kechika Management Area. PHOTO: © D. CRAIG

chika region remains a model for managing caribou ranges and other ecologically significant regions. The Muskwa-Kechika Management Area was established by law in 1997, arising out of two regional land and resource management plans in northeastern BC. After extensive modelling and multi-sector consensus-based work, the Management Area established 11,700 square kilometres of protected areas free from industrial disturbance. It also established 32,400 square kilometres of special management areas which allow energy and other development to occur within a sustainable footprint. Several special management areas adopted legal land use thresholds before extensive tenures for industry were leased.

There are significant gas resources in the Muskwa-Kechika. In some of these management areas, the B.C. government placed a hold on granting new mineral license tenures for several years while it developed "pre-tenure planning" to manage and minimize the impact of energy development. Pre-tenure plans contain thresholds for allowable levels of impact to specific categories of wildlife habitat. They also require coordinated access planning (such as building roads) between operators on the landbase. Targets were developed for the following indicators: disturbance to specific vegetation communities; amount of habitat disturbed by quality class; areas of special biological significance; abundance and distribution of non-native species; proportion and amount of disturbed area restored; spills and releases; traditional resource use and heritage sites; consultation with First Nations; volume of oil and gas produced; royalties generated; and number of unresolved conflicts. This would be a good path to follow for the unfinished pieces of Alberta's land use planning.

Next steps in Alberta: Biodiversity framework?

The cumulative effects management in the Muskwa-Kechika sounds like what Alberta's regional plans under the Land-use Framework could accomplish if the Framework's initial vision is honoured. The Land-use Framework affirmed: "We have reached a

tipping point, where sticking with the old rules will not produce the quality of life we have come to expect. If we want our children to enjoy the same quality of life that current generations have, we need a new land-use system." Alberta has pledged to maintain and conserve species diversity province-wide as well as in the oilsands region, yet the first two regional plans, the Lower Athabasca and the South Saskatchewan, have not delivered crucial land management pieces.

To its credit, in August 2014 the Alberta government released its first proposed biodiversity management framework for stakeholder consultation. The framework will apply to the Lower Athabasca region of northeast Alberta. There are proposed indicators for terrestrial and aquatic habitats and species. For example, indicators include "amount of old forest land cover," "amount of core habitat [undisturbed, connected]," "amount of fen," and an asyet-undefined woodland caribou status indicator. The idea is to establish several cautionary 'trigger' levels for an indicator that activate escalating measures to ensure a threshold level is not crossed. An accompanying landscape management plan is also being developed. Within the LARP policy document approved in 2012 there was a commitment to identify and set triggers and threshold values for land disturbance.

The biodiversity management framework and landscape plan have the potential to greatly advance cumulative effects management in caribou ranges and beyond. It has the potential to moderate today's laissez-faire approach to industrial tenure leasing, and embed clear regulatory actions within licenses and other development approvals. Critical questions remain: will the thresholds and triggers be science-based? Will real on-theground management actions take effect once trigger levels are crossed? At this point, the future of Alberta's caribou, forests and wetlands are depending upon it.

Too Much Fiddling, Not Enough Action

August 2014 marks the one year anniversary of the Alberta government forming a multi-sector advisory group to advise on the first caribou range plans it is required to develop under the 2012 federal caribou recovery strategy. Alberta chose two west central populations for its first planning process: the Little Smoky boreal woodland caribou population, and the adjacent A La Peche, a mountain woodland caribou population. The Little Smoky caribou have the highest human-caused range disturbance level in Canada. That disturbance level (forest cutblocks, seismic lines, pipelines, and roads all buffered by 500 metres) is now estimated at 100 percent of the Little Smoky range, where caribou populations have been stabilized by massive wolf culls since 2005. The A La Peche is a mountain woodland caribou population recently assessed as 'endangered' whose winter ranges are highly fragmented.

AWA is an ENGO delegate to this advisory group. Despite the dire situation of woodland caribou, AWA still believes solutions are within reach. The energy industry could aggregate and reduce its footprint through directional drilling and pooled leases. Forest harvest could end in the ranges and surrounding buffer zones if forestry jobs could be reconfigured through intensive restoration efforts and regional wood fibre sharing. It's too early to tell what the results will be, but we are there to advance a science-based habitat-centred plan to recover west central caribou to self-sustaining populations. For the time being, Alberta supports this goal only on paper while it continues to approve high rates of new habitat disturbance on the ground within these ranges by forestry and energy.

Genuine Ecosystem-Based Forestry:

Impossible in Alberta?

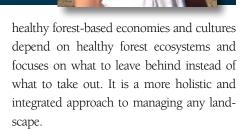
By Brittany Verbeek, AWA Conservation Specialist

he way forests are perceived and managed has changed throughout human history. Forests have been feared, loved, hated, and revered. They have been viewed as a home for evil spirits, a symbol of purity and unspoiled nature, and an obstacle to development. Along with natural disturbances, humans have shaped forests and relied on them for all basic survival needs and many psychological needs. Long before Europeans arrived, many First Nations managed forest growth with controlled burning to regulate plant and animal life. For several hundred years before the advent of industrialized commercial forestry, European settlers in Canada viewed the forests as inexhaustible and continuously cleared trees for more desirable land uses, mostly homesteads and agriculture. Since large machinery and technology was employed to log forests on a much larger scale, our seemingly unlimited forests across the country were shrinking rapidly. By the mid-1900s, Alberta was one of many provinces in Canada that adopted the 'sustained yield' model (SYM) that emphasized timber production as the primary forest value. Forest practices under SYM normally utilize clearcut harvest systems with zero retention so that all forested land is sustaining a perpetual yield of timber to the fullest degree of its productive capacity. In more recent years recognition has grown that sustained yield principles fail to adequately address the maintenance of ecosystem functioning, species diversity, wildlife habitat, and ecological services.

The Alberta Forest Conservation Strategy (AFCS) was a process developed during the 1990s to resolve a lack of clear social ex-

pectations of forest management, a growing public interest in non-timber forest values, and national and international commitments to environmental protection. The AFCS promised both collaboration between different industry users to minimize the impact of human activity on the landscape and the implementation of ecosystem-based management (EBM). Despite the potential for a new management paradigm, policies such as AFCS were heavily criticized because they lacked regulatory mechanisms to ensure proper implementation and accountability. Without these elements, forest management in Alberta remained largely driven by sustained timber yields.

