



Milk River Canyon, Grassland Natural Region PHOTO: C. WALLIS

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COVER PHOTO —

Cliff Wallis captured this sunset on the Sweetgrass Hills and Milk River Canyon from the Pinhorn Grazing Reserve. Some of the most biologically diverse and the Milk River Canyon-Sage Creek area of southeastern Alberta.

FEATURED ARTIST ____

Jean Sheppard was born and raised in Ottawa. A biologist by training, Jean received a B.Sc. in Biology from Carleton University in Canada's capital and a M.Sc. in Biology from the University of Saskatchewan in Saskatoon. In 1977 she moved with Dave, her husband, and Kathy, their daughter, to the foothills of southwestern Alberta. There she set up her studio and worked as a professional potter. She began to explore painting with soft pastels in 1992 and in 1998 retired from her pottery career. For the past decade she has concentrated on pastels and, occasionally, lino block printing and monotypes. Hikes in Waterton National Park and the rolling foothills west of Pincher Creek provide much of the inspiration for her work. Jean's work is available at Banff's Willock and Sax Gallery (www.willockandsaxgallery.com)

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PHOTO: C. WALLIS

Species at Risk

Some readers may wonder why, in an issue of the *Wild Lands Advocate* devoted largely to Alberta's species at risk, our cover does not feature one or more of the creatures we regard as endangered or threatened such as woodland caribou, greater sage-grouse, swift fox, or the grizzly bear. All are icons and, as Lindsey Wallis argues later in this issue, are crucial assets for environmentalists to use in wilderness protection battles.

The magnificent photo of the Sweetgrass Hills and the Milk River canyon foreshadows well though the key theme of our examination of species at risk. Large, intact unfragmented habitats and landscapes – what Lorne Fitch bluntly and rightly calls "big space" – are the tonic Alberta's species at risk need if they are to recover. If we cannot guarantee these hard-pressed species the space they need then their prospects will remain dismal. That grasslands photo also underlines an important fact about the province's species at risk – today, our prairie grasslands in southeastern Alberta are home to more than half of the species at risk identified on page 11. Nowhere are species in Alberta threatened more than on the mixed prairie.

In this issue we focus most of our attention on Alberta's fauna and do not consider the many species of flora, such as the tiny cryptanthe pictured on this page, that also are endangered by habitat loss.

Nigel Douglas, AWA conservation specialist, introduces us to the legislative foundations of species protection in Canada and Alberta. Sturdy they are not but we have to be optimistic that some day our politicians will summon the political will needed to breathe life into species protection. The effectiveness of any intent to protect or restore threatened species also depends crucially on the character of the environmental assessment process. Professor Arlene Kwasniak sounds the alarm about the current federal government's perspective on its environmental assessment responsibilities. What might be of especial concern is the action taken just last month by the Harper cabinet to excuse approximately 2,000 public infrastructure projects from any federal environmental assessment.

Lindsey Wallis then offers an overview and prognosis, primarily from an environmentalist's point of view, of where Alberta's threatened species are today and what steps are needed in order to restore their populations. Lorne Fitch's essay, sparked originally by the distress he felt about the Petro-Canada Sullivan hearing (see Updates section), powerfully complements Wallis' report. There he underlines the importance of space to endangered species, the folly of believing that mitigation is a panacea, and the importance of improving our ecological IQ and literacy. The next three articles consider species at risk in Alberta's foothills, grasslands, and boreal – respectively the grizzly bear, the greater sage-grouse, and the woodland caribou.

Marian Weber's article on conservation or biodiversity offsets opens the Wilderness Watch section. It outlines variations of this approach to protecting habitat, an approach that may have promise. This section concludes with AWA conservation specialist Carolyn Campbell's look at the latest incarnation of integrated regional planning in Alberta – the Lower Athabasca Regional Advisory Council, an ambitious sounding process that some might suggest hopes to achieve the impossible – restoring some ecological sanity to land use north of Fort McMurray.

- Ian Urquhart, Editor



"At Least It's a Start?": The Legislative Foundations for Protecting Species at Risk in Alberta

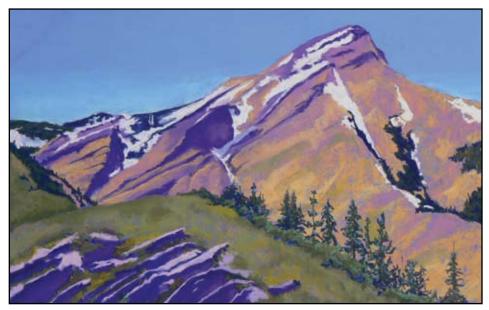
By Nigel Douglas, AWA Conservation Specialist

Here the species of t

When it comes to environmental issues, the line between federal and provincial responsibility is a fuzzy one; essentially, the environment is an area of shared jurisdiction. The provincial government manages wildlife as it does other resources it "owns." But wildlife cannot exist without habitat, and whose responsibility is it to manage or restore wildlife habitat? The province manages the two thirds of Alberta that is public land and has some jurisdiction over private land. But on federal land, such as national parks and military reserves, the federal government is responsible for managing endangered species and other species to "prevent them from becoming at risk."

Federal Endangered Species Listing

Federally, endangered species are listed under the Species at Risk Act (SARA) passed in 2003 to "prevent Canadian indigenous species, subspecies, and distinct populations from becoming extirpated or extinct, to provide for the recovery of endangered or threatened species, and encourage the management of other species to prevent them from becoming at risk." On federallyadministered land – National Parks and Military Reserves for example – the provisions of SARA have some strength, including "prohibitions that make it an offence to kill, harm, harass, capture, take, possess, collect, buy, sell or trade an individual of a species listed in Schedule 1 of SARA as endangered, threatened or extirpated." But protection of the habitat



Victoria Peak 16" x 25" Soft Pastel © JEAN SHEPPARD

that supports the species is much more vague.

According to the SARA website, www.sararegistry.gc.ca, COSEWIC is an advisory body to the federal government, charged with making "the accurate designations based on the best available scientific and Aboriginal traditional or community knowledge." The federal government then decides whether or not to act on these recommendations: "It is up to elected government officials, who are politically accountable, to turn those designations into law."

The listing process follows a series of steps:

COSEWIC

- Uses its Candidate List to prioritize which species require assessment,
- produces wildlife status reports for each species and assigns it to a risk category (extirpated, endangered, threatened, a special concern).

The relevant Minister (Environment or Fisheries and Oceans):

- issues a response statement, including timelines for future action,
- commissions suitable experts to produce a Recovery Strategy, a planning document that identifies what

- needs to be done to arrest or reverse the decline of a species,
- writes an Action Plan which identifies specific actions needed to help in the species recovery.

As soon as a species is listed people are prohibited from killing or harming members of the species as well as from destroying a "residence." Nothing though is said about protecting the species' broader habitat, its neighbourhood.

Listing a species can be a maddeningly long process. COSEWIC recommended listing the westslope cutthroat trout, for example, as *threatened* in 2006 – the politicians have yet to ratify that listing.

Recovery strategies or management plans are required to be developed for all listed species. Further to this their critical habitat should be identified and protected. In practice, although recovery strategies have gone some way to identifying critical habitat for endangered species, very little has been done to protect that vital habitat. On February 14, 2008, Alberta Wilderness Association and five other conservation groups launched a lawsuit against federal Minister of Environment John Baird for refusing to identify and protect critical greater sagegrouse habitat (see page 18).

Another of SARA's great weaknesses rests in its minimal territorial scope. First, it only applies to public, not private, lands. Second, SARA does not apply to most public lands south of the northern territories; the vast majority of Crown land in southern Canada is provincial land. The Government of Canada's website optimistically, or naively, proclaims: "In most situations, provincial laws will provide protection for critical habitat." Sadly, Alberta does not appear to be one of those cases! Although SARA gives the federal Minister of the Environment the power to "attempt to enter into agreements with provinces and territories for them to develop recovery strategies for species under their management responsibility," in practice there is little political will in Ottawa to try to force provinces to take their protection duty seriously.

Alberta Endangered Species Listing

If provinces are expected to take the lead role, what has Alberta done? The province's 1982 Fish and Wildlife Policy for Alberta, refers to wildlife somewhat clinically as a "replenishable Crown resource." Currently, Alberta is one of only two provinces that do not have specialized endangered species legislation. Instead, endangered species are managed through the 1984 Wildlife Act, an act initially designed to govern hunting and other allocation of the wildlife "resource." Subsequent changes to the *Wildlife Act* have allowed for some degree of endangered species management, but the act is ill suited to this added, much different, role. For example a Minister can make regulations protecting and restoring wildlife habitat, including that of an endangered species, but these provisions have never been used and there is no habitat in Alberta that is legally protected for the benefit of endangered species.

Alberta's "serious" involvement in species at risk began in 1996, when the provincial government signed on to the *Accord for the Protection of Species at Risk in Canada*. In 1997 the province produced its own *Strategy for the Management of Species at Risk in Alberta* which laid out the process for species status evaluation, listing and recovery planning.

A key tool potentially could be Alberta's multi-stakeholder Endangered Species Conservation Committee (ESCC). Taking advice from its Scientific Subcommittee, the ESCC reviews the status of wildlife in the province and recommends suitable designation to the Minister of Sustainable Resource Development (SRD). Species may be listed as endangered, threatened or extirpated (extinct). This is the theory at least; in practice it does not often work like this. The ESCC's 2002 recommendation that the grizzly bear should be designated a threatened species has been ignored by successive SRD Ministers. Political will is certainly no stronger on the species-at-risk file in Edmonton than it is in Ottawa.

This divorce of management decisions from scientific assessments of species' health is a recurring theme in wildlife management in Alberta. Scientists on the Scientific Subcommittee make their recommendations to the multi-stakeholder ESCC, which includes representatives from the forestry, oil and gas and irrigation sectors. This committee then makes recommendations to the Minister, who then may or may not decide to set up a multi-stakeholder recovery team. If established a team has two years to produce a recovery plan, which may or may not be adopted and implemented. Judging by the grizzly's treatment each step of the process takes us further away from the essential scientific conclusion – the species is threatened. Eight years after the grizzly bear was first recommended for listing, not a single hectare of grizzly bear habitat has been protected, even as the population estimates have plummeted from 1,000 bears to less than 400.

While the potential of the ESCC has been damaged by ministerial discretion

and the absence of political will its potential also has suffered from the Committee's lack of public input and accountability. The committee meets in private; most of the committee's website has not been updated since January 2007; no committee reports have been posted since June 2006.

Taken together both federal and Alberta endangered species laws do little to recognize how important protecting habitat is to the preservation and recovery of those species; without change this crucial flaw is likely to be fatal.

A Glimmer of Hope?

Alberta is clearly in dire need of its own specific endangered species legislation. I like to think the recent government report, *Alberta's Strategy for the Management of Species at Risk* (2009-2014), recognizes this. It commits to "(e)xamine whether a provincial Species at Risk Act would enhance the current legal measures provided under Alberta's *Wildlife Act* to accommodate species at risk in the province." If nothing else, this could enable the Alberta government to avoid the ignominy of being compelled to act by some future federal government or the courts.

The strategy goes on to say that "(s)uccessfully implementing approved recovery and management plans is the true measure of how well the Alberta program provides for the needs of species at risk. Success can only be achieved if appropriate changes are made in the way we manage a species and its habitat." This honest, frank definition of recovery recognizes the vital relationship between habitat protection and species recovery. Let us hope, and urge our politicians, to see this as a crucial step towards finally taking meaningful action to assist those species we have done so much to harm.



The westslope cutthroat trout, recommended to be listed as threatened in 2006, is still waiting for federal politicians to ratify the scientific conclusion. PHOTO: C.OLSON



THE EVISCERATING OF FEDERAL ENVIRONMENTAL ASSESSMENT IN CANADA

By Arlene Kwasniak

cornerstone of sustainable development is environmental assessment. Through environmental assessment (EA) processes regulators identify and assess the environmental, social, and economic consequences of proposed projects to assist them in determining whether they should be approved and, if so, under what conditions. Good EA produces better planned projects that have reduced environmental impacts and social costs. However, notwithstanding the benefits of EA, recently the federal government has announced its plans to greatly reduce the number of federal EAs in Canada and to limit the application of federal legislation designed to protect our navigable waters and fisheries. The January 27, 2009 federal budget speech reflected this: "... the Government will implement administrative changes to streamline application of the Fisheries Act, and regulatory efficiencies will be pursued for projects subject to the Canadian Environmental Assessment Act. For example, for projects requiring a federal environmental assessment decision, regulations could allow one environmental assessment process to meet federal and provincial requirements, by agreement with the provinces and territories."

The budget bill itself (*Budget Implementation Act*, 2009, ss. 317 – 341) contained amendments to the *Navigable Waters Protection Act* (NWPA) which would, among other things, give both Cabinet and the Transport Minister the discretion to exempt certain "classes of works" and "classes of waterways" from the Act's approvals requirements. Since the need for a NWPA approval triggers the federal EA provisions under the Canadian Environmental Assessment Act (CEAA) any exemption means no federal EA.

On March 12, 2009, Cabinet registered an amendment to the *Exclusion List Regulations* and new



Arguably Canada's Canadian Environmental Assessment Act is the child of the Friends of the Oldman River's battle to force the federal government to follow its own environmental assessment review guidelines. PHOTO: V. PHARIS

Infrastructure Projects Environmental Assessment Adaptation Regulations (Adaption Regulation) under the CEAA. Both regulations relate to projects funded through the federal government's 2007 Building Canada: Modern Infrastructure for a Strong Canada ("Building Canada Plan"). The Building Canada Plan promises \$33 billion dollars of federal funds over seven years for public infrastructure projects throughout Canada. The short explanation of these regulations is that the Exclusion List Regulation amendment removes the requirement for federal EA for an anticipated 2,000 Building Canada Plan projects over the next two years and the Adaptation Regulation purports to authorize substitution of provincial environmental assessment processes for federal ones for Building Canada Plan projects not excluded under the amendments to the Exclusion List Regulation. The Government anticipates reducing federal EA by about 2,000 projects over the next two years (Regulatory Impact Analysis Statement (RIAS) published with the regulations).

