Wild Lands Advocate

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LOVING, LOSING AND RECLAIMING OUR PUBLIC LANDS

Dr. Shirley Bray



Our public lands are a source of great wealth. Comprising about two-thirds of the provincial land base, they not only provide a vast amount of natural resources such as oil and gas, timber, water and rangeland, but they also provide ecological goods and services, social and spiritual benefits, and opportunities for recreation. They are places

that deserve protection and that can, if well managed, serve as benchmarks of healthy ecosystems.

Often divided into the forested green zone and the settled white zone, they comprise most of the Canadian Shield

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country, the boreal forest, the eastern slopes and remnants of aspen parkland and grasslands, where much of the public land is leased for grazing.

"Having public lands in this province is in the public interest," says Cheryl Bradley, a botanist, long-time prairie conservationist, and member of the Southern Alberta Environmental Group.

"There aren't a lot of countries in the world where there is a lot of land held in trust for the public," says Vivian Pharis, AWA director and long-time defender of public lands. "And I think it's something that's extremely valuable for anybody who enjoys the land for any reason."

"Public land makes all of us rich, particularly those who have no private land," says Bob Scammell, a lawyer and writer in Red Deer who has spoken out in defence of public lands for decades.

"I think the importance of public lands is that shared stewardship," says Archie Landals of the Parks and Protected Areas Division of Alberta Community Development. "The land belongs to everyone, and multiple use benefits extend way beyond resource use. I think Alberta and Canada are better places to live, generally because there is public land that people have access to besides the private stuff that they own."

Dr. Brian Horejsi, a wildlife researcher, believes that public land "is one of the most unifying forces in a society. It is absolutely critical. This unifying force may not be any more



Looking across a medicine wheel in the Majorville area east of Calgary



important than ecological services, but we get a lot of ecological services from places besides public lands." Public land is a common tie amongst us all in Alberta and Canada, he says. "To me that's paramount."

Yet like any source of common wealth, there are many fingers in the pie, some much bigger, stronger and more aggressive than others. Because of a lack of vision and leadership, this has led to escalating conflicts and multiple abuse. "Human greed has and will destroy public lands unless humans are controlled," says Steve Dixon, a farmer who lives in Brant and one of the founding members of AWA. People do not have the right to destroy the land, he adds.

We know about the past and present state of our public lands, but what about the future. What do Albertans want for their public lands, and what values do we place on these lands today?

Alberta's public lands have come to us via a rather bitter history filled with greed and ignorance. It behooves us, therefore, to take a deep responsibility for these lands.

Even before public lands were turned over from federal jurisdiction to the province in 1930 they had undergone

extensive changes. The fur traders had come and gone, as many populations of furbearers were extirpated by the late 1800s. By the 1880s only one small population of wood bison, in Alberta's boreal forest, remained out of the four million that originally roamed the land only 50 years previously. By 1900 much of Alberta's wildlife was gone.

"An awful silence settled across a land that, only a few decades earlier, had teemed with life," writes Kevin Van Tighem in *Home Range*. "Even as government began to waken to the

need to conserve wildlife populations ... the tide of settlement began a far more long-lasting set of changes to Alberta's ecosystems and wildlife – habitat loss."

In the 1870s treaties with native peoples in Alberta signed over to white people the vast lands of Alberta in return for such things as reserves, food and clothing. In *A History of Alberta*, James G. McGregor writes: "Old Indians claim that none of them could comprehend giving up their hills and valleys and the land over which they had roamed, and have said that they might as well have been asked to give up the air and the blue sky and the sunshine."

By the 1870s the land was surveyed, followed by the TransCanada railroad in 1883. In 1877 the first cows were brought to Alberta and were pastured at first on open range. By 1885 the Canadian Crown held most of Alberta's lands. In order to pay the costs of establishing control, surveying, allotting land, and paying for railroad, it needed to turn the land to profit, to develop the west as fast as possible. The grasslands and parklands were settled and turned to

agriculture. The oil and gas industry sputtered into existence. In 1925 the Johnson Brothers started logging in southwest Alberta.

After 1930, development of the land continued. In 1947 the oil industry took off with the discovery of the famous Leduc No. 1 oil well in Turner Valley. Seismic lines and pipelines began to crisscross the entire province. In 1957 the trunk road from Coleman to Grande Prairie opened up the foothills. Rivers were dammed, irrigation was expanded through the south, and the boreal was opened for massive logging.