The term ecosystem-based management is now used frequently, and seems to be the preferred greenwashing term for the government's forestry division and logging companies alike. But what does it actually mean? The Silva Forest Foundation characterizes EBM as using the precautionary principle and adaptive management. It recognizes that



The shift from SYM to EBM may have occurred to some extent on paper as more policies adopt the language but whether it has happened in Alberta's forests as opposed to on bureaucrats' desks is not always apparent. Many believe practices under current policies like Forest Management Agreements (FMAs) and the Alberta Forest Products Roadmap to 2020 are still based on the foundation of securing a continuous supply of fibre. Ecosystem functions are a far less important priority. Relying on logging companies to manage forests creates a conflict of interest when it comes to respecting ecosystem functions. Companies are unlikely to make decisions that will adversely affect their financial bottom line and, ecosystem functions are not a high priority.

Ecosystem-based Management (EBM): strategy for the integrated management of land, water and living resources that promotes conservation and sustainable use in an equitable way. An ecosystem approach is based on the application of appropriate scientific methodologies focused on levels of biological organization, which encompass the essential structure, processes, functions and interactions among organisms and their environment. It recognizes that humans, with their cultural diversity, are an integral component of many ecosystems.

Decisions Adopted By The Conference Of The Parties To The Convention On Biological Diversity At Its Fifth Meeting, Nairobi 15-26 May, 2000 (UNEP/CBD/COP/5/23)



Poor logging practices, seen here in the absence of any vegetation buffer along a road built by Spray Lakes Sawmills in the Porcupine Hills, leads to erosion into the adjoining stream. PHOTO: © G. RIDDELL

Taking a look at government websites can be deceiving because they might not give you the best picture of what is happening on the ground. The Alberta Government website likes to use the phrase "world class" in many of its statements around forest management. They claim to maintain sustainable, world class management. Peter Lee, Executive Director of Global Forest Watch (GFW), paints a much drearier picture with the new GFW report released on global forest loss. According to the report that uses satellite information from Google and the University of Maryland, industrialization of Alberta's eastern slopes has resulted in extensive forest loss between 2000 and 2012, more than double the Canadian forest loss average. In a recent AWA presentation, Peter gave Alberta a score of five out of twenty-five in forestry using four indicators: information (availability, transparency, and reliability), conservation (protected vs. harvested, and threatened species recovery), stewardship (forest loss vs. gain), and First Nations (cumulative impacts, meaningful consultation). Alberta may benefit by looking at other jurisdictions to

see how they are managing forested public lands.

British Columbia: A Community Forest Model

The Harrop-Procter community forest tenure is situated in southeastern BC, adjacent to West Arm Provincial Park in the West Kootenays. It takes its name from the two villages, Harrop and Procter, that are encompassed by the forest tenure. Its 11,300ha area is mostly mature forest composed of cedar, hemlock, and Douglas fir, with fairly homogenous stands due to a large fire about 100 years ago. In the 1970s, community members became concerned about the quality and quantity of their domestic water source yet commercial logging plans went ahead and their concerns were ignored. After many years of battles, blockades, meetings, and park proposal rejections the BC Government granted seven pilot community forest tenures across the province. Harrop-Procter was one of them. The governance was set up as a community cooperative with board members to run the logging operations and an arms-length watershed protection society.

Of course not everyone agreed on all aspects of an EBM model but there was wide agreement that watershed protection was the absolute top priority. They wanted to maintain large areas of intact forests for non-timber uses, headwater security, and to provide wildlife habitat. Their principles included mimicking natural disturbances by maintaining ecological integrity and establishing a protected areas network with connectivity for wildlife. Years before harvesting, rigorous ecosystem-scale monitoring and inventory occurred.

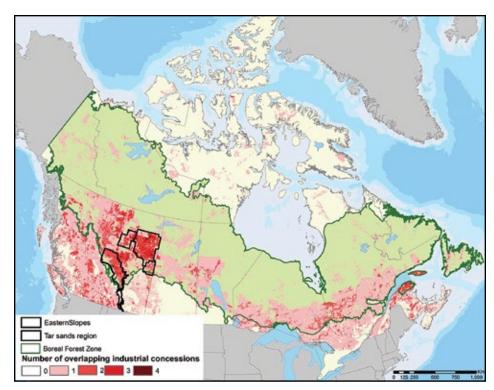
A major difference between timber-based forestry and ecosystem-based forestry rests in the planning processes. EBM planning doesn't ask how much can we log but instead bases the extent of logging according to what is left to log once all protection values are met – set aside all ephemeral and permanent surface water, wetlands, and ground water recharge areas, sufficient riparian buffer strips, species at risk critical habitat, old growth areas, and wildlife corridors. By doing the mapping and planning

this way, Harrop-Procter protects 70 percent of the landscape which means 30 percent is the harvestable area. They employ alternative harvesting methods to clear cutting in order to reduce the harvesting footprint. They also wanted to create a value-added piece to their business model so they built a small mill which has created one job per 1000m³ compared to the BC average of 0.7 jobs per 1000m³. Because it is community run, town people take great pride in the balance they're able to strike between the forestry business and forest preservation and enhancement. This community forest is a "win-win" proposition. It's following a business model that is generating a high ratio of jobs per wood harvest volume to support the local economy and is ensuring the long-term sustainability of healthy forest headwaters. Throughout their approach to tenure management to date, economic growth has been pursued very cautiously to ensure their underlying ecosystem principles are not compromised.

Fish, Forests and Flood Resiliency Forum

On June 26, 2014, AWA hosted a forum to bring together conservation community colleagues and experts from several disciplines including biology, forestry, ecology, law, land use planning, economics, and strategic modeling. The focus of the forum was to discuss past Eastern Slopes land use decisions, the present state of Alberta's forested headwaters, and future opportunities to improve land use management. The forum combined three broad topics – Fish, Forests, and Flood Resiliency – to demonstrate that they are intrinsically linked and should not be discussed in isolation.

Ryan McDonald, a forest hydrologist and speaker at the forum, told us that in general, forest harvest changes the soil's moisture regime and increases runoff, sedimentation into waterways, peak flows, and water temperature. Yet each watershed can respond uniquely to logging due to local characteristics such as slope, elevation, size, geology, drainage density, groundwater contribution, and runoff timing. Extensive monitoring and inventory should be completed around



Alberta's Eastern Slopes compares poorly with the rest of Canada with respect to the extent to which industrial tenures overlap. Photo ©: GLOBAL FOREST WATCH CANADA (Retrieved from http://www.globalforestwatch.ca/node/204)

each watershed when forest harvest is proposed.

David Mayhood, an aquatic ecologist, emphasized in his remarks the need to move infrastructure away from Eastern Slopes water systems and maintain connectivity between stream flow and its landscape. Without intact riparian vegetation in forested headwaters, water quality degrades and flood risk increases.