There was no public, and apparently

no Aboriginal, consultation prior to these regulations becoming law. This is so notwithstanding that the Canadian Constitution requires governments to consult Aboriginal communities when carrying out government initiatives that could have an adverse impact on Treaty or Aboriginal rights or interests, and federal regulatory policy (2007 Cabinet Directive on Streamlining Regulation) requires government to provide the public and affected parties with time to provide input into policy development. Environmental organizations, even those specifically interested in environmental assessment, were not consulted. Not even the Minister's own multi-stakeholder Regulatory Advisory Committee, formed under the CEAA for the explicit purpose of advising the Minister on regulatory and policy direction, was consulted.

The Government did not even comply with federal regulatory policy regarding pre-publication of regulations. The 2007 Cabinet Directive requires departments and agencies to publish regulatory proposals in the Canada Gazette Part I to allow for a public comment period of at least 30 days. The Government provided

no public comment period whatever and published the regulations directly into Canada Gazette II, where regulations that have already been registered (and therefore are in effect) are published. Although the Cabinet Directive allows a more "expedited process" where there are "[e]mergency situations- when there is an immediate and serious risk to the health and safety of Canadians, their security, the economy, or the environment" it is hard to see how denying the public the right to comment on these regulations can be justified on the basis of an "emergency."

The regulations are the result of Government claims regarding overlap and duplication. For example, The Globe and Mail (January 13, 2009) reported Natural Resources Canada Minister John Baird to have said: "There's a real hodge-podge of environmental assessment requirements - of overlap and duplication." What Baird does not seem to understand is that overlap is not bad, and that there are better ways of dealing with duplication. In the Canadian federation it is no surprise that there is some overlap – meaning that the interests of both the federal government and the provincial government are the same in some areas with respect to a proposed project.

An example of this would be where the federal government conducts an EA prior to determining whether to issue a permit under the Fisheries Act in respect to a project that will destroy fish habitat (an area of federal jurisdiction) and a provincial government conducts an EA of the same project prior to determining whether to authorize the destruction of a bed and bank of a river (an area of provincial jurisdiction). Both governments may be interested in obtaining some of the same information from the proponent. There is nothing wrong with such overlap. It is perfectly understandable given our constitutional division of powers. Overlapping requirements may also occur within a single level of government. Using the example just given, both the federal Minister of Transport, who administers the Navigable Waters Protection Act, and the Minister of Fisheries and Oceans, who administer the Fisheries Act, may have to approve the project if it is to proceed and both ministries may require similar information. This type of federal/



Recently discovered in the Lost River area of extreme southeastern Alberta, the eastern yellow-bellied racer is Alberta's most endangered reptile. PHOTO: C. WALLIS

federal or provincial/provincial overlap also is not bad or necessarily inefficient. It is just what would be expected in a world of complex government ministries and mandates.

Duplication may be contrasted with overlap. Duplication arises when a proponent, often because of overlap, is asked to provide the same information to both levels of government or different ministries, departments, or agencies within one level of government. This may or may not be onerous depending on the situation, including the timing of the requests, and the required formats. There may be inefficiencies relating to duplication but the way to address any such inefficiencies is to reduce the duplication – not the overlap.

In the past few years the federal government has taken several legitimate steps to minimize duplicative requirements on proponents and, as much as possible, to ensure that where an EA is required by both a province and the federal government, that the proponent need only undergo one EA. A "harmonized" EA will meet the needs of both levels of government. No doubt much more progress could be made, and more quickly, but the fact that the situation is not perfect from the perspective of industry and provincial governments does not mean that we should throw the baby out with the bathwater.

Consider the following:

• Federal/provincial (or territorial) EA harmonization is meant to ensure that there is only one EA in respect of a project where more than one jurisdiction requires an EA but both jurisdictions participate in the EA to ensure all legislative mandates are met. There are only seven harmonization agreements between the federal government and provinces/ territories (Alberta and the federal government have such an agreement). If all provinces and territories would negotiate a harmonization agreement with the federal government there would be less duplication.

- Regarding the federal family, the federal government has not revised the Federal Coordination Regulation since the 2003 amendments to the CEAA. This regulation sets timelines for federal authorities to determine whether they likely will require an environmental assessment. It also sets timelines for matters related to an assessment such as notifying the proponent that more information is required and makes a determination as to whether an assessment will be required after obtaining information and reporting on the determination. If this regulation was revised and given some teeth then there would be fewer alleged inefficiencies within the federal family where more than one federal authority is involved in an EA.
- The role of the federal environment assessment coordinator in the CEAA has not been fully developed or put into motion. This role includes assisting in a more efficient EA process, especially where an EA is required by more than one jurisdiction.
- The Canadian Environmental Assessment Agency's Quality

Assurance Program that, amongst other things, is meant to identify inefficiencies, has not been given a chance to complete its work.

- Industry itself could better coordinate and exercise its role in EA.
- If the problem is late EA triggering by some federal responsible agencies, then we should address this problem by getting them to trigger earlier, rather than by eliminating the trigger.
- The onus is on the party alleging inefficient overlap to substantiate it. In my view, this onus includes substantiation of precisely what the problem is and a determination that limiting the federal role in EA will solve the problem. As well it includes the need to demonstrate that any limitation of the federal role in EA does not inappropriately compromise consideration of the national interest, of matters within federal constitutional authority, or consideration of cumulative effects.

To close, I wish to point out that even on a cursory review there are numerous substantive and procedural legal and policy concerns and questions regarding the amendment to the *Exclusion List Regulation*, and the new *Adaptation Regulation*. Here are but a few:

1. CEAA's criterion for a project or class of project to be added to the Exclusion List regulation is that the project has only "insignificant environmental effects". The amendments to the Exclusion List made on March 12, include such things as the construction of certain facilities for treatment or distribution of potable water and for wastewater and stormwater management, rapid transit systems, buildings for cultural, recreational, heritage, artistic, tourism, sporting, or other community events, municipal parking lots, roads and public highways and limited widening of bridges. Some of the above are limited to developments within certain distance of utility rights of way, or where the projects either are not within 250 metres of an "environmentally sensitive area," or within 250 metres of an "environmentally sensitive area" designated by the federal government, where the project cost is under \$10 million dollars. The amendment defines "environmentally sensitive area" narrowly as an area protected for environmental reasons

in "regional or local land use plans, or by a local, regional, provincial or federal government body." One might question how Cabinet could rationally determine that such projects, no matter where they occur in Canada, no matter how much they cost (since money spent on a project is not an indicator of environmental impact) have only "insignificant environmental impacts?" How can it be justified, for example, that the construction of any of the excluded buildings, roads, transit systems, wastewater or potable water systems, will have only insignificant environmental effects? The Regulatory Impact Analyses (RIAs) suggests that the insignificance is asserted on the assertion that "[c] ompleted environmental assessments on over 1,000 projects have demonstrated that these types of infrastructure projects have insignificant environmental effects" This "explanation" lacks plausibility. How could it be said, for example, that since in the past the construction of sporting facilities have had only insignificant environmental impacts that all future ones will (other than in "environmentally sensitive areas")? Sporting facilities can be tiny, medium sized, large, or huge and can have an enormous variety and range of environmental impacts. Such facilities range from small community parks to major stadiums. There is no single type of 'sporting facility' and environmental impacts depend on location, size, proximity to water bodies, construction design and so on.

2. The RIAs contains no information on potential short and long term environmental and health costs of not conducting a federal environmental assessment for what in many cases will be major projects, or for relying on provincial processes to base decisions that must be made federally. Nor does it contain any information on the effect of taking the national interest out of the environmental assessment process when a provincial substitution is authorized.

3. The CEAA allows substitution of EA processes only in respect of panel reviews and only to other federal entities such as the National Energy Board or to a body formed under an Aboriginal Land Claims agreement. The *Adaption Regulation* authorizes substitutions with respect to Canada Building Plan projects to provinces, notwithstanding that provinces cannot regulate matters under federal constitutional authority and so the EA process might well be lacking information regarding such matters. As well, provincial processes vary from province to province leaving the public with no guarantees for a coherent and consistent process. Also, provincial processes necessarily will lack a national perspective and may not adequately account for cumulative effects.

It took public interest advocates and environmental organizations decades to elevate federal environmental assessment to its place of prominence in Canada. Alberta has been a leader in this regard, notably through the efforts of the late Martha Kostuch and the environmental organization, Friends of the Oldman River ("FOR") who took the Alberta government to court over the lack of federal authorization for and environmental assessment of the Oldman Dam in southern Alberta. Kostuch and FOR were successful on both grounds and because of these successes, and the later relentless efforts of many individuals and organizations, Canadians, both present and future, enjoy the benefits of federal EA. These benefits include planning projects so that impacts on fisheries, wildlife habitat and ecosystems are avoided, mitigating adverse environmental impacts by the imposition of the latest technologies, imposing monitoring and follow up conditions on the basis of what is learned from EA, and in the appropriate cases, determining that because of adverse impacts it is in society's best long term interests that a project not go ahead. If we are left primarily with provincial EA, countless projects that are now subject to assessment, simply will not be assessed, and those that are only provincially assessed will lack the federal and national perspective. Although eviscerating federal EA might result in a short-term upward blip in our economy, we, our children, and our grandchildren, will be paying for this "stimulus" for a long time. 🏠

Arlene Kwasniak is an Associate Professor in the Faculty of Law at the University of Calgary. Her primary research areas of interest include natural resources (in particular water) and environmental law.



Alberta's Species at Risk: Overview and Prognosis

By Lindsey Wallis

braham Lincoln once said: "public sentiment is everything. With public sentiment nothing can fail; without it nothing can succeed; consequently he who moulds public sentiment goes deeper than he who enacts statutes and decisions."

Species at risk are a crucial part of environmental groups' efforts to rouse public support and create positive change for the environment. "It is a lot easier to get attention for an area if you have an icon, a flagship species to protect an area around. They become proxies for the work that we do to protect the wildland," Cliff Wallis, director of the Alberta Wilderness Association, says.

The grizzly bear, although not listed as *threatened* by the Alberta government, is an example of an iconic species and an ecosystem ambassador. The grizzly bear has been used by environmental groups to raise public awareness about environmental issues, partly through the Save the Grizzly campaign. "We are trying to sell a concept and we have to find the best ways of doing that," Wallis says. "A flagship species (like the grizzly bear) is used as a way of drawing attention to environmental concerns."

Cheryl Bradley, a southern Alberta biologist, agrees that species at risk are a useful tool to achieve biodiversity and conservation goals because people can identify with them. "They do help protect biodiversity, although public support may not be for all the right reasons...they may not understand the importance of the ecosystem but they can rally behind protecting grizzly bears or little burrowing owls or kit foxes. It's partly human nature that we can identify with other creatures and agree that they probably have a right to exist."

Bradley notes that species at risk can work against environmental groups in cases where the animal is not necessarily well liked or highly valued, such as snakes, spiders or some unattractive plants. Even the grizzly bear can pose



An 80 km stretch of the Milk River is home to Canada's only known resident population of Weidemeyer's admiral. Its crucial habitat is found in the woody vegetation along the banks of the river. PHOTO: C. WERSHLER

problems because some people feel bears harm cattle or feel personally threatened by grizzlies and therefore are unwilling to protect them.

Alberta's Endangered Species Conservation Committee recommended the grizzly for threatened status and most environmentalists agree that grizzly bear populations in Alberta are some of the most threatened in North America, with less than 500 remaining in the province today. According to Wallis the low number of bears spells trouble, not only for the species, but for the entire mountain ecosystem. "The grizzly bear is an umbrella species and represents the health of the ecosystem," he says. "These species at risk are like canaries in a coal mine - they indicate when land management strategies aren't working."

This is why AWA and other environmental groups are underlining the importance of habitat protection. "If you protect habitat for grizzly bears you protect habitat for a whole range of species. If the bears are in good shape it is likely that the ecosystem is in good shape," Wallis says.

Species at risk are protected under the federal Species at Risk Act (SARA), which also recognizes the importance of habitat protection. The three main objectives in the act are to identify species at risk, protect the species and its habitat, and develop recovery plans.

Under SARA, critical habitat for species at risk is identified as "the habitat that is necessary for the survival or recovery of a listed wildlife species, and is identified in a Recovery Strategy or Action Plan for that species."

Legislation is designed to protect both the animal and its habitat from harm. SARA prohibits the destruction of critical habitat once it has been identified in a recovery strategy. The problem, according to Wallis, is that though the deadlines for identification of critical habitat are one or two years after a species has been listed as at risk, in most cases the deadlines have been extended, leaving critical habitat unprotected. Wallis says that, while it is only speculation, he thinks a lack of resources needed to identify critical habitat plays a role in these delays but politics is also involved; the government is concerned critical habitat designation will restrict development in those areas.

Fines up to \$1 million can be levied against individuals and companies who disregard the regulations. In 2006 fines of \$20,000 were levied against three individuals convicted of poaching abalone and just this year two B.C. photographers were fined \$6,000 for destroying the nesting site of a yellowbreasted chat. However, there have not yet been any fines for destruction of habitat under SARA.

The Alberta government has revised its species at risk strategy to "better manage and recover species at risk," according to public affairs officer Trisha Letilley. The strategy will focus more on putting recovery actions into effect and will work in conjunction with the new Land-Use Framework to better protect species and habitat. "The Land-Use Framework will set up regional plans and legislation will bind regions to those plans," Letilley said.

More details on the legislation are set to come out by the end of March. Cheryl Bradley is optimistic that the legislation will have "teeth," but is concerned because opposition to the Land-Use Framework seems to be coming, not from industry, but from inside the government.

Some caution may be in order, however, since the Land-Use Framework website states that "existing contractual commitments will be honoured. However, planning decisions on future development will need to be aligned with provincial policies and directions."