In 1754 Anthony Henday, the first European to come to Alberta, came on a reconnaissance mission for the Hudson Bay Company. Norm Conrad writes about two perspectives of what Henday's coming meant in his book *Reading the Entrails: An Ecohistory of Alberta*. In one view "[h]e marks the advent of purpose for Alberta – all before was mere nature.... All after was development and improvement, the beginning of civilization and the end of savagery." In the second view, Henday's coming is seen as the "lead ripple in a sequence of waves of itinerant exploiters coming to take from the land whatever the market's appetite demanded, to export it,

to enrich themselves and then move on, leaving behind a hollowing land."

Lorne Fitch of Alberta Fish and Wildlife notes that "public land was the stuff that was left after everything else was taken. In the years since the development of our landscapes, public lands have taken on a greater interest, perspective and value because they have been shown to be the buffers, they've been shown to be some of the last best critical habitats."

"Alberta's public lands represent one of the greatest opportunities for long-term biodiversity and wildland

protection in the Canadian prairies," notes Cliff Wallis, grassland expert and past-president of AWA.



Steve Dixon in his Cessna airplane

Loving Our Public Lands

Love of our public lands has prompted people to enjoy them, to use them for recreation, to provide food through hunting and fishing, to study them, to become active stewards of them and to protect them.

When Steve Dixon, now 87, was young, his love of the land led him to join the Alberta Fish and Game Association in High River. He spent his spare days wandering through Kananaskis Country. "How could I be so lucky as being a poor boy and being able to have the opportunity to go into that kind of a country and enjoy it?" he asks.

Although he took a bull elk each fall for meat through the winter, he says he never hunted with the idea of seeing how much game he could kill. "My interest in that country was to hike through it and enjoy the beauty of it and be able to sleep out a few nights and leave it that way." He says that when he



gave his baby son a choice of elk meat or beef, his son chose the elk.

When the road was put in through Kananaskis Country, he says "the abuse was absolutely sickening. We know you can't open this country up to all that traffic, it just doesn't work." Flying over the area he saw increasing oil and gas exploration. "The wildlife disappeared at a hell of a rate," he recalls. "I quit hunting about 30 years ago because the game population was just about nil."

He brought up the issue at three different conventions of the Alberta Fish and Game Association and found that many of his AFGA colleagues did not share his enthusiasm for preservation, that the land had to be taken care of and looked after. "I said I was going to start an organization for that purpose only." With rancher Bill Michalsky and oilman Floyd Stromstedt, he started AWA.

Hyland Armstrong shares a family ranch in the Cypress Hills. The ranch is a mixture of private land and public grazing leased land. He says his training in rangeland management and his experience have given him a different perspective from many other grazing leaseholders.

"I have to always remind myself when I'm moving across this grazing lease that there is more to this grazing lease than the ability to graze – there are opportunities for wildlife, watershed management and recreation. Therefore, my management must take all these things into account, not just so-called management of livestock." He believes he must be accountable for how he manages the resource.

He points to the fact that leaseholders comprise only about 0.1 per cent of the population of

Alberta. "The biggest issue for us is to realize that we have to understand what the rest of society wants with this resource and listen to them and communicate with them." He is not afraid to open a dialogue with the public and he regularly gives talks about sustainable range management for cattle and wildlife. In order for a dialogue to happen between ranchers and the public, he says, "there needs to be trust and I get the impression that the majority of ranchers don't trust too many people. So we've got to learn to start trusting people."

"When I think of managing a resource, the resource comes first," he says. "Then you can usually get an economic return – but it's always in the long term, not the short term." He notes that ranchers are generally not trained in range management; they don't take an objective approach or use critical analysis. Many tend to make the mistakes that their forebears taught them, believing that it is the right thing, valuing short-term profit and managing their ranches for increased carrying capacity, not for long-term health of the range.

Armstrong thinks that what many ranchers think of as stewardship is fairly superficial. "They call themselves stewards, but they're really ranchers. Their focus is not on managing landscapes, it's on managing ranches, managing cattle. Some management techniques may not have economic justification, but do have ecologic justification," he says. "[Managing] for sustainability doesn't pay off immediately; it may take three or four generations."

Armstrong thinks we are too obsessed with what we can do with public lands and we should be more concerned with the impact of what we're doing. "We're arguing over recreation, hunting, grazing, but no one ever argues over impact. We aren't keen on looking at good evidence."