Dr. Marty Luckert, a University of Alberta forest economics professor, told us the global forestry industry is increasingly based on large plantations in climates that grow trees quickly. This places Canada at a disadvantage that increases the farther north that logging occurs, yet research continues into the viability of poplar plantations in Alberta. He challenged the forum to consider introducing exotic tree species on public lands in Alberta and argued that a move in this direction could have substantial ecological benefits through reducing the size of forestry's footprint and lowering the costs of caribou preservation.

One major theme of the forum was the need to limit total land use impacts on our forested headwaters. The status quo of forestry oper-

ations along Alberta's eastern slopes may not have as severe implications on the ecological stability of the landscape if that was the only human disturbance occurring. The reality is that forest harvesting is one of many land uses occurring on the same landscape. Both Brad Stelfox and Peter Lee, two presenters during the forum, reported that Alberta has one of the highest rates of overlapping land tenures in Canada. It is essential to consider cumulative impacts on this landscape. For decades, AWA and other environmental non-government organizations have advocated for reducing industrial development along the Eastern Slopes and emphasizing responsible low impact recreation and a large protected areas network. But, as Brad Stelfox pointed out, the decisions Alberta's growing population will make about where to live may put another very significant pressure on the Eastern Slopes. More and more people building permanent homes in the Eastern Slopes will present a very significant policy challenge.

The day and the evening of the forum ended off on an inspirational and positive note. Pamela Dykstra shared the history and success story of the Harrop-Procter Community Forest discussed above.

Priority Eastern Slopes Management Principles

Throughout the one-day forum, the following principles were discussed: they should play a key role in guiding decision making around Alberta's forests. None of these principles are new but they need to be in the forefront of decision makers' minds.

- Human vulnerability and damage risk from flooding is a land management problem and we need to treat it as such.
- We need to emphasize science-based outcomes with practical solutions.
- The pace at which we better understand ecosystems is incredibly slow compared to how fast we change them. The precautionary principle should therefore be applied in all land use decisions.
- Limits to human access and development should not be seen as negative but rather as opportunities to preserve our natural capital.
- Climate change will have significant impact on the function of our forests and needs to be an important consideration in any present and future decision making.
- Full cost accounting is critical when evaluating development along the Eastern Slopes; too often ecosystem services are undervalued or disregarded completely.

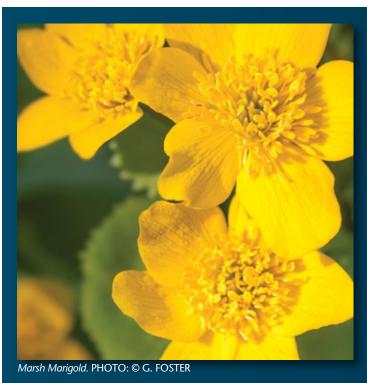
 Alberta needs to learn from other jurisdictions; we must discover and implement better management options that have been successful elsewhere.

Opportunity in Alberta for Community Forest Pilot Projects

Based on a model similar to the Harrop-Procter Community Forest AWA believes ecosystem-based community forest pilot projects can and should be established in Alberta. The Harrop-Procter Community Forest has accomplished true ecosystem-based community forestry with high job creation as a successful alternative to the timber supply-based forestry currently entrenched along the Eastern Slopes. This community forest model would allow watershed protection and forest ecosystem integrity to be the top priorities while still creating local jobs. The area under the community forest agreement would undergo ecosystem-based conservation planning to understand the dynamics of the specific area, with extensive sampling, mapping, inventorying, and monitoring prior to any harvesting. Areas within the tenure would then be set aside to establish and protect buffers around surface water, groundwater recharge areas, species at risk critical habitat, wildlife corridors, old growth trees, and steep escarpments. What is left over would become the total allowable forest harvest area. The precautionary principle would be applied when proceeding with growth and development of timber harvesting. Using the Harrop-Procter model may be the best way to achieve true ecosystem-based management and would help fulfill the mandate for EBM that Albertans believe the Government of Alberta must uphold.



Pamela Dykstra, from the Harrop-Procter Community Forest, speaking at the Fish, Forests and Flood Resiliency Forum about ecosystem-based community forestry. Photo ©: C. OLSON





How Great Was My Valley

Editor's note: The following essay was inspired in part by Christyann Olson's reflections on growing up in the Crowsnest. Her article appeared in the June issue of the Advocate.

By Joe Lothian

grew up in the Crowsnest Pass area of Southern Alberta and I lived on the edge of a wilderness of my imaginings. It was a wilderness of mountains, hills and valleys, of creeks and rivers, the haunt of bear and cougar, the pasture of deer and elk, a place where moose browsed willows and coyotes called to the moon. Mist wreathed peaks sheltered sheep and goat, hawks and eagles rode the thermals and surveyed the panorama of my wilderness beneath their wings.

I was to learn later that it was not a wilderness at all, man's footprints were there, not large or heavy but evident in the horse trails herding pastured cattle, the scorched rings of old campfires, the lynx log traps of early trappers and the remaining decaying stumps of those forest giants harvested through selected logging. To a boy growing up on the fringes of this imagined wilderness my knowledge was second hand and sketchy. I knew that in the back forty of the rock ranch I grew up on there was a wireline winding its way off into the hills. I learned the wireline connected the Ranger Station in our town to a distant Ranger Station deep in my wilderness. I also knew by hearsay that during the summer months a fire lookout was staffed on the top of Livingstone Mountain. My imagination fancied myself manning that lofty lookout. As a boy I had an insatiable appetite for adventure stories and my mind peopled my distant wilderness with the characters of my favourite books. From my imagined high mountain lookout I could visualize Jean Isbel gliding through the sun speckled pines on the trail of the Jorths or "Deathwind" tracking Wingenund, the sachem of the Delawares, through the forest. I saw Davy Crockett grinning down a bear. Such are a small boy's fantasies.

The wilderness of my imaginings has been civilized by progress. In the interest of tourism and fire suppression years ago the government of the day built a road through it. I speak of the Livingstone Valley and the creeks and rivers that feed the Livingstone before it joins the Oldman and cuts through the mountains. On the plains the Oldman feeds the South Saskatchewan, the river that in turn nourishes the larger Saskatchewan. The waters of my wilderness flow into Lake Winnipeg before spilling into the Nelson on their way to Hudson's Bay. There I imagine they wash the bones of Henry Hudson.

Let's not forget the fathers of these waters, the mountains hoarding their snowpacks through the long winter to flush out the spring run-off, to maintain the deep pools and the sparkling riffles favoured by a slash jawed cutthroat. The Crowsnest, Window Mountain, Beehive, Livingstone, and their cousin ridges, Cabin and Sugarloaf are among those that stand out for me.