Currently Alberta has no overriding regional plan that dictates what can and cannot be done in an area but the government has been down this road before with the Integrated Resource Plans of the '80s. According to Wallis, they failed because they were focused on resource development and most critical habitat was not included in any prime protection zones where no development occurred.

Bradley hopes the Land-Use Framework will change the way land use decisions are made and eliminate "the tyranny of small decisions" that are made in isolation. "What we need is to look



The cat-sized swift fox has been successfully reintroduced into southeastern Alberta. The goodwill and cooperation of ranchers is crucial to the species' long-term prospects. PHOTO: C. WALLIS

at all the land uses on a land base and cumulatively what are their effects on the landscape...We're not clear at this point how (the Land-Use Framework) will roll out, but just talking this way we're moving in the right direction," she said.

The first two regions the framework will address are the Lower Athabasca and the South Saskatchewan; the advisory committees will consist of representatives from a wide range of interests. Wallis says he is worried because nongovernmental organizations were not included in the Lower Athabasca advisory committee and that these plans won't result in action, leaving a lack of enforceable mechanisms to protect habitat.

"There are a lot of stop gap measures in place but habitat is still being fragmented and lost," Wallis says. "There is a lot on paper but very little being done on the ground."

Measures the government is already taking include reducing industrial activity in critical habitat by using setbacks and seasonal access restrictions for critical winter or breeding habitat but Wallis says the overall development in sensitive areas is not being reduced. In fact, there are new threats posed by new developments in existing protected areas like the Suffield National Wildlife Area, where EnCana has proposed to drill more than 1,000 wells.

The need for better habitat protection in Alberta is most evident in Grassland ecosystems, where there is a disproportionate number of species at risk. According to Wallis, this is because less than 1% of Alberta's Grasslands are protected, compared to the Rocky Mountain ecoregion where over 60% is protected. The Foothills are also in dire straits with less than 2% protected.

Bradley emphasizes the need for protection of large tracts of landscape. If the landscape is not protected the diversity of life that depends upon it will be lost. "By dealing with habitat on a large scale you're more likely to assure the protection of species, rather than trying to protect biodiversity with postage stamp areas," she says.

Wallis says the need to protect habitat to effectively protect species is best illustrated by the plight of the caribou. There were 15 years of mitigation efforts including timing restrictions, greater spacing between oil and gas wells, and fewer all weather roads but caribou numbers still plummeted. This is because companies did not stop chopping down the forest and did not stop drilling wells or building roads and effectively industrializing the landscape.

"Delays in protecting critical habitat are often caused by industry and government saying that they need better science," Wallis says. He counters that to do good science we require control areas to test how land use decisions affect habitat and the species that depend on it. Without large tracts of protected habitat there are no control areas. "You can't talk about a square mile or two. For species like caribou and grizzly bear you need thousands of square kilometres," he says.

With the exception of Wood Buffalo National Park, most protected areas outside of the mountains are typically small, says Wallis. They are nowhere near the size, nor do they have the connectivity, that has been recommended by scientists. Furthermore, they fail to meet the minimal targets of the Alberta

government in their Special Places 2000 program. In these under-protected areas, including the Foothills, Parkland, Boreal Forest and Grassland, Wallis says that all manner of industrial activity needs to be halted in critical habitat for species at risk.

"You don't know how bad it is until it is too late. There is a lag effect," Wallis says.

Three hundred eighty species are listed as *at risk* or *sensitive* by the Status of Alberta Wildlife 2005. The high number of *sensitive* and *at risk* species concerns environmentalists because, as Wallis says, "it will get worse before it gets better because it takes so long for ecosystems to recover." He points to the 50-80 years it will take for the ecosystem in the Little Smoky area to recover enough so caribou can become selfsustaining again.

"It is a lot cheaper and a lot more

effective to protect these areas in the first place than to get into inefficient and costly recovery operations," Wallis says.

"The public assumes that governments will protect species and ecosystems but people need to speak up and let their elected representatives and other people know that this is an issue of concern," Wallis says. "The environment doesn't affect people immediately. It is a very slow loss that is almost imperceptible. Obviously not enough people are phoning or writing to voice their concerns."

According to Wallis strategies for protecting at-risk species should include creating large protected areas, monitoring species status (including expanded research programs) and intervening (including land-use stipulations). "Most of the emphasis has been on intervention programs and to a lesser extent research and monitoring — some species like caribou are well researched but many species are not. However, large protected areas are missing in any recent government efforts related to species at risk," he says.

Wallis points again to areas like the Grasslands and Parkland, home to the majority of Alberta's species at risk, which have no large protected areas without industrial activity or motorized access. "We need a comprehensive look at how we are managing the whole landscape if we want to recover our declining species. The Land-Use Framework may be our last shot at this."

Bradley says she wants Alberta to give habitat protection the same weight as economic or social objectives and for all Albertans to work together for that objective. "Whether we get at it through the recovery plans and critical habitat designations or through regional land-use plans we need to get the habitat protected

Alberta's Endangered/Threatened/Special Concern Species (flora excepted) as identified in the Federal Species at Risk Act		
ENDANGERED	THREATENED	SPECIAL CONCERN
MAMMALS		
- Swift fox - Ord's kangaroo rat	- Wood bison - Woodland caribou (Boreal and Southern Mtn pop	ulations)
BIRDS		
 Whooping crane Eskimo curlew Burrowing owl Piping plover (circumcinctus subsp) Mountain plover Greater sage-grouse Sage thrasher 	 Peregrine falcon (anatum subspecies) Sprague's pipit Loggerhead shrike (excubitorides subspecies) 	- Long-billed curlew - McCown's longspur - Yellow rail
REPTILES AND AMPHIBIANS	S	
		- Eastern yellow-bellied racer* - Northern leopard frog - Great Plains toad - Western toad
FISHES		
	- Western silvery minnow - "Eastslope" sculpin (St. Mary and Milk River popu	lations)
ARTHROPODS		
- Gold-edged gem - Half-moon hairstrea - Five-spotted bogus Moth - Non-pollinating yuc - Yucca moth	yucca	- Monarch - Weidemeyer's admiral
MOLLUSCS		
- Banff Springs snail		

*Alberta is not recognized as a home for the eastern yellow-bellied racer

in law," Bradley says.

Alberta Wilderness Association is dedicated to protecting species at risk by protecting the habitat needed to survive and thrive. Public awareness campaigns and litigation are among the methods the AWA uses to pursue this goal.

AWA has used individual species to champion the protection of endangered ecosystems. Two examples of this approach are the greater sage-grouse (Grasslands) and grizzly bear (Rocky Mountain/Foothills).

By taking the federal government to court over critical habitat designation for sage grouse more attention is being devoted to the protection of this bird and its habitat because of the publicity and subsequent public outcry during the litigation. Wallis says government is dragging its heels because critical habitat may place further restrictions on development in those areas.

Wallis says environmental groups

have been patient but the government is way behind in meeting the legal requirements for designation of critical habitat under SARA. "At some point governments must do the right thing we shouldn't always have to take them to court."

For the grizzly bear, AWA has launched a number of public awareness campaigns, most notably Save the Grizzly, which includes magazine ads, billboards and a website.

AWA staff also serve on various government and industry committees on species protection. "The legal requirements surrounding species at risk have been instrumental in bringing industry and government to the table to discuss habitat," Wallis says.

While SARA is helpful, Wallis stresses that without provincial species at risk legislation we can't address all the concerns about declining species and habitat destruction. "The polls are telling us that the environment is a high priority, even in these bad economic times, but the public has to communicate that to their elected representatives. If we don't we will continue to lose species," he says.

Cheryl Bradley says, "We've got a great opportunity here to try to develop a society that is gracious enough to allow other species to co-exist with us. We still have the option here to maintain our full suite of biodiversity. In the long-term that's beneficial.

"If you just plan for today and don't consider what your actions are going to do tomorrow you might end up where you don't want to be."

Lindsey Wallis has just graduated from the post-graduate journalism program at Mount Royal College and will be interning at Calgary's Fast Forward Weekly. She loves the outdoors and keeps herself grounded by spending weekends hiking or cross-country skiing.



How Many Grizzly Bears Can Dance on the Head of a Pin? Thoughts on Imperiled Species and Spaces

By Lorne Fitch, P. Biol.

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Try to imagine the spirited debates the theologians of old had about how many angels could dance on the head of a pin. The story goes that it was an important argument for them and I can visualize them, in gloomy monasteries, huddled around a flickering candle, holding forth on their great debate. Perhaps the discussion lightened when a clearer thinker asked if it mattered whether the angels were dancing the medieval equivalent of the jitterbug or dancing cheek to cheek.

Today we find biological theologians in brighter, computer-equipped rooms, engaged in analogous debates. Instead of angels they debate how many grizzly bears (or sage grouse, westslope cutthroat trout, caribou, bull trout, and so on) can, or do, exist on the pinhead of landscape left for them. If that is not complicated enough for this new breed of theologian, the debate is made more difficult because the pinheads of suitable habitat left are further eroded and fragmented by new roads, pipelines, cutblocks and the other trappings of an industrialized and prosperous Alberta.

A Picture of Serious Decline

One side of the modern debate about species and land use is presented at wildlife conferences. It can be very depressing to endure a wildlife conference these days in Alberta; there one is besieged by well-researched information from the brightest academic minds showing a dismal prognosis for healthy landscapes and wildlife. Consider the following:

- Recent research indicates that of the 34 known sage grouse dancing grounds in southeastern Alberta only seven are now visited in the spring by this magnificent prairie icon. The population may have declined by 92% in the past 30 years.
- Woodland caribou in the north are losing the predator/prey battle largely

because of excessively fragmented habitats – too many roads, seismic lines and cutblocks.

- Counting grizzly bears is a pursuit fraught with difficulty but it appears that fewer than 500 bears remain in Alberta (and only 90 between Highways 1 and 3).
- Westslope cutthroat trout were once so numerous that two anglers in a single day, in 1903, caught 400 from Fish Creek which flows through Calgary. Today Fish Creek barely merits its name and many similar streams that once held a cornucopia of native trout are severely depleted

And, on it goes. These numbers worry biologists because they dip to the point of threatening the viability of species for the future. It is very unusual for the increase of any wildlife populations to be reported at a wildlife conference in Alberta these days.

"Don't Worry, Be Happy"

Alternatively, if you have patience and the ability to occasionally suppress your gag reflex, you can listen to the other side of the debate at the many regulatory hearings that ostensibly oversee the parceling out of Alberta's landscape and resources. During the hearings, the proponents of industrial development extol the virtue of their particular project for Albertans. Take the proponents at face value and you will be stunned at how good their ambitions are for us; how could we possibly say no?

Proponents usually play the stewardship card. Corporations pledge a deep commitment to the environment and all the living things their activities will touch. You can listen to thoughtful, comprehensive environmental impact assessments, each of which will have a maddening similarity to others. All EIAs have a frightening tendency to say: "Yes, there will be impacts but all can be mitigated. Any residual effect will be so small, so localized and so insignificant that the project most assuredly is harmless to the public interest. Trust us, we will monitor the situation and rectify any concerns immediately. There is no reason why the project should not proceed right now." These stewardship statements are key; they try hard to create the impression of completeness, commitment and competency.

But, if the projects are as benign as presented, if mitigation is so effective, and if monitoring is so conclusive then why are we not up to our armpits in grizzlies, caribou, sage-grouse or cutthroat trout? The answer may well be that today's biological theologians have as much impact on their real world as their religious counterparts, through their debates about angels, had centuries ago.

The Answer is Space; What was the Question?

We humans consider ourselves to be an intelligent, caring, sharing species perhaps especially when we deal with our fellow *homo sapiens*. But, these same attitudes seldom guide our behaviour when it comes to allocating space to other creatures. We add another pipeline, more wellsites, pile cutblock on top of cutblock, and carve out more kilometres of road to somewhere. We build small starter castles on an isolated piece of heaven, dig a bigger hole in the earth



Vascular plants, such as the endangered small-flowered sand-verbena shown here, as well as mosses also should be included among Alberta's species at risk. PHOTO: C. WALLIS

with an imperfect plan to refill it, and divert just a few more litres of river water to grow potatoes, mine the tar sands, or flush a toilet. Too often these decisions about how we treat or value space are made without considering their effects on other species.

We may realize too late, as others have, that what our companion species as well as ourselves need is space itself. David Brower eloquently described the California condor, which is a significantly imperiled species, as five percent flesh, blood, bone and feather; the rest he said was place. Without that place of which he speaks, without the earth, the wind and the water we will effectively lose these and other creatures.

We will sentence them to death if we do not grasp the basic, essential context of species maintenance. That context is space – big space, appropriate space and unadulterated space; space without most of the sights, sounds, stench and footprint of us. Place without space is no place at all.

Wallace Stegner put his finger on this essence some time ago. He said, "Something will have gone out of us as a people if we permit the last virgin forests to be turned into comic books; if we drive the few remaining members of the wild species into zoos or to extinction; if we pollute the last clean air and dirty the last clean streams and push our paved roads through the last of the silence, so that never again will Canadians be free in their own country from the noise, the exhaust, the stinks of human and automotive waste, and so that never again can we have the chance to see ourselves single, separate, vertical and individual in the world, part of the environment of trees and rocks, brother to the other animals, part of the natural world and competent to belong in it." It seems clear that Stegner thought that who and what we are is, in part, based on space.