He says there are four questions we need to ask: (1) What is the structure and function of the landscape that you are dealing with? (2) How do wildlife and plant communities respond to structure and function? (3) How does structure and function change or affect distribution of resources? (4) How does your management alter that structure and function?

"If you can honestly answer those four questions," he says, "then you can have a better idea as to how to manage that

resource. The ultimate question is do you want to see that type of change take place and go from there."

Dorothy Dickson takes her role as part owner of Alberta's public lands very seriously. She has been a vocal supporter of conservation of wild lands and waters for decades and has participated in various committees, including one for the management of the Rumsey Natural Area and Ecological Reserve, one of the last best remaining examples of aspen parkland in the province and the



Dorothy Dickson and Klaus Jericho of "Southern Alberta Environmental Group" in the Rumsey Natural area

world. Her practical, no-nonsense, common sense approach is endearing to her fellow conservationists, but is also invaluable in helping others to understand conservation aims.

In a meeting with the cattle commission once, they asked Dickson whether "you people want all of us grazing leaseholders off the land, do you just want the land for yourselves?" Dickson replied, "Good heavens no, you're our greatest protection because grazing is a useful use of the land that properly done doesn't destroy its environmental, ecological value, but at the same time keeps other developments away. Your being there in an approved use of public land is the greatest safeguard for that public land."

Dickson often leads hikes to the Rumsey area. She contacts the leaseholders to tell them she is going in and to find out if there is anything she should be aware of, such as a dangerous bull. She never asks for permission, she says, but she will always let them know when she is coming. She has discovered that quite a few leaseholders don't agree with the new access



rules. At first they wanted everyone to get their permission for access, but in considering how that permission was to be obtained, they found it too cumbersome. "They couldn't care less if people come in walking," says Dickson, "they don't really want to be bothered being contacted."

Dickson has always supported removing the liability of the leaseholders for the public walking on their leased land. "But I always pointed out in the papers that I wrote that if they want to have control and you have to get their permission, then that's admitting liability. If they want to be liable for the land then they've got to look after it to the standard that I expect. I've also pointed out to them that I was part owner of that land and if they gave permission for a use that damaged that land then I was free to sue them. I could hold them responsible. For example, if someone let trail bikes into Rumsey, and they went

up and down the hills and caused erosion, I've said to the grazers in there, if you ever do that, I'll have you in court in no time. It's my land."

At a range management forum she was on the same panel as Tom Thurber, who chaired the Agricultural Lease Review in 1997. Thurber, who had a grazing lease in the Peace River area, graciously said that he had no problem at all with Dorothy coming on his property to watch birds and so on and she was always welcome.

Dorothy replied, "Well, thank you very much, Tom, and as long as you take good care of that grazing lease, you are welcome on my land."

Dickson has also been a volunteer steward of the Innisfail Natural Area for more than 18 years. She says that the stewards "are the eyes and the ears of the government." Stewards can do as little as check the area once or twice a year and send in a report. But Dickson has gradually built up inventory lists for hers "because that's of interest to me." It also gives the government a better idea of the value of the area. "Where the system breaks down is that because of staff cutbacks and the attitude in some of the senior staff, we don't get the backup we need."

Losing Our Public Lands

There are several effective ways of our losing public lands. Loss can be measured in loss of the land itself through privatization, loss of the value of the land through degradation, loss of control over the land by giving control away to private interests, loss of access to the land and loss of our voice on public lands by ineffective or nonexistent public consultation and by our own lack of awareness and action. Our public lands have seen and continue to see all of these, and the abuses that our public lands have suffered are well documented.

These losses can be traced in large part to problems with

management at the government level. The source of the problems can often be found with the fundamental values held by those in charge.

Problem one is that there is a disconnect between what the government says, which is often couched in somewhat politically correct language, and what the government does, which is generally a reflection of its true values.

For example, Anna Kauffman, a spokesperson for Alberta Sustainable Resource Development (SRD), which is in charge of public lands, wrote in response to questions on public lands that "[t]he Alberta Government and Albertans value public land for a variety of uses: conservation, watershed, wildlife, industrial and recreational use."

Clearly this list is not in order of priority. If conservation, watersheds and wildlife had priority over industry, we would

not have such things as industrial activity in protected areas, clearcut logging in the headwaters of river basins in the eastern slopes, grizzly bear and caribou recovery teams, endangered species, game farming and virtually unbridled development in all natural regions.