Then there are the marching ranks of lodgepole pine, and spruce, greening the valley bottom and sometimes climbing to the crest of the ridges. There are the alder, the willow shading the running streams and the stands of creek side big green timber, moss festooned and growing out of the windfall remains of their ancestors. This was a part of my wilderness before the advent of the clear cut and a political policy that sees the forest as little more than fibre. Too much of what remains is threatened by the march of progress. Some march, some progress!



It was, it still is a wonderful valley to visit. Once it was a paradise for hunting and fishing; now it is over hunted, over fished, and over traveled. I retain a sense of proprietorship when I venture into my remembered wilderness that will be forever with me. I know it belongs to all but I still resent the intrusion of others into my valley, trampling on the memories I share with family and friends. I resent the roads beyond roads, I resent the evidence of capped gas wells, of clearcuts, of trail bikes and quads cutting trails through meadow and bush. That is the reality of my wilderness now, but today's compromised picture does not erase the fond memories of another time. Ah Wilderness! And now a road runs through it.

That road is the forestry trunk road, graveled and well maintained. It gives access to all and perhaps that is as it should be. Before the road was built access was by horse-back or by Model A's with enough clearance to scrabble over rocks and light enough to push or wrestle through river fords or out of bog holes. And then there were the occasional mechanical breakdowns that demanded the skills that came with graduating from the Haywire Technical School. God bless my cousins for having both the vehicles and the skills needed to keep them on those tracks in the foothills.

My first explorations into my wilderness were by foot or by horseback. Later they came in a cousin's Model A. Those were magic days indeed. As the years rolled on growing prosperity changed my access to the Livingstone – from a car and tent, to a trailer and to the ultimate camper's degradation, a motorhome.

Today my valley is no longer a wilderness, except perhaps to the youngest among us, but it still is beloved. It is the summer cabin of our family where we are free to pick a different creek or a different campsite each time we venture into the Livingstone Valley. This time away from the city is a time of renewal, family, and companionship It's time that makes life sweeter. Like the Livingstone's waters the stories flow, knitting the generations together. Recounting these memories is how we pursue happiness.

Yes, the Livingstone Valley has changed. The mark of man is well writ on what was once my wilderness. The logging industry has pushed their roads up the creeks to harvest the old growth forest. When the old growth is gone they chop away at the smaller timber, timber that a generation or two ago was too small to cut. Main roads spawn smaller roads in watersheds where bull trout once spawned. Quads chew through the timber; trail bikes carve their paths through the sensitive sod of the open ridges.

Some wise philosopher once wrote you can never go home again. He might have added that you can never go back to what was. I reluctantly accept that. My memories sustain me. I was in a fishing paradise. In hindsight I wish that paradise was regulated more strictly than it was. Instead of fishing

with bait I wished I'd followed the example of those purists, the fly fishers. In retrospect, I regret not following their example of casting a fly and doubling the pleasure of landing a two pound cutthroat with a split cane rod rather than a steel telescope rod, a baited hook and a weighty sinker.

We fished for trout during the summer months working the creeks in accordance with the regulations that closed different parts of the watershed in alternate years. That was government policy to protect the fishery. I thought it worked. A baited hook cast into a pool seemed always to attract a greedy small bull trout to your offering before a cutthroat had time to put on a napkin. We had little respect for Alberta's now provincial emblem in those early days. Those greedy little bull trout were thrown unceremoniously back into the bush as being of no account. I hope the current regulations protecting the bull trout, "no black, put it back" and the evidence of the occasional large bull trout patrolling logjams suggest the prohibition is having a salutary effect.

The orange slashed cutthroat were the fish of choice in those days and they were plentiful and of a size to grace any creel. These remembered cutthroats too are disappearing from the creeks of my valley.

When the rods were put away the rifles

were oiled and sighted in. Hunting season was about to begin. A hunting license was a permission to hunt, there were no draws or tags, there was a season on deer, on elk, on moose, on sheep, and goat. There were limits of course but a winter's larder could be achieved on one successful hunt. Hunters awaited the first heavy snowfall to drive the big game from the high ridges to the valley bottoms and the horse parties went forth to collect nature's meaty bounty. It was not an uncommon sight to see a returning party moving through town with the carcass of an elk or deer anchored to the pack of a skittish horse. My valley had much to offer and before the road ran through it, access was limited to the resourceful, to those with a love for the great outdoors and the wonder of my wilderness.

All past is prorogue and one cannot go back again. I want to take you back into that past to share with you the stories of my wilderness, of my valley, to invite you on a journey to remember a time now past. That time cannot come back again except in the memories that enliven a campfire gathering, lighten a long winter evening, or raise a chuckle in a shared recollection.

Joseph is a retired coal miner and oil patch employee who has fished the Livingstone Valley and adjoining creeks for more than 70 years.



Conservation Corner:

New Research Identifies Breeding Grizzly Bear Habitat

By Niki Wilson

hrough decades of study biologists have learned a lot about threats to grizzly bear survival. This knowledge means that management efforts can in theory focus on reducing mortality in order to protect populations. While important work is still being done in this area, for grizzly populations to persist into the future wildlife managers also need to to focus on conservation at the other end of the lifecycle: habitat important to breeding females.

So says Jason Fisher, a senior ecologist with Alberta Innovates-Technology Futures. Recently, in a study co-funded by Alberta Parks, he and colleagues Matthew Wheatley and Darryl Mackenzie developed a method to identify habitat preferred by female grizzly bears with young.

"We wanted to create a tool that we could, with some accuracy, chart where breeding females exist on the landscape," said Fisher.

Using photos of female grizzlies with young collected systematically by remote cameras

throughout the Willmore Wilderness Area, the researchers calculated — with 98 percent confidence — how often breeding females used various landscape types.

"We found breeding grizzly bears more often in high alpine areas above the tree line, but below the rock line, in that beautiful, shrubby, open habitat that everybody loves to go hiking in," said Fisher, who adds that grizzlies were found less often in mid-elevation conifer forests and low elevation wetlands.



Grizzly sow and cubs on a late summer morning PHOTO: © ALBERTA INNOVATES – TECHNOLOGY FUTURES; ALBERTA PARKS

Though the results do not indicate why the females are choosing the high elevation areas identified in the study, Fisher said it could be for a number of reasons, including good forage, like berries and other nutrient rich food. It could also be due to the female's avoidance of males at mid-elevations, given the tendency of male bears to kill cubs when they encounter them.

"In the big picture," Fisher says, "we're less concerned with understanding the mechanism, and more concerned with understanding how important those high elevation habitats are for breeding grizzly bears."

Fisher suggests this is especially important given the "tree line creep" occurring as a result of climate change. As tree line slowly moves up with warming temperatures, Fisher notes that ongoing research suggests there has been a reduction in alpine habitat in the Canadian Rockies.

He wonders what that will mean for breeding grizzlies. "Are they going to lose more of that preferred habitat, and will that manifest in a decrease in the rate at which they're breeding? It generates more questions that we think need looking into."