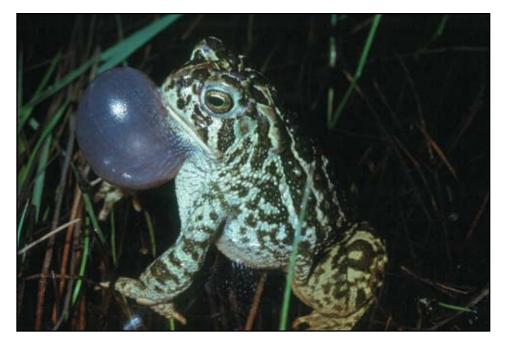
Proponents essentially ask us to ignore the importance of space to our heritage. Their argument is that we cannot eat memories and sustain ourselves on sentiments like Stegner's. Where, they ask will we find the food, fuel, fibre and then the jobs to create the cash to buy the first three. "How can we afford to lock resources away from a growing population with needs and expectations?" This well-worn canard fuels so much of our fast-paced, unplanned, reckless approach to resource and landscape liquidation. What should nag at our comfort and complacency is the reality of cumulative effects; too many things are happening at once on the same sliver of landscape. Some effects do not happily coexist; there is growing, inescapable evidence that their additive nature eats away at a landscape.

Meeting the genuine needs of Albertans is one thing but creating other wants to shore up relentless venal greed is immoral and unsustainable. Its costs, one of which is the loss of spaces and species, are huge. We have already parceled out and appropriated most of the province's asset base. Developing the small remaining "islands" of wilderness will not improve our quality of life in a measurable way. Economic benefits become illusory when we externalize costs to the environment instead of calculating in honest, full cost accounting for our activities. Aldo Leopold spoke about the last desperate act of a homesteader to wring one more benefit out of a ruined farm when he wrote, "Girdling the old oak to squeeze one last crop out of the barnyard has the same finality as burning the furniture to keep warm." The increased fragmentation of the remaining islands of wilderness on the map is akin to "burning the furniture".

There are not many places on this earth where the wild is still as close at hand as it is in Alberta. I watched a grizzly sow and twin cubs dine on fresh green spring vegetation just eight kilometres from the town of Pincher Creek. Enough wildlife may be found within an easy day's drive from Calgary to make visitors to our country green with envy. Space is essential to preserving such opportunities. Several of our highways still have signs warning of no fuel or services for a considerable distance ahead, a dreaded measure of unoccupied space for some travelers and an attraction to others. There are still pieces of Alberta with enough space where you can walk yourself to death.

Much of the rest of the civilized world has been successively sculpted and shaped for hundreds, if not thousands of years, to meet our utilitarian vision of what a landscape should be or do. The emerald isle of Ireland, beautiful as it is, is the result of the progressive clearing, cultivation and grazing of its landscape for hundreds of years. Viewed through the lens of too much Guinness the landscape is green and appealing; however, the concept, and the vision of wild is long gone from that place, as is the memory of any wild space.

What is sad is that space and species can slip through our fingers in a geological heartbeat; what is unforgiveable is that our attention span is such that we do not seem to notice. A unique population of bull trout once occupied Crowsnest Lake. They now only exist as memories or in old black and white photographs. I have one of those pictures. It shows a smiling child clutching a trout nearly as large as he is. As lake dwellers the Crowsnest bull trout reached large sizes and they spawned in several of the tributaries to the Crowsnest River. Eighty years of angling took its



The Great Plains toad is a species of special concern that has benefited from the protection afforded it on the Suffield National Wildlife Area. PHOTO: C. WALLIS

toll but it was the transformation of the Crowsnest Pass watershed that proved too much for bull trout. Coal mining and logging affected virtually every portion of the watershed. Those land uses combined with residential development meant that by the late 1950s every spawning tributary except one had a dam or a barrier to upstream movement across it. The last hope for the bull trout was Allison Creek. Unfortunately highway construction led to the development of a gravel bar at the mouth of the creek that was impassible to bull trout for several years and the population disappeared shortly afterwards. With that last door slammed shut 10,000 years of bull trout prosperity in the upper Crowsnest watershed ended.

There were no eulogies for the passing of bull trout in the upper Crowsnest, unlike for other species we have lost; the passenger pigeon, the bison, the Eskimo curlew have their mourners in print. I am not surprised. We have an imperfect understanding of the complexity of aquatic systems, of their connections to all living things and of the cumulative effects that insidiously erode the ability of a system to support some species. We do not feel the need to mourn that which we do not understand enough to miss.

If anything worse than losing something could be imagined it must be to forget that something has been lost. We are perilously close to that point with Alberta's imperiled species and their spaces. We are there because we have lost, or misplaced our temporal and spatial benchmarks, our navigational aids to charting changes.

A benchmark is a place in time and space where we have made a point of noticing and noting as many parameters as exactly as possible so we can say in the future, that is how things were then. It is a measure of landscape health, biodiversity and productivity and a mark against which we measure change. Unfortunately, unless a benchmark is very well documented and accepted the measures from it can wander and shift. This wandering, this shifting may be seen from one individual to another; it may be seen in our own memories; it may be seen from one generation to another. I was stunned by the observation of an elderly angler I once interviewed to help me understand the declines in bull trout populations in south-western Alberta. He said, "I would consider your best day of fishing today as one of my worst from my memory of past experiences". It reminded me that my memory may be limited and imperfect and that benchmarks may shift from one generation to the next.

The shift in benchmarks, the loss of spaces and species, sometimes occurs beyond our awareness and reckoning. We think, in our arrogance and ignorance, that the landscape and resources of today are the "full pie". The reality is today's pie is a mere slice of yesterday's pie. And

so it goes; without an appreciation of the progressive thinning of the remaining slice, it can, and will, eventually wink out of existence. Our landscape, like the Cheshire cat in Alice's Wonderland, "vanished quite slowly, beginning with the end of the tail, and ending with the grin, which remained some time after the rest of it had gone." Such is the cost of a failure to remember history and to be lulled into a false sense of security by shifting benchmarks.

Disconnects between Science and Ecological IQs

Our need for good navigational aids and benchmarks and higher ecological IQs is one that science can help us with. The path to higher ecological IQs is one that begins by instilling curiosity, interest and respect for the natural world, the same attributes that are essential to any pursuit in science. Those qualities have always been important and perhaps now are more crucial than ever to create a solid footing upon which the findings of science can find some traction in the minds of skeptics, non-believers, and decision-makers. Unless science can be turned into a guiding light and the keeper of valued, recognized benchmarks, we will remain trapped in a spiral of research that devises better and better ways to measure the activities of fewer and fewer creatures. As the old joke goes, we will know everything about nothing, fiddling as the creatures around us dance their last dance on earth.

An understanding of **how** species and spaces disappear begins with the application of various measuring devices of science. Those measurements can only take us so far however. The most effective device for understanding **why** species and spaces disappear may be a mirror. When we are forced to look into the mirror we will see ourselves. Too many of us support the politicians who promise us low taxes and a hot economy and deliver those goods by exploiting and liquidating Alberta's resource base. All of us – politicians, corporate executives, citizens too - are in some ways complicit. "The main problem," Norman Myers reminds us, "for declining wildlife is not the person with conscious intent to exploit or kill: it is the citizen who, by virtue of his consumerist lifestyle, stimulates economic processes that lead to disruption of natural environments."

Can we avoid being complicit in the disappearance of spaces and species? To travel down that different path we need to change our current mindset; we need to rethink how we approach the natural world and how we will share a common landscape with everything else that lives in, on, or above it.

If we want to increase our ecological IQ it seems to me we need to address the issue of imperiled species and spaces on two levels. First, we need to deal with the myths, misconceptions, untruths and half-truths about biodiversity. Second, we need a concerted effort to increase awareness about how to maintain systems and wild creatures. Fortunately, most of this information currently exists.

The problem, as Will Rogers thoughtfully observed, is not with what we know, but with "what we know that isn't so." Most people view the world through beliefs that are largely ill formed; they lack crucial information and may be irrational because of other circumstances in their lives. They lack the time, critical thinking skills, and the interest to sort through a complex ecological situation; so, it is not surprising we do not grasp the facts at hand and interpret them correctly. Appreciating our situation also is made more difficult by the corporate and political denial machinery. That machinery trains people to view skeptically the warning bells and to turn a blind eye to evident landscape changes and the loss of vital ecosystem pieces. We are conditioned to point our fingers at others. My actions are not a risk to biodiversity; the activities of others are.

Why do we need to improve our ecological literacy and IQ? Very simply, human decisions can have a disproportionately greater impact by changing, sometimes irreversibly, the playing field. The dynamic equilibrium of the ecosystem is disrupted by the additive, cumulative, effects of our actions (e.g. CO² emissions).

Ecological literacy is important, as a public servant once told me, "for those who live in the environment." That means all of us, doesn't it? Some ignore this fundamental truth; they think they are magically immune to the ecological changes affecting us. Creating awareness of ecosystem functions, processes and relevance to humans is the first step to attitudinal and behavioral shifts at the individual and community levels. Those shifts, in turn, may lead to more sympathetic and constructive policy creation at the political and corporate levels.

It's About Choices

If we do not increase our ecological IQ and functional literacy in environmental matters there are several other options we should be prepared to choose from.

You can see a grizzly in a zoo. I suppose we could keep a study skin of a sage grouse in a museum, much like that of Martha, the last passenger pigeon. Caribou, or at least their semidomesticated version, reindeer, will exist elsewhere. A little snippet of the DNA of a westslope cutthroat trout could be held on ice–against a day we might be able to recreate it.



Fenceline Sunflowers 15"x24" Soft Pastel © JEAN SHEPPARD

We could memorialize the creatures and landscapes that slipped from our grasp. The last grizzly in California died in 1922, yet an image of the bear is still prominent on the state flag. This mute testimony to inaction, inability and intransigence is ironic for a state that is so often now in the vanguard of environmental change.

We could satisfy ourselves with the leavings. Most of the rest of the civilized, developed world contents itself with the fragments, dregs and second bests when it comes to spaces and species. They likely have developed a philosophy like one of my university friends. When confronted with failing grades he pointed out that it was not his poor grades that were at fault, it was the impossibly high standards of the school. If we cannot make the grade for species and space

maintenance, we can always lower the standard.

We Can Learn, Can't We?

If we continue to lose spaces and species knowingly in the face of alternatives, then we will have committed an unforgivable, unpardonable act of complacency. There is an old bit of doggerel that goes; "when home and land are gone and spent, then the learning is most excellent." We need to share the same spaces as grizzlies, caribou, and bull trout, not because we live there but because the quality of their spaces contributes to the quality of where we live.

The theologians sitting long days and into the night debating how many angels could dance on the head of a pin never existed. The debate is a myth we have come to believe because we hear it repeatedly and never check the sources of the story. It is akin of the myths of sustainable development, corporate stewardship and accountable government.

We need to spend our days in positive discussion about the real things of this world. Watershed values, storing carbon, preserving possibilities, setting benchmarks and, retaining places rich in biodiversity where we can find joy, surprise and humility – they are of greater importance, arguably, than some of our current resource extraction endeavours.

Others have learned the lesson: let's not be blind to the possibilities of change while there are good options staring us in the face. A seemingly altruistic act of saving imperiled spaces and species may be viewed soon as a perfectly reasonable, selfish act to save ourselves.

You see, we also are up there, dancing the Macarena on that pinhead.



ALBERTA'S GRIZZLIES: WHO WILL BEAR THE BLAME?

By Nigel Douglas, AWA Conservation Specialist

The government's own Endangered

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FEATURES

ho will history point to as the person most responsible for the demise of Alberta's grizzly bears? Demise is surely not too strong a word for a species whose population estimates have slid from 1000 in 2002 to 350-400 today. In all that time successive governments have stood by and done nothing to address the destruction of grizzly habitat, choosing instead to focus on ways to spin their desperate mismanagement into a good news story.

Species Conservation Committee (ESCC) recommended in 2002 that the grizzly should be designated as *threatened*. Subsequent government responses have been consistently bizarre, from previous Sustainable Resource Development (SRD) Minister Mike Cardinal, who set up the provincial Recovery Team while continuing to issue licences to hunt grizzlies, to current Minister Ted Morton, whose department has talked about managing motorized access, but only by redefining the term motorized vehicle so as not to include ATVs.



The prospect of an Alberta without the iconic grizzly bear is frightening. *The bear's future is inextricably* linked to insuring the species has sufficient habitat. PHOTO: © W. LYNCH

The Alberta government continues to back away from its commitments to grizzly bear recovery. The word *recovery* is seldom used these days in government circles, having been dropped in favour of the safer word management. More emphasis is also being put on the fact that Alberta's grizzlies are not a distinct population; they are part of a much larger western Canadian population. The logical extension of this argument is of course that it doesn't matter if Alberta loses its grizzly bears; there are plenty more in B.C.

Quite incredibly, the Alberta government has still not ruled out the possibility of reintroducing the grizzly bear hunt after the temporary hunt suspension runs out in 2009. Having spent 5 years and \$2 million on a detailed scientific survey of grizzly numbers, Minister Morton recently announced that his department will also take into account the results of a poll supported by the Alberta Fish and Game Association which concluded that, because there were lots of people who had seen grizzly bears, there must be lots of bears and so hunting should be restored.

As the person responsible for managing wildlife in Alberta, the Minister of Sustainable Resource Development stands squarely in the crosshairs as the person responsible for managing public lands and wildlife populations.

Of course, the Minister for SRD does not operate in a vacuum. Other ministries, most notably Energy, also make decisions that affect grizzly bears and other wildlife. Energy sells mineral leases throughout grizzly habitat with little input from wildlife managers and none from the Alberta public. The Minister of SRD operates according to the mandate given to him by the Premier. Although this mandate does not mention wildlife, biodiversity or the environment, it does require the ministry to "Ensure Alberta's energy resources are developed in an environmentally sustainable way."

And, of course, all of these politicians operate according to the mandate given to them by us, the people of Alberta. Albertans care deeply about their grizzly bears. (At least we seem to care deeply right up until election day, when we



Although cutblocks create good habitat for grizzly bears that benefit is outweighed by the increased mortality risk resulting from road construction. PHOTO: R. TETREAULT

care about other issues more). It was those people who cared enough to write letters to newspapers and contact their MLAs who helped to get the grizzly hunt suspended in 2006. Hopefully it will be those same people, and many more beside, who will force their government to listen and to act to reverse the demise of the province's grizzly bear population before it is too late.