Bob Scammell, one of the most astute members of the public on public lands sees things quite differently. "The most pressing public land issue is the neglect, abuse, wanton disregard, and mismanagement of our public land

amounting to a breach of trust by those who hold the land in trust for all Albertans," he says. He joins many informed Albertans who are angry with the state of public lands and public consultation today and who have witnessed loss after loss over the past decades, in spite of the public's wishes to the contrary.

Alberta's history is littered with examples of the government saying one thing and doing another. One of the most recent and obvious examples was the Bow Island land trade (see *WLA* June 2004). Although the government says it only trades public land for land that is of equal or better conservation value, in this case it was clear from the biologist's report that native prairie was traded for land of obviously lesser value. The biologist said it would not be in the public interest to make the trade.

Perhaps part of the problem is how we define words like conservation. "Conservation is more than just where and how to manipulate some habitat or a specific population," writes Margaret Lewis in her 1979 book, *To Conserve a Heritage*. "It isn't just safeguarding a stream bank or setting aside a sanctuary or wisely using a forest or more stringently managing cattle on crown land or changing the season for elk and the bag limit of grouse. Conservation is far, far more than all of these things put together; it's a lifelong undertaking that demands lifelong philosophies and objective policies that must



A boreal lake provides a peaceful place to explore this natural area



be granted the time of years to manifest themselves to their fullest.... [I]t means being committed to those things in nature that do not contribute to the expectations of ulterior motive. Conservation means caring at the root level of our values."

On the other side, David Breen, in *Pollution for Profit*, explains that "economists have their own notion of conservation. They argue that conservation involves maximizing the present value of a resource: in other words, getting the most petroleum in the present for the least investment."

Problem two is the government's refusal to do in-depth scientific analyses to see if their ideas have sound economic and ecological merit. They also regularly ignore studies that are contrary to their ideology, no matter how good the evidence. Resistance to such analyses comes when people think they already know the answer or they don't want to know.

Andrew Nikiforuk explains part of the problem in an article on the failure of Special Places (*Alberta Venture*, Dec. 1999). "A strong made-in-Alberta ideology stymied the program from day one. Unlike most industry leaders I know, many provincial politicians regard conservation as a form of 'sterilization.' Men such as Ty Lund,

conservation as a form of An example of habitat fragm 'sterilization.' Men such as Ty Lund, roads and railn Steve West and Ken Kowalski believe that protecting the landscape from industrial development is just wrong. These individuals practice a 19th century land creed that is purely utilitarian: abuse it or lose it. Wild economies, natural capital and the beauty of Creation apparently offend these men.... For a government that prides itself on innovation and flexible thinking, the 'sterilization' ideology remains a public embarrassment."

It's a condition called cognitive dissonance, the adherence to anachronistic ideas in the face of all evidence. It is reminiscent of John K. Galbraith's comment that "it is far, far better and much safer to have a firm anchor in nonsense than to put out on the troubled seas of thought."

The other reason for failure of the program, Nikiforuk notes, is that more than 90 per cent of Alberta's landscape had already been committed or promised to industry. Rather than come up with innovative solutions, the government simply ignored the existence of any problem, to the irritation of all involved.

Perhaps one of the best examples of the kind of ideology underlying the government's actions is a grace given at a 2002 Saskatchewan Party fundraiser at the Calgary Petroleum Club, with people like Preston Manning and Jim Dinning in attendance. Gillian Steward of the *Winnipeg Free Press* reported that veteran stockbroker Scott McCreath started his prayer with "Thank you Lord for giving us the freedom to do whatever we want, whenever we want...."

"The government needs to do their job," says Darrel Rowledge. "Their job is careful considered analysis based in science, the facts on the ground, and the will of the people. That is their job. And that is what they refuse to do."

Rowledge was one of many knowledgeable, committed people who put in several years of volunteer time and effort on

the Alberta Forest Conservation Strategy (AFCS), only to see the final document, *The Alberta Forest Legacy*, stripped of anything meaningful. He says the number one recommendation of the economic working group, which consisted of academics, economists, and representatives from industry, was to do careful analysis and complete and comprehensive assessments. "All we did was ask a simple question: how are you going to design a sustainable forest economy without data?" The bureaucrats refused to take that recommendation forward.