This study will be replicated in southern Alberta in Kananaskis and on the east slopes

of the Rockies. Says Fisher, "There is more human disturbance down there – lots of recreational activity, seismic lines, cut blocks, and mining, etc. So we're going to do another analysis to see if breeding females are more or less likely [to occur] in relation to that disturbance." That analysis will be ready in the Spring of 2015.

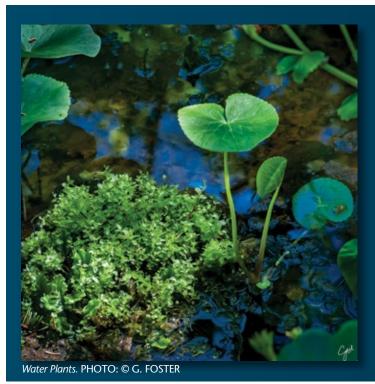
Fisher hopes that eventually there will be an Alberta map that identifies habitat for breeding females, suggesting priorities for protection and management.

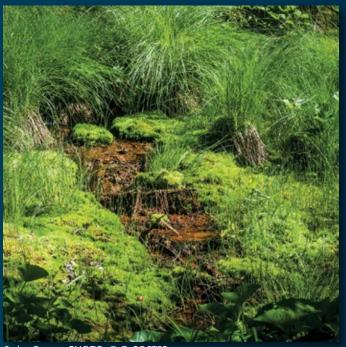
"This research shows that it's not just about making sure that grizzly bears aren't getting knocked off by poachers, or by managing access and railway lines, but also about making sure grizzly bears have enough places to produce cubs to replace those losses."

Niki Wilson is a multi-media science communicator and biologist living in Jasper. Visit her at www.nikiwilson.com



Grizzly sow and her cubs do some tree rubbing during an early July evening PHOTO: © ALBERTA INNOVATES – TECHNOLOGY FUTURES; ALBERTA PARKS





Focus:

Alberta's Species-at-Risk

By Nigel Douglas



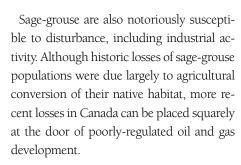
For the past several years, AWA has been working hard to raise the profile of the greater sage-grouse, arguably the most endangered species in the whole of Canada. Regular *Advocate* readers will be all too familiar with the desperate plight of this wonderful bird that has been driven to the edge of extirpation in Canada. But here we will look beyond the sad picture of mismanagement which has got us to where we are today to have a look at the actual bird itself: what is this bird that all the fuss is about?

The greater sage-grouse in particular is a strikingly imposing-looking bird. Picture a small turkey. Give it a brownish-black body, mottled with grey, and a jet black belly. Add to this a massive Elizabethan-style ruff around the neck and a large throat sac which inflates like a balloon. Finish off with a pair of bold, arched yellow eyebrows, and a long, erect, spiky black and white tail, and you are starting to get the picture. As if this appearance is not enough, the males gather together in the spring in communal "leks" where they dance and strut to impress the watching females, all the while emitting a bizarre series of popping and whistling sounds. The females lack the eccentric markings and behaviour of the males, but are still large and impressive birds. (A sage-grouse display is a truly breathtaking spectacle: search for "sage-grouse" on Youtube.com, sit back, and enjoy the show!)

There are two species of sage-grouse: the greater sage-grouse, *Centrocercus urophasianus* and the *Gunnison* sage-grouse, *Centrocercus minimus*. The greater sage-grouse

is the largest grouse species in North America (the Gunnison sage-grouse is about a third smaller). Following the loss of historical populations in B.C., sage-grouse in Canada are now restricted to the far southeastern corner of Alberta and southwestern Saskatchewan. South of the border, they are also found in 11 states in the western United States.

In Canada, the greater sage-grouse is found in the mixed grassland ecoregion, a warm, dry region where the native vegetation has now been significantly reduced. Canadian greater sage-grouse are highly dependent on silver sagebrush, which constitutes 47 to 60 percent of the adult diet in the summer and 100 percent in the winter. The species has very specific habitat requirements at different times of year, including habitat for breeding, wintering, displaying and chick-rearing. If any one of these subtly different habitats is not available then the species will disappear.



As with many grassland rarities, Alberta and Saskatchewan mark the far northern extent of their range. Although there have been predictions that a warming and drying climate in future may lead to a northward expansion of Alberta's Grassland Natural Region, it may arrive too late for the imperilled greater sage-grouse. Based on historical accounts, there has been a 90 percent reduction in the Canadian range and a substantial decrease in the number of breeding locations.

The loss of sage-grouse from the Canadian prairies over the last 50 years has been



PHOTO: © C. OLSON

dramatic. From the 613 displaying males counted in Alberta in 1968, the population has plummeted to the 13 males counted in 2014. In Saskatchewan the picture is little better: just 18 males recorded in 2013.

The Sage-Grouse Partnership, initiated by AWA in 2013, offers some optimism that, with sufficient support from different levels of government, local communities and the environmental sector, it may be possible to bring the sage-grouse back from the brink. But only time will tell whether or not it will be enough for this charismatic species.

Quick Facts:

- Centrocercus urophasianus
- Federal status: Endangered
- Provincial status: Endangered
- Length: up to 75 cm
- Weight: Males up to 2.2 kg; females – up to 1.4 kg
- Interesting fact: The greater sagegrouse is the largest grouse in North America.

Loggerhead Shrike

The loggerhead shrike, like all of the shrike species is a bit of an anomaly. Though it is a "songbird" in every sense of the word, a strikingly handsome bird with a beautiful trilling call, it also possesses a raptor-like hooked beak which it uses to tear apart small mammals and birds. Known as the "butcher bird" it is famous for impaling its victims on thorn bushes and barbed wire fences, creating a gruesome larder to which it can return and feed at its leisure.

Loggerhead shrikes catch the eye. Adults show a bold pattern of dark grey upperparts with a long black tail and black wings. White wing patches are very conspicuous in flight and, when it settles, the striking black bandit mask shows very clearly. The solid black bill has a hook tip which hints at its predatory nature. The name *loggerhead* is a somewhat disrespectful reference to its large head in proportion to the rest of its body.

The loggerhead shrike - Lanius ludovicianus - is one of only two shrike species common-

ly occurring in Alberta (the northern shrike is more usually a winter visitor) and it is the only shrike species endemic to (living only in) North America. There are ten recognized subspecies of loggerhead shrike, but the prairie loggerhead shrike subspecies, *Lanius ludovicianus excubitorides*, is the only one to breed in Alberta. Approximately 15 percent of the world's prairie loggerhead shrikes breed in Canada – in Alberta, Saskatchewan and Manitoba – with the rest ranging south through Montana, Wyoming, Colorado, Texas and into northern Mexico.