SRD Minister	Grizzly Friend	Grizzly Foe
Mike Cardinal, 2001-2004	Received 2002 recommendation from Endangered Species Conservation Committee to list grizzly as <i>threatened</i> Established Grizzly Recovery Team	Refused to list grizzly as <i>threatened</i> Continued to issue licences to hunt grizzlies Did not save any grizzly habitat Grizzly bear population estimates fall from 1,000 ¹ to "less than 700 ² "
David Coutts, 2004-2007	Suspended grizzly hunt Initiated 5-year population survey	Refused to list grizzly as <i>threatened</i> Did not save any grizzly habitat Grizzly bear population estimates fall from "less than 700" to less than 500 ³
Ted Morton, 2007-present	Approved Grizzly Bear Recovery Plan Continued temporary suspension of grizzly hunt.	Refused to list grizzly as <i>threatened</i> Disbanded provincial Recovery Team Did not save any grizzly habitat Cancelled population survey before it was complete Grizzly bear population estimates fall from less than 500 to around 350

Grizzly bear management records of successive Ministers of Sustainable Resource Development

Notes

- 1. February 2002, Endangered Species Conservation Committee
- 2. Draft Grizzly Bear Recovery Plan
- 3. From Government of Alberta DNA population estimates, 2004-2007 http://www.srd.gov.ab.ca/fishwildlife/wildlifeinalberta/grizzlybearmanagement/default.aspx



THE LAST WALTZ FOR A PRAIRIE ICON?: THE GREATER SAGE-GROUSE

By Ian Urquhart

The video is stunning. As many as five greater sage-grouse strut across the prairie in their annual courtship ritual. Words cannot do justice to the magnificence of the visual display I watch, nor to the audio display I hear. Dual, dark, featherless, skin patches – symmetrical expansions of the male's esophageal air sac – literally explode through the grouse's white chest feathers to dramatic auditory and visual effect. This theatre is staged on a lek, a traditional courting site used year after year by the males in their efforts to breed with females. While Steve Schwartze's video was shot in northeast Montana in April 2008 (www.youtube. com/watch?v=TX6mcLM3lPw&NR=1) it might have just as easily been shot in the Dry Mixedgrass natural subregion in Alberta's southeasternmost corner, south of Medicine Hat.

Or. could it? Since 1998 the sage-grouse has been classified as an endangered species by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC). This classification and status just was reaffirmed by COSEWIC in the same month as Schwartze made his video; the greater sage-grouse's SARA (Species at Risk Act) status is *endangered*. This once prolific prairie icon is one Alberta shares with Saskatchewan. When the carts of European settlers first rolled across the grasslands there may have been as many as ten million sage-grouse in North America. In 2008 there were less than a thousand birds of breeding age in the total Canadian population and half as many leks as in the late 1990s. Since 1988 this population has plummeted by 88 percent, 42 percent in the last decade – a collapse COSEWIC rather conservatively labels "significant population declines."

The Species at Risk Public Registry (www.sararegistry.gc.ca) estimates that the Alberta sage-grouse population in the late 1960s was anywhere between 3,000



The spectacular breeding displays of the sage-grouse are culturally important to Prairie First Nations. Some dances and costumes imitated the male strutting displays. PHOTO: © W. LYNCH

and 6,000 individuals. Survey data from 2001 identified just 108 males at only eight leks; the total estimated population in Alberta in 2001 was roughly 480 birds. Not surprisingly, both adult and chick survival rates were low. In 2008 only 78 males were reported to have returned to Alberta's remaining leks, 13% below the numbers recorded in 2007.

Explaining the precipitous decline of the sage-grouse, as would seem to be the case for so many of Alberta's species at risk, is inextricably linked to habitat loss and degradation. "Causes for the decline," according to COSEWIC, "are largely due to the loss, fragmentation and degradation of its native grassland habitats through oil and gas exploration, overgrazing and conversion to crops." By eliminating millions of hectares of sagebrush habit over the years we have produced a grouse population in danger of extirpation – a fate already suffered by the British Columbia population. Unfortunately, the provincial

government seems unprepared to stress the importance of habitat integrity to the grouse's future. The *Alberta Greater Sage-Grouse Recovery Plan 2005-2010* states: "The exact causes for the decline in sage-grouse numbers are not known."

The conclusion that our population of sage-grouse is headed for extirpation may be too pessimistic, at least according to the 2008 sage-grouse recovery strategy prepared by Parks Canada on behalf of the federal Minister of the Environment. The strategy regarded recovery of the population as feasible for several reasons. The population was stable, albeit at low levels, with sufficient birds of breeding age and active leks to boost the population; net population increases could also be pursued by taking advantage of the remaining good habitat and improving poorer habitat; altered land-use practices could perhaps reduce, even eliminate, threats to the grouse and its crucial habitat.

Developing an effective action plan for sage-grouse recovery also was regarded as important for the positive effects it would have on other species at risk in Alberta's Grasslands natural region. Protecting sagebrush habitats also was predicted to benefit two other endangered species, the burrowing owl and the sage thrasher, two threatened species, the loggerhead shrike and the Mormon metalmark, and a special concern species, the long-billed curlew.

Recent work by Cameron Aldridge and Mark Boyce on the habitat needed to help sage-grouse persist suggests that major changes in Alberta's approach to land use buffers around active leks would be needed in order to assist the grouse. The authors focus their attention largely on identifying high-quality nesting and brood-rearing habitats in an 1100 square kilometre study area in southeastern Alberta. Their modeling and mapping work suggests that much larger buffer areas need to be established around active leks if high-quality sage-grouse nesting and brood-rearing

habitats are to be protected. Alberta's 3.2 kilometre protection buffer "guideline" around lek sites, although greater than the old 1 kilometre guideline, is still questioned by their research. This buffer approach to protection "could easily result in important habitats being left unprotected...."

From the work of biologists such as Aldridge and Boyce it seems quite certain that the future of the sage-grouse depends importantly on the maintenance of intact "source habitats" – habitats that pose a minimal risk of failure to the species. Yet, on this point, the federal government ultimately has delivered no more than the provincial government. "Critical habitat," the federal recovery strategy claimed, "cannot be identified for the Sage-Grouse at this time."

The federal refusal to identify critical sage-grouse habitat in its 2008 recovery strategy is a familiar refrain in the politics of protecting endangered species in Canada. According to Ecojustice (formerly the Sierra Legal Defence Fund) of the 55 final recovery strategies posted on the SARA public registry in early 2008, only 17 of those strategies identified any critical habitat at all. This situation exists despite the fact that the SARA requires recovery strategies to identify the habitat needed for endangered species to survive or recover "to the extent possible, based on the best available information."

This refusal was the final insult for AWA and other conservation organizations. In February 2008 AWA joined Federation of Alberta Naturalists, Grasslands Naturalists, Nature Saskatchewan, the Wilderness Committee, and Ecojustice in a lawsuit filed in the Federal Court of Canada; the claim there is that the federal Minister of Environment failed to carry out his duties under SARA to identify critical sage-grouse habitat. As Professor Boyce succinctly put it: "Protecting habitat is the most important thing we can do to help the recovery of species at risk and for the sage-grouse this needs to be done now. Unfortunately, as with other endangered species, Environment Canada has chosen not to identify critical habitat in the sagegrouse strategy, despite having ample scientific information to do so."

For someone who is only recently acquainted with the sage-grouse issue this situation is maddening for two reasons.



The burrowing owl is an endangered species that also would benefit from protecting and restoring the sagebrush habitat critical to sage-grouse health. PHOTO: C. WALLIS

The first reason concerns the treatment of the sage-grouse by government in the United States. On the one hand, south of the border the debate continues over whether or not the sage-grouse should be listed under the Endangered Species Act. A final decision on that question, originally anticipated for this May, now is expected even later in 2009, pending the consideration of new information regarding the species and its habitat. Yet, despite this uncertainty, American regulators actually show signs of managing the landscape as if the future of the sage-grouse mattered. A month ago, for example, the Interior Board of Land Appeals remanded 82 coalbed methane well permits in Wyoming's Powder River Basin back to the Bureau of Land Management (BLM). Why? Because the board declared there were inadequate and inconsistent protections for sagegrouse. It is refreshing to see energy regulators actually being required to consider seriously the effects petroleum exploitation have on species unable to lobby Congress or state legislatures. Is it too much to hope for that Alberta's

regulators will follow this lead?

The second maddening feature of the sage-grouse issue is the elevated public profile I think grouse protection enjoys in the United States compared to Western Canada. In researching this article it was quite easy to find stories documenting the travails of sage-grouse in the Western United States. Turning to Alberta, it was as hard to find media coverage of this "officially listed" endangered species as it is to find an active lek in southeastern Alberta. According to the databases I consulted no newspaper, no print media of any type, gave any coverage to February's launch of the sage-grouse habitat lawsuit against the federal government. Such silence is stunning, arguably irresponsible. It serves to underline a point made in Nigel Douglas' article on grizzlies - the public needs to speak out - make that shout out - about the importance of such an endangered species. If we do not act in the very near future we may soon visit YouTube to watch the last waltz of a prairie icon.



THE NORTHERN FRONT OF ALBERTA'S WAR ON WILDLIFE: CARIBOU UNDER SIEGE

By Christyann Olson, AWA Executive Director

hen we were younger and learning about medieval times the tales of fair maidens kept safe behind castle walls and moats to keep the evil enemy at bay seemed quite magical. Knights of the Round Table formed a brotherhood and made plans to defend their lands. All who could took up arms to defend their family and their heritage. Giving up was not an option, battle cries became legendary and gave shape to family crests. The vulnerable lay under siege, holding out until there was no more food, no more fresh water. no more strength, waiting desperately for the knights in shining armour to arrive and save the day. Who would believe that today, in Alberta, we are living a medieval battle, that we have laid siege on our wildlife, and that a twenty year old battle cry is the last hope for some? In 1990, AWA's battle cry was "the

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protect habitat and let the species save themselves" (1990 AWA tabloid Alberta's Caribou Written off?) and we won't give up. As I began pulling this story of caribou together it became clear that Alberta's war on wildlife really is not much different from the tales of old. My fair maiden is caribou, but you could pick almost any wildlife species in Alberta. Wolves, grizzly bears, elk, even beavers - they are the fair maidens behind the castle wall and the siege is taking its toll on them. The gruesome outcome is becoming clearer and more inevitable to those who will look. We are talking about the extirpation of the Little Smoky herd of caribou; we are watching desperate times in desperate places and wonder why, despite all we know, we are not able

In Alberta we may have three distinct types of woodland caribou herds: Mountain, Little Smoky and Boreal woodland. The 2005 Alberta Woodland Caribou Recovery Plan identified the Little Smoky herd as being *at immediate* risk of extirpation. Genetic analyses



Caribou like this one are at the brink of survival especially in the Little Smoky area of Alberta. A great deal has been learned about them, plans have been made, but there has been no direct action taken to protect their habitat. They are victims of Alberta's War on Wildlife. PHOTO: MARK BRADLEY © BOREAL NATURE PHOTOS

reported in the January 2009 Molecular Ecology Journal by a University of Calgary research team confirmed that the Little Smoky population is different from other caribou populations in west-central Alberta. It is likely the last remnant of a distinct boreal caribou population along the Eastern Slopes of the Rockies. Human-caused habitat changes particularly excessive landscape fragmentation including seismic lines, pipelines, roads, and cutblocks - have altered predator-prey relationships, putting the Little Smoky herd at peril. The study, supported by Weyerhaeuser, the Canadian Association of Petroleum Producers, Shell Canada, Parks Canada, and Alberta Department of Sustainable Resource Development focused on mountain caribou. The researchers recognized the adaptive nature of some caribou types, in particular the ability of some individuals to be migratory while others are sedentary.

We now have genetic evidence to support what we have believed for years – the Little Smoky herd is distinct from mountain caribou. These caribou,

estimated to number somewhere between sixty and one hundred, are at risk of extinction. The Little Smoky herd is perhaps the most genetically distinct herd in the greatest danger of extirpation.

Recovery will be a long-term proposition. In 2005 the government-led recovery team made recommendations. Now, four years later, we have deferrals by two forest companies (Canfor and Weyerhaeuser), some great research and an understanding of the problem. Notably, and tragically, the government refused to endorse the recommendation that might have done the most to stop the rapid decline of the Little Smoky herd – implement a moratorium on new mineral and timber allocations. Habitat conservation, an essential part of any recovery strategy, was ignored. Rather than acknowledge the need to rein in industrialization in the Little Smoky herd's range Alberta has continued to promote further development in critical habitat. The siege has become even more threatening for these old-growth forest dwelling herbivores.

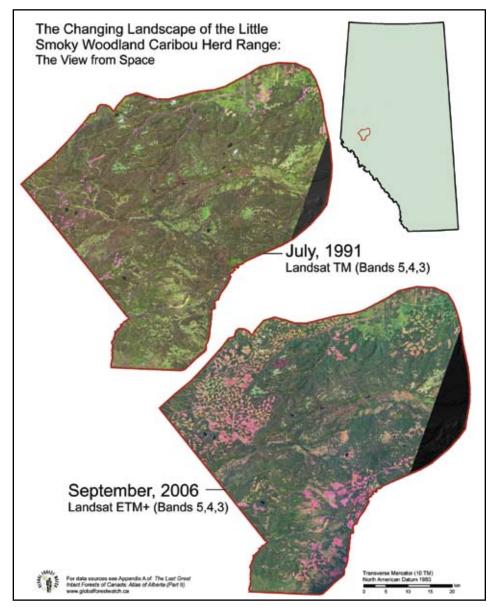
In a 2009 article for the University

of Montana, Mark Hebblewhite talked about the predator-prey relationship and why habitat has become so critical. Woodland caribou seek out lichens and lichens depend on old forests; caribou need many hectares of old-growth forest. Hebblewhite pointed out that recent timber-harvest practices in Canada have wiped out vast expanses of forest across the woodland caribou's range. "What we've done is taken these big chunks of winter range that moose and wolves don't come into, and converted them to young forests that wolves, elk and moose love," he says. Caribou evolved a strategy to avoid wolves in boreal forests, and now, Hebblewhite says, they are "bumping into" the predators more and more frequently. The result is an alarming decline in caribou populations. He wrote: "A third to half of Canadian populations are declining because of human causes. Wolves are the proximate cause of caribou decline. But the ultimate cause is this land change."