Dr. Bill Fuller, a retired professor from the zoology department of Athabasca University, also sat on a working group for the AFSC (see *WLA* June 2001). He wrote that one of

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Dr. Bill Fulle
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An example of habitat fragmentation by wellsites, pipelines, roads and railroads in the boreal

the objectives was to achieve a sustainable forest economy. "The report of the Working Group recognized both market and non-market values of the forest, and the necessity for sustainable forests, but in the final report of the Steering Committee, none of those points were even discussed. Alberta is unique in that it can have a sustainable forest economy without a sustainable forest!"

Even though Premier Ralph Klein has promised more than once to do a comprehensive analysis of the game farming industry, it has never been done. All the predictions of the scientists regarding disease and other problems have come true and taxpayers have been on the hook for millions. Yet, the government will not disband the industry.

"Alberta land has truly been considered a commodity to be bartered, abused, manipulated, exploited and exhausted of all its resources," writes Lewis. "It is not a luxury that we invest millions of research dollars and manhours into learning about [our ecosystems]; it's a responsibility.... Our actions, or lack of action, reflect the values we have of ourselves and the values we have of others."

Problem three is that the government lacks direction for public lands. According to Kauffman, the government's vision for public lands "is to continue managing public land so future



and present generations can continue to reap the many benefits." However, a vision does not consist of an action; it consists of what we want public lands to look like and to be now and in the future.

"The Alberta government has no policy for public lands," says Wallis, "which means that basically anything goes. Despite what the public has said over the last few decades, that public lands are important for wildlife, recreation and wilderness values, that really has never has been reflected in legislation or in policy. We have a public land law, but it doesn't state what the prime purpose and intent of public lands is, which leads to mismanagement and allocation and sales."

The problem, he says, is the lack of leadership. "Right now

you can do anything out there the government and encourages anything, except real protection. It doesn't matter if you're talking integrated planning, you'll have the same failures because there is no underlying policy and vision for where they want to go." Without a long-term vision, public land management decisions are often made to satisfy shortterm needs.



Hiking the Whaleback

Even the right-of-centre Canada West Foundation is pointing to the lack of public policy on "natural capital," particularly land and water resources. Senior Fellow Barry

Worbets, who wrote a report on this idea, is constantly praising the new Water for Life Strategy. Yet even he is not confident that the government will put in the money necessary to see the strategy implemented.

The government's new 20-year strategy for the province says that it "will develop a comprehensive land use policy," but this is clearly not the fundamental policy required. Not once is public lands specifically mentioned in this document.

"The Alberta Liberals believe the government is the steward of public lands, on behalf of all Albertans," says Laurie Blakeman, the Alberta Liberal environment critic. "This includes a responsibility to protect as well as manage lands in the *public's* interest."

The government seems to see having lands that are public more of a liability than a responsibility. There is confusion between the private interest and the public interest. "We're dealing with a government whose ideology is privatization," says Cheryl Bradley. Many times the public interest gets short shrift, she adds. "But I think there is a strong desire among Albertans to keep our public lands public and to manage them

for the good of all, not just the good of a few."

Dorothy Dickson believes that we must have a strategy and an overall plan of what to do with public land in the future. By keeping land public we are able to retain control over what kind of uses it is put to, she reasons, but she knows that the government doesn't listen. She wants to see protected areas protected by good legislation that prohibits industrial activity, but she doesn't trust the current government to pass that kind of legislation.

Ray Rasmussen told Andrew Nikiforuk in an article on Special Places (*Alberta Views*, Fall 1998) that the government could not be trusted to defend the public interest anymore. "It is quite frankly another commercial interest and has to be

treated as such."

Problem four is that, lacking an overall vision and principles, the government has poorly defined goals. According to Kauffman, "[o]ur goal is to balance the needs of the many different users of public land with protection of the environment." They believe this balance will be obtained by using an integrated resource management

philosophy or "multiple use."

Yet, in SRD's latest Business Plan, there is an acknowledgement that the current growth in industry and

tourism sectors and in Alberta's population has put considerable pressures on public land and natural resources "and challenges the Ministry's ability to manage for the multiple values Albertans expect from them."

Without fundamental principles, it is virtually impossible to reconcile the opposing views of different users of public lands. Worbets is just one of many who know that the current multiple land-use system isn't working and needs to be changed.