Like so many of Alberta's endangered species, loggerhead shrikes are restricted mostly to the Grassland region of southeastern Alberta, with a few pairs in the Aspen Parkland. More than other grassland specialists, it requires structure to its landscape, particularly perches - trees, bushes, fence posts or telegraph poles - from which it can launch its hunting forays. Prey includes everything from ground squirrels to mice, lizards to larks, beetles to crickets. Shrikes also require dense scrub for nesting, such as willow or caragana. Nesting is a surprisingly quick process: eggs hatch after 16 days of incubation, usually in June. After another 16 days the chicks are ready to leave the nest and within 35 days of hatching the young are independent and able to forage for themselves.

The Canadian population of prairie loggerhead shrikes has been declining for at least 40 years; in Alberta there was a steady decline of around 1.2 percent every year between 1970 and 2009. Today the Alberta population is estimated at approximately 3,000 pairs. For migratory species, it is important to remember that they may only be summer visitors to Al-



Alberta prairie loggerhead shrike PHOTO: © C. WALLIS

berta. Protection of habitat on their breeding grounds in only part of the story: protection of their wintering grounds as well as migration habitat in between is also important. Relatively little is known about exactly where Alberta's shrikes overwinter, though it is thought to be in southwestern United States and Mexico.

The Alberta government lists the main threats to loggerhead shrikes as "habitat loss and fragmentation on the breeding grounds." It notes that "intensive agricultural practices have converted native grassland with shrubs and shelterbelts to cultivated fields, resulting in the loss of suitable breeding and wintering habitats."

In July 2014, the Canadian government published a draft Recovery Strategy for the LoggerheadShrike excubitorides subspecies in Canada, which was made available to public comment. AWA offered a number of comments in an attempt to help strengthen the final strategy. Most concerning was the proposed strategy's emphasis on "maintaining" shrike range and population, rather than seeking to recover the species. Having delayed 10 years from the initial calls to protect the species, the government's approach seems highly unambitious. Though there was an emphasis in the draft strategy on "protection and enhancement of suitable breeding habitat," very few concrete measures were laid out to explain how this will be achieved. Though AWA agrees that recovery of the species is "feasible" a great deal more commitment will need to be made before this recovery could be considered likely.

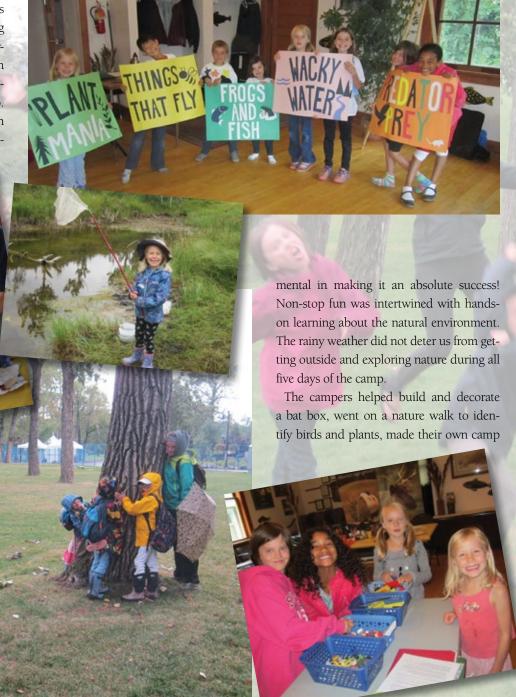
Quick Facts:

- Loggerhead shrike, Lanius ludovicianus excubitorides
- Federal status: Threatened
- Provincial status: Sensitive
- Body length: 21 cm
- Average weight: 35-50 g
- Interesting fact: Loggerhead shrikes impale poisonous prey such as toads or monarch butterflies, then wait for several days to eat them, by which time the poisons have broken down.

Wilderness Defenders Kids Day Camp

By Brittany Verbeek, AWA Conservation Specialist

n my opinion, there is no greater joy in this world than hearing kids laughing and seeing them running around delighting in the outdoors. I was fortunate enough to experience that joy for an entire week in August during AWA's first annual Wilderness Defenders Kids Day Camp. We had eight wonderful kids participate in the camp and their enthusiasm was instru-





amazing volunteers. Rheanne Verbeek, Jackie Verbeek, Meagan Robertson, and Zoe Arnold helped organize and lead the camp; Gus Yaki led our nature walk; Dan Olson guided the bat box construction. A big thank you to them, AWA staff, parents, and especially... all the kids!

De-fencing for Antelope

By Brittany Verbeek, AWA Conservation Specialist

The sun was beaming down on AWA staff and volunteers on Sunday, August 10 at the Onefour Research Station in southeastern Alberta. Alberta Fish and Game Association (AFGA) recruited several volunteers to remove approximately fourteen kilometres of six-strand barbed wire fence. The fences, put up for cattle breeding pastures, were right in the middle of prime pronghorn range and hindered their movement. The hope was that removing the fences would help increase the pronghorn antelopes' ease of movement and predator avoidance. Our job was to remove the staples from the posts and lay the barb wire on the ground for the power rollers to roll up. The job was completed by the end of the day thanks to the many hands of volunteers from all over southern Alberta. AFGA could not have picked a better prairie day with endless blue skies to help the pronghorn roam unimpeded in the area.



Antelope near Sage Creek PHOTO: © J. BARGMAN





Full On:

Engagement Organizing for Canada's Freshwater Leaders

Editor's note: in June Christyann Olson and Sean Nichols were invited to participate a freshwater workshop that was part of Mountain Equipment Co-op's Freshwater Campaign. David Minkow, one of the workshop leaders, kindly gave us permission to use his thoughts about the workshop.

By David Minkow

Head, heart and hands. And knees.

The canoe, drifting in the middle of Blue Lake, seemed empty. So, Susi, Tim and I paddled over for a look. Eventually, we saw a pair of bent knees hanging over the stern seat, and that was all we could see, even when we tried to peer inside. Was it the lower half of a mannequin used by camp counselors as a prank? Nope, those knees belonged to a participant in last weekend's Engagement Organizing workshop for Western water leaders who had nestled into the canoe's stern for a well-deserved rest.

We felt bad for interrupting the pre-dinner snooze of Lee-Anne Walker of the Elk River Alliance; after all, this was the only down time in a day of training that had begun with a 8:30 a.m. session on developing a theory of change and wouldn't end until 10 p.m. when "tipples and tools" featuring an in-depth look at databases finally concluded. All told, it was a very full weekend, yet the participants—who had come from Vancouver and Winnipeg and many points in between to be at the Blue Lake Centre in the East Kootenays—appeared to embrace wholeheartedly our ambitious schedule and didn't seem to mind when sessions ran longer than expected.