Clearly wolves are not the cause of caribou population decline, merely another symptom of uncontrolled habitat disturbance. For this reason, AWA strongly objects to the fact that government officials have killed nearly 200 wolves in the Little Smoky area; meanwhile, government does nothing to secure long-term habitat protection.

As wolf numbers are controlled the numbers of common ungulates such as moose and white-tailed deer increase and this population growth encourages other predators such as cougars and black bears. Will these too now need to be culled to protect caribou from predation? AWA director Cliff Wallis says, "we call this Alberta's War on Wildlife. It extends from wolves to deer to moose, and perhaps bear and even beaver, as the future unfolds and we manage loss of habitat by removing predators and even prey. Habitat has been depleted so significantly in such a short period of time even if we stopped all activity today, we would be looking at decades of restoration work and wolf culling to keep a viable population in the Little Smoky."

AWA continues to press both industry and government vigorously for habitat protection. Some forest companies have voluntarily deferred harvest in intact habitat but there is no long-term plan or assurance that these deferrals will be respected. And, there is certainly no or



Map: Courtesy of Global Forest Watch Canada

little support from government for the deferrals.

The oil and gas industry continues to frustrate the recovery process and continues to push forward with development. The only reason we have not seen more damage in intact habitat from oil and gas development is the downturn in the economy. AWA and others are having discussions with more environmentally conscious companies to try to encourage them to lead by example and protect intact habitat.

The most frustrating thing about defending the Little Smoky herd throughout the past few years has been a lack of support for habitat protection from industry associations and lack of leadership and political will from the Alberta government departments of Energy and Sustainable Resource Development (SRD). Recommendations from the Alberta Caribou Committee governance board regarding the Little Smoky are promising but the board has received no response to the recommendations made last summer from SRD minister Ted Morton or his deputy minister.

When asked what the bottom line is, Wallis replies "Government and much of industry are refusing to do anything meaningful in habitat protection for woodland caribou." The combination of industrialization in the forests and climate change endangers all woodland caribou herds in Alberta. At best, it will be a tough few decades before there is any light at the end of the tunnel for this species. But, abandoning the woodland caribou is not an option AWA can entertain.



CONSERVATION OFFSETS: A PATH WORTH EXPLORING

By Marian Weber, Alberta Research Council

onservation issues are front and centre when Albertans think about development. In the 2006 consultations for Alberta's Land-Use Framework, loss of wildlife habitat and biodiversity ranked second in terms of concerns about land use, right below the government's failure to account for the cumulative effects of development. Biodiversity is fundamental to the quality of life enjoyed by Albertans, yet loss and fragmentation of habitat from development are putting more and more pressure on species at risk. Biodiversity or conservation offsets are actions intended to compensate for the residual unavoidable harm to biodiversity from development. Conservation offsets can be created through acquisition or protection of existing habitat, restoration or enhancement of disturbed habitat or the creation of new habitat. The basic idea behind conservation offsets is that impacts associated with the disturbance of ecosystems and habitat loss are mitigated through either restoration or conservation of adjacent areas so that no net loss of habitat occurs and so that biological values are maintained. In addition temporary habitat loss associated with on-site mitigation is avoided.

Conservation offsets are most prevalent in the U.S.A. where the Endangered Species Act and the Clean Water Act are key legislative drivers. In Canada and Alberta there is also enabling legislation for offsets. There is growing interest in offsets in Alberta, and examples of on-off voluntary offsets include the private land acquisition undertaken by Albion Sands, in conjunction with the Alberta Conservation Association, to compensate for impacts from the Muskeg River oilsands mine expansion. Companies like offsets because they are flexible and allow them to go beyond regulated mitigation requirements while still being cost effective. Voluntary offsets are good for government too as they can get



Middle Rowe Lake 15" x 18" Soft Pastel © JEAN SHEPPARD

conservation benefits without developing additional regulation. Nonetheless, there are a number of barriers to voluntary offsets including suspicion of company and government motivations, and increased scrutiny and risk for companies, particularly if the offset does not generate conservation outcomes.

In the U.S. offsets created through the 1980s under the Endangered Species Act were developed on a project by project or 'turn key' basis. These offsets failed to protect species as the proliferation of small, disconnected mitigation sites and the inability to prevent incompatible land uses on adjoining lands reduced overall availability and quality of habitat. Furthermore, these early offsets lacked long term management requirements and compliance could not be monitored. As a result, the U.S. moved towards a more coordinated approach based on conservation banks which are large intact areas of habitat conserved and managed for the purposes of biodiversity protection. It is hoped that conservation

banking is better for species than either on-site project mitigation or one-off offsets, and conservation banks are often developed within regional species recovery plans. To date there are more than 70 active endangered species banks in the U.S. However there is insufficient information and research to date to really know the long term effects of offset banking on biodiversity. Nevertheless, the U.S. experience suggests a number of issues that are critical to the success of conservation offsets.

Clearly Defined Offset Program Objectives

It is important to think about the objectives of an offset program and what types of activities are appropriate for the creation of an offset. It is also important to clarify the driving forces behind the offset program. Issues around monitoring, defining offset requirements, and stakeholder engagement will differ depending on whether the program is being driven by policy or whether

the objectives are to build stakeholder relations and the reputation of companies. The Acres for America program is an example of the latter type of program. Acres for America is a partnership between Wal-Mart Stores, Inc. and the National Fish and Wildlife Foundation to offset the footprint of Wal-Mart facilities by conserving important habitat for fish, wildlife, and plants through acquisition of interest in real property. Whatever the motivation, building trust with stakeholders is a key factor in dispelling the image of offsets as a 'license to trash' and ensuring that offsets actually achieve their objective.

In terms of offsets related to regulatory and policy drivers, companies express concerns about the costs of developing suitable offset projects and potential future liabilities. This highlights the need to develop appropriate criteria for programs and to get community buyin as well as agree on the governance model for offsets. In the case of large scale development projects such as the oil sands, the impact of offsets on communities needs to be understood. Conservation banks in the U.S. deal with issues such as the predation of wildlife on crops, reduced recreational access, and reductions in local economic growth. From a corporate standpoint, understanding the availability of suitable lands for offsets and the impact of offsets on land costs is equally important. Ideally, an offset program should be developed within a land-use plan that explicitly considers tradeoffs between development, community goals, and conservation objectives. Such a forum will address public concerns about how offsets will affect land prices as well as the livelihoods of communities both adjacent to the development as well as in the offset area.

Trading Apples for Apples

Offsets are based on the premise of habitat substitutability but of course there must be some way to evaluate ecological "equivalency." There are important value tradeoffs associated with offsetting the loss of unique habitats or other conservation values (e.g. unique cultural sites). Rare and site specific values are probably not appropriate for an offset program. For other sites the impact of the habitat loss on species must be quantified which is particularly challenging for projects that result in habitat reductions and fragmentation over large areas. Once impacts are established candidate offset sites must be evaluated. Habitat effectiveness depends on a number of factors including size, connectivity, quality, and types of activities in adjacent parcels. In offsets that involve reclamation and restoration there are issues of timing and risk - what happens to the species up to the time when the offset is functional? What about risk that the offset will not provide ecological benefits? Of course, on-site mitigation also involves temporary loss of habitat, so it is important to be clear about what the actual mitigation alternatives are.

Over the long term there are challenges associated with maintaining ecological benefits from offsets "in perpetuity". Landowners change hands, agencies managing conservation banks can go bankrupt, and development of surrounding lands will evolve changing the management requirements for the species and potentially reducing the value of a particular site over time. These challenges are often beyond the control of a single firm or entity and emphasize the need to develop offsets within the context of a species management or regional land use plan.

Enforcement

Enforcement issues are often ignored. But, as suggested above, there are real problems with enforcing offset agreements "in perpetuity." In the U.S., conservation banks are required by regulation to hold sufficient endowment

funds to carry out any future required management actions on the land. These can include prescribed burning, managing access and recreational use, and may require significant financial resources. Conservation organizations often have limited financial resources and often rely on endowment funds to carry out their programs. Their employees may also lack expertise to evaluate the financial aspects of offset requirements. To further complicate matters in terms of income from endowment funds there is a tradeoff between the initial size of the endowment and the level of risk from fund investments and hence risk associated with the offset. In California, the Environmental Trust, a non-profit which held 4,600 acres, including ten conservation banks filed for bankruptcy after it was unable to fulfill its environmental responsibilities. This all of its environmental assets at the mercy of the courts and creditors. Thus some financial oversight of offset liabilities is probably necessary.

A salient issue for Alberta is the ability of an agency holding an offset to protect the offset from future development. In Alberta, landowners cannot deny access to developers who have leases for energy or other subsurface resources and there have been high profile conflicts between landowners and energy companies. This raises the question of whether disturbance of land that functions as an offset should have additional requirements under the Surface Rights Act. For example, in addition to compensating landowners, developers

Can Conservation Offsets Help Alberta's Woodland Caribou? - *Ian Urquhart*

The question above may be vital given what is said elsewhere in this edition of the Advocate about woodland caribou and the importance of "big space" – large, intact parcels of crucial habitat – for species-at-risk. It may be an attractive option to implement with respect to one of Alberta's declining caribou herds – the Cold Lake herd. It is tempting to speculate that one reason the Cold Lake herd's decline has not been as precipitous as other herds in Alberta is because they inhabit one of the province's more intact landscapes – the 5,291 square kilometres of

northeastern Alberta covered by the Cold Lake Air Weapons Range. Provincial and federal politicians, the Armed Forces, and the energy sector should consider whether the more intact/less fragmented portions of the Range could become Alberta's first conservation bank. This progressive initiative might complement well the efforts taken by Saskatchewan and the Canadian military to establish approximately 1,700 square kilometres of protected areas on the Saskatchewan portion of the Range. might be required to also hold offsets for their impacts on existing offsets on a unit by unit basis.

A Path Forward for Alberta

In Alberta there are numerous opportunities for developing conservation offsets. Under the Alberta Environmental Protection and Enhancement Act, approvals for large projects require proponents to work with stakeholders to manage impacts. The Species at Risk Act (SARA) also emphasizes consensual approaches to managing species at risk. Within these processes there are opportunities for developing offsets. The most important message from practitioners is to make sure that any approach is coordinated. One option is to create a voluntary "challenge" registry for conservation offsets and include government and public participation in developing the program. A challenge registry is a publicly accessible registry of the impacts of companies on habitat including targets, baselines, and offsets, and could be set up by region. The objective of such a program is to challenge other companies to demonstrate meaningful contributions towards meeting biodiversity and other conservation objectives. To be successful such programs should reflect regional conservation priorities and there should be an agreed upon administrative structure for monitoring offset requirements. A challenge registry will help us learn about how offsets might work for different regions, and what kind of governance is required. The role for government is to provide enabling policy particularly with respect to land use planning and zoning. Thus the regional planning that will take place under the Land-Use Framework may offer a good opportunity to explore offset options for the province.



Under Construction - Lower Athabasca Regional Land Use Planning

By Carolyn Campbell, AWA Conservation Specialist

n December 19, 2008, the Government of Alberta established the Lower Athabasca Regional Advisory Council (RAC). This Council is the first under the province's new Land-Use Framework integrated planning process. The Council's recommendations, due by the end of 2009, will shape a regional plan to be passed by Cabinet to direct the spectrum of land and water uses in the region, from protected areas to tar sands mines. The scope of the process is ambitious and the environmental outcomes in the Lower Athabasca could well improve compared to the laissez-faire permissiveness of the last 15 years. However, available details suggest many worrying gaps concerning wilderness protection and conservation.

The Lower Athabasca planning region covers three large municipalities in northeast Alberta – the Regional Municipality of Wood Buffalo (including Fort McMurray), Lac La Biche County and the Municipal District of Bonnyville. The region extends from the town of Bonnyville north to the Northwest Territories border. It contains the watershed of the lower Athabasca River as well as parts of the Beaver River and Slave River watersheds. The main economic drivers now are the Athabasca region and Cold Lake region tar sands



Lack of provincial conservation, biodiversity and wetland policies this far into the Lower Athabasca land use planning process is very troubling for the future of the spectacular, ecologically rich McClelland Late Wetland Complex which overlaps with the Fort Hills oil sands mining project. PHOTO: JIRI REZAC, WWF-UK

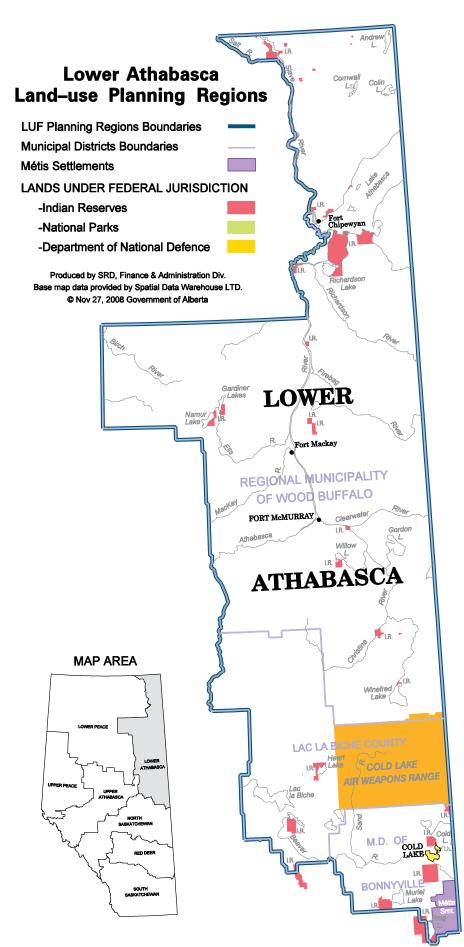
deposits. There are also active natural gas, forestry, agriculture and gravel industries.