The aim of this workshop, and the other two trainings we at the Freshwater Alliance presented over the past couple of weeks in Ontario and Nova Scotia (thanks to the generous support of Mountain Equipment Coop!), was to train freshwater leaders in how to develop and build on successful public engagement programs and, along the way, foster connections with other leaders in the freshwater community. From the answers partici-

pants gave during the closing exercise—the aforementioned head, heart and hands—our aim was true.

We asked participants as well as the trainers—along with the Alliance's BC organizer Susi Porter-Bopp and our national trainer and senior advisor Tim Morris, we were joined by Matt Price, co-author of "Engagement Organizing: The Culture and Technology of Building Power"—to share the ideas and information (head), feelings (heart) and planned actions (hands) that we were bringing back home with us from the weekend. It was heartening to hear everyone's takeaways and intentions, including plans to:

- explore the snowflake model of distributed organizing
- use public narrative to engage people through values and emotions
- incorporate theory of change into strategic planning
- reach out to the congregation and not just the choir
- make more phone calls (and not rely on online engagement)
- start using databases for supporters and prospects

When it was my turn to share, I said that my head was coming back with the creation histories told around the campfire Friday night by Ktunaxa storyteller Joe Pierre Jr. as well as proof that exploring the stories of Self, Us and Now is a great way for water leaders to develop their public narratives. For my heart, I echoed the sentiments of many others about carrying back the passion and love that the group has for freshwater. As for my hands, in addition to announcing an intention to write this blog, I said that the first thing I would do when I got back would be to hug my kids with renewed faith that the future of Canada's freshwater was in so many good hands.

The participants in the three Engagement Organizing trainings will stay connected over the summer through biweekly community of practice webinars to delve deeper as well as explore some topics we didn't have time to cover during the workshops. Thanks again to MEC for making these trainings possible and we look forward to the possibility of future ones.

David Minkow is communications specialist for the Canadian Freshwater Alliance.



Updates

South Saskatchewan Regional Plan

On July 23, 2014 while many were away on holidays and enjoying the beautiful summer weather, the Alberta government released the final South Saskatchewan Regional Plan (SSRP). It came into effect on September 1. In some regards it was an improvement from the draft plan released last October, but AWA sees it as a missed opportunity. Five years in the making... we and many Albertans hoped for more. Meaningful environmental protection on Alberta's public lands still tiptoes around most industrial development opportunities.

The good news first. The plan has created three new Wildland Provincial Parks including 54,588ha in the Castle, 4,498ha along the Livingstone Range, and High Rock's 8,348ha running along the British Columbia border. Bluerock, Bob Creek, Bow Valley, and Don Getty Wildland Provincial Parks have all been expanded in the south Saskatchewan region along with the establishment of several new and expanded provincial recreation areas. More than 34,000ha of grazing leased public land was designated as Pekisko Heritage Rangelands. Perhaps this designation will provide momentum for more Heritage Rangeland designations and encourage other ranchers to embrace this option.

The plan states that on Green Areas of Crown Land "watershed management and headwaters protection is the priority. Forests will be managed with this as **the highest priority** (including water storage, recharge and release functions)." (Emphasis added) This is an example of some of the more promising statements in the plan but whether measurable changes will occur to support these kinds of statements remain to be seen.

Now the 'not so good' news. For a plan intended to guide decisions on how to manage increased competing uses on the same landscape, the SSRP falls far short of that goal. It remains filled with ambiguous language as it tries to allow everyone to do everything in the same place, at the same time.

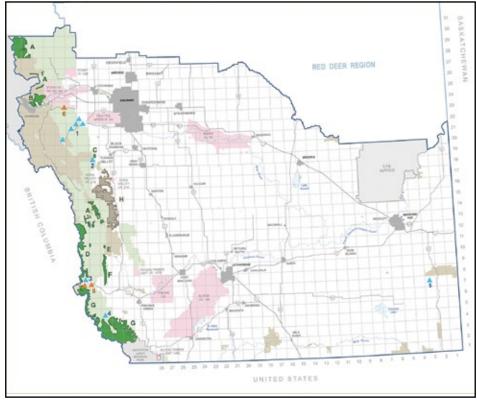
Many key conservation pieces are missing. These are the pieces needed to turn the SSRP into more of a balanced land use plan that takes cumulative effects into account. The Regional Trails System Plan, Linear Footprint Management Plan, Biodiversity Management Framework, and Recreation Access Management Plans will not be completed until the end of 2015 or later. The south Saskatchewan region desperately needs limits on human access and industrial development now.

The Milk River and Wild Horse Plains grassland areas appear on a map for priority sub-regional planning. This is hopeful but, meanwhile, no new designated conservation areas were established in either of those areas. This still leaves the majority

of the region's species at risk vulnerable to further population declines. Oil and gas exploitation continues and native grasslands still may be converted into agricultural lands under the SSRP.

To the provincial government's credit, the plan acknowledges the importance of wildlife connectivity, and key guidelines and projects that will contribute to developing wildlife corridors in the Bow Valley and Crowsnest area. However, the new and expanded Wildland Provincial Parks previously mentioned do not provide the connectivity and landscape-level protection that many species need to survive. The parks omit critical valleys supporting unusual plant and animal diversity and very few of the tributaries that are known critical habitat for threatened trout are within their boundaries.

The designation of the Castle Wildland Provincial Park left many disappointed because the park excludes half of the land-



The South Saskatchewan Region CREDIT: GOVERNMENT OF ALBERTA

scape – arguably the biologically richer half - that conservation groups and many other Albertans have been asking to see protected as park for decades.

The bottom line is that protection of high value ecosystems continues to wait while the economic development train continues apace. If conservation was a person, she's being asked to sit patiently at the station in the hope that some day the conservation express will be allowed on Alberta's tracks.

- Brittany Verbeek

Maligne Lake

Why bother drafting management plans for Canada's National Parks? That's a question worth considering if you've been following the efforts of Maligne Tours to expand its business on Maligne Lake in Jasper National Park. In late July Parks Canada decided it would give further consideration to 13 of 14 elements of the company's development proposal. Parks Canada, in a move AWA applauded, rejected the most ecologically threatening element of the company's ambitions. This was the 66-suite "themed heritage accommodation" overnight lodge - what most people would call a luxury lodge. But a second overnight accommodation scheme - 15 tent cabins - survived and was included in the 13 elements Parks Canada accepted for further consideration.