The Regional Advisory Council's goals are to provide advice to achieve broad economic, social and environmental objectives through a cumulative effects approach to landuse management, rather than the current project-by-project approach. Heather Sinton of Alberta Environment, who is a member of the South Saskatchewan regional planning team, gave an overview of generic RAC planning stages at a Calgary meeting on March 11, 2009. First, the RAC will scope its process and examine the current "state of the region". Then it will define a vision of a desired future for the region. Using modeling to project

into the future (various time periods) for economic, social and environmental outcomes. Council members will assess the implications of future land use choices that could include, for example, 'status quo' and 'slower' or 'faster' economic growth scenarios. The RAC will recommend a direction, with policy tools and actions to accompany it. Policy tools could include: priority land use and/or zoning, targets/limits to environmental change, criteria for patterns of density, intensity and type of activity, and direction to increase, cap, limit or phase activities. The Government of Alberta's newly established Land-Use Secretariat will develop a final plan based on RAC recommendations and public response. Then Cabinet must approve the plan.

Heather Sinton cautioned that a regional plan's first cut at outcomes may be broad and qualitative. "There may be some zoning, and targets and thresholds established within those zones, but how far we get depends in part on the information available. Further work at both regional and sub-regional levels will be identified, and as we bring in more information, we will be in a position to set some targets at a later date." The Plans also will rely on monitoring of an array of indicators to evaluate whether the intended outcomes are being achieved.

There are still significant unknowns for the Lower Athabasca plan. Alberta Sustainable Resource Development (SRD) spokesman Dave Ealey noted in correspondence on March 11, 2009 that "we are still early on in the process of determining the scope of the Lower Athabasca regional plan. Within that scope will be an effort to incorporate the seven land-use framework strategies." Two of these strategies are encouraging in theory: "Promote efficient use of land to reduce the footprint of human activities on Alberta's landscape" and "Develop a strategy for conservation and stewardship on public and private lands." However, we know very little of how these might apply to boreal forest public lands. Dave Ealey stated that "a strategy on conservation and stewardship remains to be developed as an objective of the Land-Use Framework. How that will be addressed by the [Lower Athabasca Council] will be part of their deliberations.



The Lower Athabasca Land-Use Planning Region. Credit: Alberta Sustainable Resource Development, Corporate Services Division. Used with permission.

I expect." He also added that "details on a public consultation plan for the Lower Athabasca Regional Plan are still being developed." These information gaps are troubling three months after the RAC's formation and nine months before their reporting deadline.

Who sits on a RAC is important, doubly so for the Lower Athabasca since so much of the process is still evolving. The Government of Alberta invited nominations for this RAC from the Alberta Environment Network (AEN). AEN is an umbrella group of nongovernmental organizations, including AWA, dedicated to protection of Alberta's environment. While several of the chosen RAC members have conservation backgrounds, it is very disappointing that no one from an AEN organization was chosen for the Council.

A key policy informing the Lower Athabasca plan is the new provincial oil sands strategy (Responsible Actions: A Plan for Alberta's Oil Sands, February 2009). It includes broad environmental goals such as stronger reclamation enforcement, improved water management and increased conservation and protection areas. However, some detailed objectives are ambiguous, such as: "Establish a conservation offset program to secure high-value conservation lands in the oil sands regions and throughout Alberta to support provincial biodiversity, wetland and environmental management objectives." We do not have clear provincial biodiversity objectives, and a preliminary assessment of the Lower Athabasca Region's biodiversity status has only just been released (see sidebar on the Alberta

Lower Athabasca Biodiversity Monitoring

The Alberta Biodiversity Monitoring Institute (ABMI) recently released its first core report. Its preliminary conclusion is that biodiversity intactness in the Lower Athabasca Land-Use planning region is 94%, or 6% below intact reference conditions. This led to the eyebrow-raising title "Biodiversity hardly affected by oilsands" of an *Edmonton Journal* article (February 27, 2009).

This monitoring program, a decade in development, has been extensively peer reviewed and praised by leading national and international scientists. However, it has important limitations. ABMI Information Centre Director Jim Herbers notes that the reference condition is not historic: "this would be preferred but it is impossible to get, even for ten to fifteen years ago." Instead, the reference conditions are 2003-2007 data from sampling sites in the least disturbed areas in the region. These would be "similar to national park conditions," according to Herbers. Therefore, the ABMI does not measure or account for any change in overall species abundance occurring before 2003.

ABMI monitoring will not measure trends in rare or endangered species. According to Herbers, there are good programs in place to do that now. This report monitors 52 birds and 97 vascular plants, both native and non-native, that are considered representative, many of which are sensitive to the effects of the human footprint on the landscape. It is designed to track trends and correlations between common species, habitats and human footprint at a regional scale.

The coarseness of the data means they should not be applied to regions smaller than 2 million hectares. The mineable oil sands region is roughly 350,000 hectares so ABMI monitoring cannot identify biodiversity issues in the vicinity of oilsands mines. Herbers commented that the grid could be intensified in future to apply somewhere in the 300,000 to 500,000 hectare spatial scale. As well, the results are considered preliminary because only 68 of 235 sampling sites in the region were surveyed between 2003 and 2007; statistical uncertainty will decrease as more sites are surveyed.

The conclusion that AWA draws from this first report is the urgency of establishing an effective network of protected areas in the intact areas of the Lower Athabasca region. ABMI intends to produce two core reports a year covering its monitoring of thousands of species across Alberta. With the above caveats in mind, ABMI monitoring will provide a useful portrait of regional scale changes to Alberta biodiversity after 2003. AWA hopes the provincial government will continue to fund this monitoring effort.

Biodiversity Monitoring Institute's report). Regarding wetlands, Alberta Environment intends to provide the Lower Athabasca Council with wetland policy guidance and implementation tools in time to inform its decisions; however, a public announcement of provincial wetland policy is still some months away. We do not know whether provincial objectives will permit continued loss of wetland area or not.

Another ambiguous oil sands strategy objective is "Review and establish protected areas in the oil sands regions to achieve biodiversity objectives, and allow for multiple uses such as traditional Aboriginal activities, recreation, and tourism experiences." Throughout the province we are seeing plans to expand off-highway vehicle trails and full-facility campgrounds. Despite the Government's own surveys showing that Albertans' place the highest priority on investing public dollars towards setting aside natural areas motorized recreation now seems to occupy a significantly higher priority in Parks' agenda than ecological protection.

Most troubling of all are Energy Minister Mel Knight's comments to a Calgary Herald reporter published on February 13, 2009, just after the oil sands strategy's release: "None of what we're doing with respect to the strategies we have in place-the energy strategy, this oilsands strategy, the land-use framework-none of those things will slow development pace," Knight stressed. "They're not intended to do that." In a region where existing tar sands projects are already posing unacceptable longterm risks to water quality, quantity, wetland integrity and sensitive species habitat, that attitude suggests that the environmental outlook for the Lower Athabasca remains poor. AWA will continue to update our supporters on Lower Athabasca land-use planning. Land-Use Framework or not, public pressure for protecting wilderness habitat and watershed integrity in northeast Alberta will remain essential.

Government of Alberta launches

major review of water allocations Summer 2009 is shaping up as a crossroads for water issues in Alberta. Environment Minister Rob Renner announced recently an extensive review of Alberta's water allocation system. "We are in the midst, as we speak, of exploring a number of different alternatives, ... everything is on the table, and ... we will be bringing forward a draft policy for Albertans to comment on later this summer or early in the fall," Minister Renner stated during Question Period on March 19th. A major driver for this review is growing water demand in the South Saskatchewan River basin, much of which has been closed since 2006 to new surface water allocation licenses (the Red Deer River basin is still issuing licenses). Existing water licenses across Alberta are held in a First-in-Time First-In-Right priority system. Most water allocation volumes in the Bow and Oldman basins are granted in very senior licenses held by irrigation districts, and a number of smaller municipalities are projected to be at the limit of their licensed allocations in the next twenty years.

One input to Alberta Environment's review will be an Alberta Water Council recommendation due in June on improvements to the water allocation transfer system. Environmental groups on the Water Council, including AWA, will advance as an essential interest the setting aside of water for basic human and ecological needs. They should be the highest seniority and outside the tradable allocation market. Alberta Environment will receive advice from two other main sources before releasing its draft policy for public consultation. The Alberta Water Research Institute will provide a literature review comparing allocation systems worldwide. An advisory group led by David Percy, Dean of the University of Alberta's Faculty of Law, will also provide recommendations.

- Carolyn Campbell

Land-Use Framework

The Alberta government's long-awaited Land-Use Framework (LUF) looks set to take on new life in early April with the introduction in the legislature of the Alberta Land Stewardship Act. This Act will have sweeping powers to supersede all previous legislation which will now be required to conform to the purposes of the LUF.

Responsibility will fall squarely on the shoulders of the Regional Plans, one for each of the seven regions identified in the LUF. Though Regional Advisory Councils (RACs) will be established for each region their role only will be advisory; they will discuss only those issues identified by Cabinet and their final recommendations may or may not be incorporated into the final Regional Plans. These final plans will be very much government-written plans.

The first of the RACs – for the Lower Athabasca Region – is already meeting, and environmental groups have made it abundantly clear they are bitterly disappointed that none of their nominees were invited to be on the Council (despite having been invited to submit names). Membership of the second RAC, for the South Saskatchewan, had still not been announced at the time of writing, even though this RAC was originally intended to start work in January 2009.

Once again the environmental community was invited to submit nominees to sit on the council for the Southern Region. Even though the region has since been divided into two, South Saskatchewan and Red Deer, none of the nominees has received so much as an acknowledgement of their nomination, still less any indication of what the makeup of the RAC will be. A second rejection of input from environmental groups would send a very clear and disturbing message about the direction in which the LUF process is heading - certainly not the reduction in Alberta's focus on "economic development and growth" requested by a large majority of Albertans in the 2007 LUF survey.

High Island WILDCam maintained,

more Parks consultation recommended In late February 2009, Tourism, Parks and Recreation Minster Cindy Ady announced that the High Island WILDCam program would be maintained. This program was the subject of public consultation from September to November 2008 due to concerns raised by Lac La Biche naturalists and AWA. Without prior public consultation, in March 2007, Parks personnel arranged for the installation of two towers and several cameras and cables on High Island, a small island on Lac La Biche designated as a Natural Area. The intention of the project was to enable live video feeds of colonies of nesting Caspian terns and great blue herons. However, impacts from heavy equipment during installation, and the ongoing physical and aesthetic impacts of the program were cause for concern.

AWA arranged a meeting in May 2008 with senior Parks officials that helped to move the issue into public consultation. AWA Conservation Specialist Carolyn Campbell toured the High Island installations and attended a Lac La Biche open house in September 2008 to hear community comments. Based on that, AWA gave qualified support for the WILDCam project, as long as there was ongoing communication with local stakeholders to minimize its environmental impact.

Tourism Parks and Recreation's recommendations arising from this public consultation included "Ensur[ing] that public consultation is conducted prior to any new development happening within undeveloped areas within parks and protected areas." AWA greatly appreciates the vigilance of its members across the province, and will continue to advocate for the ecological integrity of our protected areas.

- Carolyn Campbell

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- Nigel Douglas



New forestry scars on the side of Crowsnest Mountain will likely take decades to recover. PHOTO: A. BRYCE

Logging on Crowsnest Mountain

Despite considerable local opposition, the Alberta government recently gave Spray Lake Sawmills the go-ahead to log on the flanks of Crowsnest Mountain. There seems to be little economic justification in despoiling such a signature landscape. The thin soils and high winds of the Crowsnest Pass produce spindly matchstick trees which are then trucked on a 500 km round trip to the mill at Cochrane. Many residents are appalled at how anybody can look at this breathtaking landscape and see nothing more than forestry dollars.

- Nigel Douglas

Petro-Canada Sullivan Hearing Put to Bed

Those Albertans who believe that the relationship between the province's energy industry and its regulator, the Energy Resources Conservation Board (ERCB), has long been an overly intimate one were given further ammunition with the February suspension of the Board's hearing into Petro-Canada's Sullivan application. In a surprise announcement, February 19, ERCB declared that the hearing was "on hold," pending an investigation into a recently disclosed personal relationship between one of its staff members and a Petro-Canada employee. Both had been involved in the hearing process.

Ironically, the 12-week ERCB hearing into the application by Petro-Canada to

drill 11 sour gas wells and build 51 km of pipeline in southern Kananaskis had already come to an end in late January. Although the regular hearing had ended lawyers for interveners were still in discussions with the Board arguing that government Fish and Wildlife staff should be compelled to appear in front of the hearing panel. Petro-Canada lawyers had countered that the company's written accounts of their meetings with Fish and Wildlife staff should be sufficient. These discussions seem to be moot.

It remains to be seen whether the ERCB will allow the application process to resume after a suitable third party investigation or if the credibility of the entire hearing process has been irreparably compromised. The prospect of going back to the beginning and starting again is not likely to be greeted with enthusiasm by any of the parties.

AWA argued at the hearing that it was inappropriate to make planning decisions of this magnitude before the government's Land-Use Framework (LUF) process had had the opportunity to complete the planning framework under which such activities need to be managed. Any recommencement of the ERCB's hearing process will pre-empt any decisions that the LUF's upcoming South Saskatchewan Regional Advisory Council is able to make.

- Nigel Douglas

Dammed if You Do, Dammed if You Don't

It is a well known environmental adage that when environmentalists lose a battle it stays lost; but when they win a battle they are likely to have re-fight it again, and again, and again...

The Meridian Dam seems to be another example of this. The dam would be situated on the South Saskatchewan River close to the Saskatchewan border. It would create a 150 kilometre reservoir, stretching as far upstream as Medicine Hat; it would flood critical wildlife habitat in Suffield National Wildlife Area and Prairie Coulees Natural Area. Proposals for the dam have appeared and disappeared several times since it was first proposed in 1972.

On March 11, 2002, AWA published a news release entitled *Meridian Dam is Dead*. The pre-feasibility study into the dam had finally been released and had revealed that the project would cost an estimated \$5.5 billion; for every dollar invested there would be a return of only 33 to 35 cents. At 2001 prices, that would have represented a bill of more than \$1,500 for every single Albertan. The bill is likely far higher now. As AWA's Cliff Wallis wrote at the time "Congratulations are certainly due but don't pop the champagne corks yet." How right he turned out to be!

At a March 2, 2009 meeting Medicine Hat City Council unanimously passed the following motion: "That the City of Medicine Hat request the province of Alberta to conduct a full feasibility study of the Meridian Dam." This proposal, despite its cost and its environmental destructiveness, simply will not go away.

How seriously will the province take this motion? Since 2002, the South Saskatchewan River Basin has been closed to further water allocations, making a dam even less feasible today than it was in 2002. The South Saskatchewan Regional Advisory Council of the Land-Use Framework is scheduled to begin meeting this spring. At this time it is unclear whether water allocation issues such as the Meridian Dame will be discussed.

- Nigel Douglas

RECALL OF THE WILD

This is the second of a new Wild Lands Advocate series featuring interviews with Albertans who had the opportunity of living and working in Alberta's backcountry when it was still largely wilderness. Writers will interview those who have known and loved wild Alberta for many decades, bringing you singular perspectives and stories from their colourful lives.

Elmer Kure – the Man Who Never Gave Up on Conservation By Dorothy Dickson

Elmer Kure grew up on a farm in Spruce View east of Innisfail on a road leading to the Eastern Slopes. From his father he learned that the basis of good farming is stewardship of the earth by practices such as crop rotation. However, when they bought some new land to add to the farm they had a disagreement because his father wanted to follow the usual practice of clearing the land of all natural features to gain more land for crops. Elmer, on the other hand, wanted to leave a wooded area and small wetland untouched.

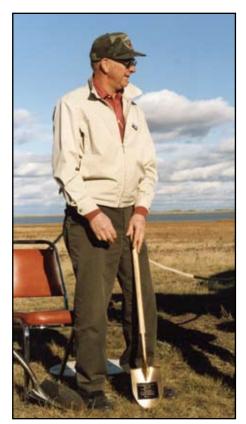
He lost this first foray into land conservation and protection of wildlife habitat but went on to win many more.

Young Elmer sometimes shot hares or grouse for the pot and he earned money by shooting ground squirrels for a local fox farm. He was paid by the squirrel and had to buy his own ammunition so every miss was money out of his pocket. He soon became an accurate shot and 'don't fire unless you are sure' remained his hunting ethic.

The Alberta Fish & Game Association, to which Elmer belonged, usually elected as President the member who had served as a Vice-President for four years but in 1958 they decided they needed someone who was prepared to be politically active and speak out on their behalf. They wisely chose Elmer, who has been effectively 'speaking out' on many hunting and conservation issues ever since.

However, his 'speaking out' was always done with courtesy and respect for other points of view, so he was able to be on friendly terms with politicians such as Ernest Manning and Harry Strom and his understanding of politicians and the political system has stood him in good stead ever since.

He delighted in being out in wild areas of the Province with his hunting buddies and his joy in, and respect for,



Elmer Kure at the inauguration of the Antelope Creek Ranch west of Brooks.

nature grew as they explored. Over the years he became a strong voice for those hunters, naturalists and environmentalists who believed that if you wished to use, enjoy and learn about nature, you had to accept the responsibility to work to preserve it and that included supporting the establishment of areas where all wildlife was protected.

In the early 1970s, when public awareness of conservation was growing and Alberta established the first Ministry of the Environment and the semiautonomous Environment Conservation Authority (ECA), there were so many issues needing work, public hearings to attend and proposed policies to discuss, that the President of the AFGA asked Elmer to become the Association's Executive Director. In 1973 he handed the farm on to his son and took the job full time - but, at his insistence, at half salary because, typically, he thought there were better ways to use their money.

Elmer was of the strong opinion that the time had come for the AFGA to have a wider and more conservation-minded outlook at the whole environment of the remaining wild lands and to take a major role in preserving their inherent values, rather than just their value to produce game for hunting. This view received considerable opposition but was gradually accepted by other members and certainly increased the Association's respect among conservation organizations such as AWA. That Elmer was always willing to work with others for a cause he felt was important was clear when he worked alongside the Federation of Alberta Naturalists in routing pipelines away from vulnerable prairie areas and agreed with the Canadian Parks and Wilderness Society's efforts to keep the winter Olympics out of our National Parks.

He was not so popular with the ranching community when he opposed grazing in much of Cypress Hills Provincial Park. The pictures he took on opposite sides of the fence dividing the parkland from the grazing lease helped to convince the decision makers to agree with him.

He represented the AFGA on the Renewable Resources Committee of the ECA Public Advisory Committee (PAC) at the time the original Eastern Slopes Policy was being written. Its main aims were protecting watersheds and ruling where recreational activities, including hunting and fishing, were appropriate and where protection of wildlife habitat should be given precedence. Public hearings were held throughout Alberta and Elmer attended every one of them, contributing greatly to the resulting recommendations that led to a generally good policy – which, unfortunately, was altered and considerably weakened years later.

The struggle for better protection of the beautiful and biodiversity-rich Eastern Slopes continues, but we still have the three strongly protected Wilderness Areas for which Elmer fought so hard or – one of the achievements of which he is most proud and for which we are very grateful to him.

His interest in farming encouraged him to support the PAC proposal to site drilling rigs in the corners, rather than the middle of quarter sections and he encourages the landowners now fighting over power line routes. However, he is not comfortable with those current farming practices aimed at producing more and more per acre. He thinks the cost of depleting the soils so much that they need increased use of chemical fertilizers and the heavy use of pesticides, is too big a price to pay and will eventually do more harm than good.

When hunting bison in the Slave River lowlands in 1960, Elmer diagnosed anthrax in the herd and alerted the government. From that grew his interest in wildlife diseases which fuelled his strong opposition to game farming. That such opposition was not successful is one of his greatest regrets and, of course, it was not long before the predicted spreading of disease from confined operations to wild animals was proved correct. The useless slaughter of ungulates on Alberta's eastern border to try to stop the spread of Chronic Wasting Disease has only recently been stopped and the AFGA and other groups are increasing pressure on the provincial government to close the remaining game farms before the brain disease spreads further. Elmer firmly believes that wildlife, alive or dead, should never be for sale.

One of his pet projects which still brings a big smile of satisfaction to his face was the preservation of the Antelope Creek Ranch to show how things could be and should be done in a way that sustains the land's natural values as well as its economic and recreational ones. When it was for sale and the government would not pay the asking price Elmer and a friend set about raising the money. He alone raised \$450,000 – no wonder they gave him a gold-coloured shovel at the inauguration.

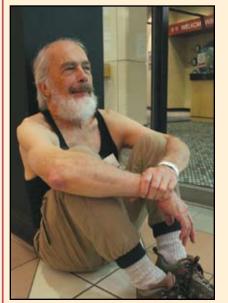
Elmer's advice to those who want to bring about changes that will improve protection of the environment is to start at the community level, listen to other opinions and be flexible when possible. But if you decide something must be opposed, stand up and say "No" and mean it. Keep saying no for however long it takes, never back down or just give up. The many committees on which Elmer was asked to serve attest to the respect in which he is held by fellow conservationists and hunters and the awards he won reflect their gratitude for his achievements. His continuing dedication inspires us to follow his advice and never give up. 🁏

DEPARTMENTS

Association News & Events

IN MEMORIAM

WILLIAM ERNEST FARRINGTON Feb. 4, 2009 at the age of 76 years



Will Farrington appeared on the street in front of our Calgary office one spring day a few years ago and offered his services. A great volunteer, Will helped us with any project we asked him to be part of. A graphic designer by trade, he helped formulate concepts and designs for the Alberta Wilderness Resource Centre and was an important part of the team that pulled together ideas and sought out funding and resources to make our centre a reality. His cheerful smile was found in any number of places. He was a singer with choirs and groups at both the Unitarian and Hillhurst United church congregation. We often encountered each other at events. When AWA needed help with the Climb and Run for Wilderness, Will would be

there, helping set-up, serving coffee, and generally doing whatever was required with quiet stealth! As the years passed, Will would spend part of each year here in Calgary and the rest in Montana. We have many fond memories of Will. Just as I was expecting an email from him this spring, saying he would be back in Calgary soon, instead came the sad news that he had passed away, a victim of cancer. We miss Will and in his honour and to celebrate his spirit and penchant for volunteering and giving of himself, we have instituted an award at this year's Climb and Run for Wilderness in his name. The Will Farrington Memorial Award for the outstanding volunteer will be presented for the first time on April 18, 2009.

- Christyann Olson

Association News & Events

AWA SUMMER HIKES AND BACKPACKS PROGRAM

AWA's hikes program is a great way to explore the lesser-known wilderness gems of Alberta, discover our province's diverse wildlife, and learn about AWA's work to protect these magnificent landscapes.

For more information about all our summer hikes see the 2009 hikes brochure or visit our website: www.AlbertaWilderness.ca.

Pre-Registration Is Required for All Trips

Online: www.AlbertaWilderness.ca Phone: (403) 283-2025 Toll-free: 1-866-313-0713

DAY HIKES

\$20 – AWA members \$25 – non-members

Saturday June 13, 2009 Whaleback Hike With Bob Blaxley

Thursday June 25, 2009 **Porcupine Hills Hike** *With Vivian Pharis*

Wednesday July 8, 2009 **Dry Island Buffalo Jump Hike** *With Tjarda and Rob Barratt*

Saturday July 11, 2009 **Ya Ha Tinda Hike** *With William Davies*

Saturday August 1, 2009 Sage Creek Hike With Lorne Fitch

Wednesday August 5, 2009 **Plateau Mountain Hike** *With Vivian Pharis*

Saturday September 26 Zephyr Creek Hike With Paul Sutherland

BACKPACK TRIPS

For the more adventurous travelers, our backpack trips offer 3- or 4-day wilderness trips. These trips are for people of varying availability, so please call AWA's office for more details.

\$100 – AWA members \$125 – non-members



PHOTO: C. WEARMOUTH

Saturday June 6 – Monday June 8, 2009 (2 nights) Lakeland Backpack With Aaron Davies

Monday July 20 – Wednesday July 22, 2009 (2 nights) **Castle Backpack** *With Reg Ernst*

Thursday August 13 – Sunday August 16, 2009 (3 nights) **White Goat Backpack** *With Jen and Nigel Douglas*

SUMMER SOLSTICE STROLL

Devonian Botanic Gardens, Edmonton Friday June 19th, 2009, 6:00p.m. – 9:00 p.m. Pre-registration is requested On-line: shop.albertawilderness.ca Toll-free: 1-866-313-0713

This is AWA's and Devonian Botanic Garden's 3rd Annual Solstice Stroll.

Join us for a summer evening stroll through these beautiful and diverse botanic gardens.

Learn about the significance and mystery surrounding the Solstice and celebrate Alberta's Wild Spaces with us.

This is a wonderful evening for the whole family, we hope you will bring a picnic to enjoy as your stroll winds into the pavilion where we will have fun filled entertainment and prizes.

Watch the website for more details. \$35 – family, \$15 – adult, and \$10 – child/senior

BUS TOUR

Tuesday June 9, 2009 Parkland and Grassland Mini Bus Tour

Join us on a driving tour through Alberta's Parkland and Grasslands Natural Regions, including stops at:

Rumsey Natural Area. You will see rolling knob and kettle terrain, and learn about conservation concerns with special interpretive guests Dorothy Dickson and Cheryl Bradley.

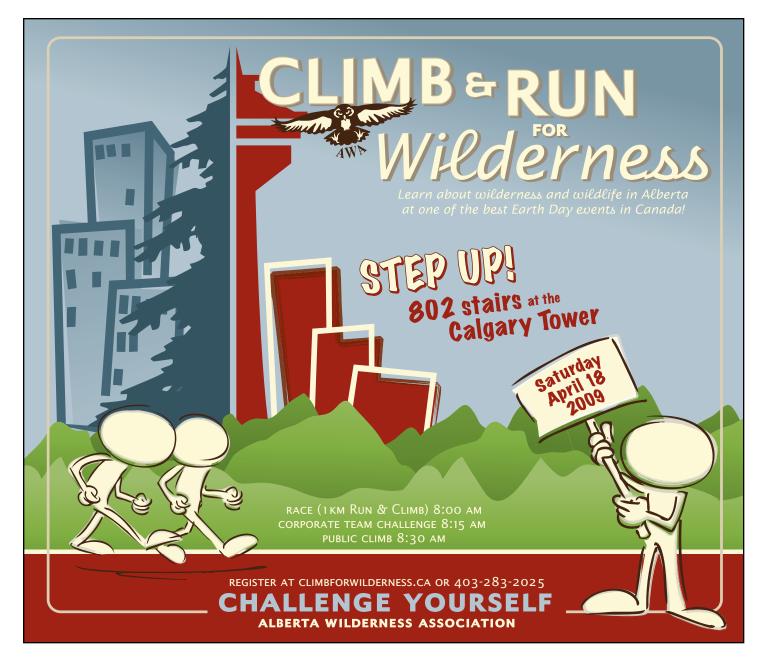
TK Ranch. Owners Dylan and Colleen Biggs will introduce us to the environmentally managed TK Ranch, where attention to the entire ecosystem means their fields are excellent examples of native prairie and their humanely handled and ethically raised cattle flourish in the fresh air and sunshine.

Little Fish Lake. This 7 km² lake is an important staging area for waterfowl and shorebirds during their migration.

Cost: \$45 – AWA members \$65 – non-members



Western Wood Lily 18" x 18" Soft Pastel © JEAN SHEPPARD



Return Undeliverable Canadian Addresses to:

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