The 2010 Management Plan uses refreshingly clear and straightforward language when it assesses the prospects for new overnight commercial accommodation outside of the Municipality of Jasper: "No new land will be released for overnight commercial accommodation outside the community." Parks Canada ignores this directive in its July press release and instead cherry picks from the Management Plan in order to try to justify its decision. The Agency trumpets the proposal for its "potential to improve communication and interpretation about the Maligne Valley, as identified as a key goal in the approved Jasper National Park Management Plan (2010)." (my emphasis) Communication and interpretation is key and carries weight because it's in an approved plan. Why didn't the approved plan's clear language that "no new land will be released" receive equal billing?

I think at least part of the answer lies in the revenue or profit-generating importance of overnight accommodation to Maligne Tours. This certainly was a key theme of the company's presentation in Edmonton last November. The company's conceptual proposal presented the hotel and the tent cabins as "the primary reason behind this proposal."

In late August Ecojustice, on behalf of the Canadian Parks and Wilderness Society and the Jasper Environmental Association, filed a legal challenge to this Parks Canada decision. The tent cabins and the worth of the Jasper National Park of Canada Management Plan (June 2010) are at the centre of that challenge.

The thrust of the legal challenge is as straightforward as the language of the Management Plan; Jasper Superintendent Fenton erred in law or jurisdiction or acted unreasonably when he approved the tent cabin development proposal. It's contrary to the 2010 Management Plan and there's no credible basis to amend the Management Plan to allocate lands for new commercial overnight accommodations.

Parks Canada's Guide to Management Planning makes it clear that Management Plans aren't set in stone. They may be amended "(w)hen changed circumstances affect major plan objectives both directly and significantly." But there's the rub. The only changed circumstances here are the financial circumstances of Maligne Tours. While we might feel for the company's owners it's hard to see how their financial situation affects the approved Management Plan's objectives directly and significantly. Parks Canada appears on course then to entertain bringing another Glacier Discovery Walk to Jasper National Park - a project without ecological merit that's best justified as an effort to boost a company's bottom line.

AWA remains optimistic that the death of the 66-suite luxury lodge – the most crucial financial component of the Maligne Tours conceptual proposal - will lead the company to do what Parks Canada should have done already. Pull the plug on the Maligne Lake development project.

- Ian Urquhart



Gear Ideas

By Kristina Vyskocil

Preparing for Emergencies

Serious, unexpected and dangerous situations can strike novice and experienced outsiders alike and at any time. Should this happen, the legendary durability of the Survive Outdoors Longer 2-person Emergency Bivvy Sack can come to your rescue (\$22.75).

What is the Survive **Outdoors Longer (SOL)** 2-Person Emergency **Bivvy Sack?**

The Survive Outdoors Longer 2-Person Emergency Bivvy Sack is exactly what it sounds like: an emergency bivvy sack that allows you and a partner to efficiently conserve body heat and stay dry.

What does the Survive **Outdoors Longer 2-Person Emergency Bivvy Sack** do well?

shelter. It is constructed from the same Heatsheets® material as Adventure Medical Kit's world-famous emergency blankets, except it is sized for two people instead of just one (213cm x 152cm/84" x 60"). The material construction of the emergency bivvy sack also means it is extremely light (164 g/5.8 oz). In addition to this, the vacuum-metalized poly-

ethylene reflects up to

90% of your and your partner's radiated body heat. Unlike an emergency blanket, though, the emergency bivvy sack offers full protection since it fully seals on the sides, making it completely rainproof, snowproof, and windproof. The emergency bivvy sack also comes with its own extra-large stuff silnylon stuff sack that will also accommodate extra survival gear.

What are some drawbacks of the Survive Outdoors **Longer 2-Person Emergency Bivvy Sack?**

There really aren't any drawbacks here: this emergency bivvy sack delivers on its promises.

What's the bottom line?

If you and your partner are forced to spend an unexpected night outdoors, the Survive Outdoors Longer 2-Person Emergency Bivvy will instantly improve your odds when the temperature drops.

Kristina currently works at Mountain Equipment Co-op and in the fall will be entering the final year of her English B.A. at Grant MacEwan University.



Fall Events

Annual AWA Lecture and Awards Evening

Martha Kostuch Wilderness and Wildlife Lecture

"Legislating Conservation: Challenges and Opportunities"
Presented by Dr. Ted Morton

Dr. Morton has been invited to speak about his vision that led to the Land-use Framework and province-wide planning process. A vision for conservation and meaningful on-the-ground planning for our legacy of wilderness and wildlife is part of AWA's vision and mandate and we expect Dr. Morton will challenge us as he reviews the process, the reality and the difficulty in legislating conservation.

The Alberta Wilderness Defenders Awards will be awarded to **Tom Maccagno** and **Gus Yaki** and the Great Gray Owl Awards will be presented to **Heather Crone** at this evening of celebration.

Location: 455 - 12th St. NW Calgary, Alberta

Date: October 31, 2014

Time: Reception 6:00pm • Lecture and Awards 7:00pm

Cost: Members \$50 • Non-members \$75 Reservations required, space is limited

AWA Annual General Meeting

Location: 455 - 12th St. NW Calgary, Alberta **Date:** November 1, 2014

Time: 11:00am

Edmonton Talk: Fishing in Argentina with Bruce Dancik

Friday, November 28, 2014

Join us as AWA and friends kick off a "Wilderness Around the World" speaker series in Edmonton!

Location: Jackson Power Electric Ltd. (9744 - 60 Avenue, Edmonton)

Time: Doors open at 6:30 p.m. Talk starts at 7:00pm

Tickets: \$5.00

Music for the Wild

Saturday, December 6, 2014

Headline Act Jim & Lynda McLennan

A Jim and Lynda McLennan performance includes instrumental fingerstyle guitar pieces from Jim (many from the Western Canadian Music Award-nominated CD, Six-String Gumbo) and vocal tunes from Lynda (many from the recent *Dancing On Air CD*). Their repertoire includes old standards and contemporary compositions, and is delivered in a unique style best described as "folk-jazz." Seasoned performers, their genuine and engaging stage demeanor immediately puts audiences at ease.

Opening Act The Hot TimAlis

Tim Fraser and Alison (Ali) Laberge are **The Hot TimAlis**, and have been making music together since 2006, hosting for several years the wonderful Saturday evening sessions at The Cabin Cafe. Tim and Ali alternate lead vocals and harmonies, while Tim plays acoustic guitar and weaves a melodic background. Ali combines percussion with her lively and bright presence. They are fun, energetic, and always musical, and feature a remarkable and eclectic musical repertoire of favourites.

Location: 455 – 12 Street NW, Calgary **Time:** Doors open at 7:00 p.m. Music at 7:30pm

Tickets: \$20.00



Return Undeliverable Canadian Addresses to:



Alberta Wilderness Association Box 6398, Station D Calgary, Alberta T2P 2E1 awa@abwild.ca