The history of land management in Alberta is one of promise and failure. "We went from having in the 1970s one of the best land agencies in all of North America, here in Alberta, especially Fish and

Wildlife," recalls Pharis. "We were real leaders, they were innovative, we had such good people ... and of course they all got fired when [the government] really started cutting back and realigning."

In his 2002 study of Integrated Resource Management (IRM), Steven Kennett, Canadian Institute of Resources Law, points to two main reasons for past failures to integrate



Vivian Pharis has led AWA's Adopt-A-Trail work on the Bighorn Historic Trail since 1995



environmental and resource management (see WLA Oct. 2002). "First, IRM was implemented through a commitment to general principles, regional planning and coordination mechanisms, but did not penetrate to the structural level of policies, legislation, institutional arrangements and decision-making processes. Second, the land-use planning process at the heart of IRM was never entrenched in law. These features contributed to the ultimate failure of IRM by reducing its ability to achieve effective integration and by increasing its vulnerability to ideological opposition and funding cuts." Worbets says these failures are coming back to haunt the government.

The current IRM initiative was launched in 1999 and the Northern East Slopes (NES) strategy was the first regional strategy produced. Archie Landals criticizes the NES process for being conflict based and for giving people unrealistic expectations that everyone could substantially increase their activities while still achieving environmental protection. He says the Southern Alberta Sustainability Strategy (SASS) is doing much more background research before going public, so that unrealistic expectations are not encouraged.

One of the problems in building new land or water management systems is that the government refuses to alter certain basic aspects of the old system, like honouring existing dispositions.

An ecologist would say that if you want to conserve a river, you need to make the river ecosystem a priority. But when the River Basin Councils were formed to provide management plans, they were told at the outset that not only would the water allocation system not be changed, it would not even be up for discussion. Yet,

the government freely admits that under the current allocation scheme the Bow and Oldman Rivers are being degraded.

"The overarching issue on public lands," says Fitch, "is to fully understand all of the ecological goods and services that are produced on those lands and to factor that into their value when it comes to competing land uses."

At a public information session in southwestern Alberta on coalbed methane, local landowner John Lawson pointed out that the question we should be asking is not "how do we do it right?" but "is it the right thing to do?" Local outfitter Mike Judd, speaking from bitter personal experience, angrily asked, "Who is going to benefit from it [CBM]? What we are going to be left with in the end is mega-infrastructure of gravel roads, leaking well sites, contaminated, fishless rivers, no game on the hills, and the taxpayers are going to bear the brunt of it. It's time we started saying 'No!' if we don't need it."

"We need a balance" is a favourite phrase of Mike Cardinal, Minister of SRD. But it doesn't have any objective basis. When the government looks at balance they seem to view conservation as a heavy lead weight that needs to be balanced with a lot of buoyant development.

In a 2002 report on the Big Lake region, Richard Thomas wrote, "Habitat loss and fragmentation tend to occur in a 'piecemeal' fashion. Each successive human generation grows up thinking that the ever-diminishing, more highly fragmented portion of Alberta's original forest cover that remains is 'the norm.' The latter in turn, becomes their 'baseline' or 'reference landscape,' against which they gauge the pace and scale of ongoing environmental change.

"The net result is that we are suffering from an overall loss of historical perspective regarding what constitutes a 'natural' (i.e. original) landscape within the province. [D.S.] Wilcove (in *The Condor's Shadow*, 2000, p.13) has labeled this phenomenon 'generational amnesia.' Maintaining such an historical perspective enables one to place the often-heard argument that 'we need to strike a "balance" between protection and development' into its true context. In the case of

the Big Lake region, this 'balance' (heavily in favour of development) has long been struck, and there is an urgent need to redress the existing imbalance via habitat protection and ecological restoration."

Conrad points out that during Special Places, the government proudly proclaimed on its Web page how much industry and tourism there was in our protected areas. "After ravenously consuming 99 pieces of the pie," he writes, "the glutton demands balanced sharing on the hundredth, the last piece."



Cheryl Bradley (centre with binoculars) leads a hike in the Twin Rivers Heritage Rangeland

Pharis and others want to see public land management properly funded. More research and field agents in positions of forest stewardship, biologists and enforcement officers would go a ways in correcting some of the deficiencies on public lands. Scammell says we should use the millions of dollars in surface rights payments paid by the petroleum industry for surface disturbances on grazing leases that now go to leaseholders, in spite of the fact that the public has made it clear in every public lease review that it wants that arrangement changed.

Problem five is lack of effective and inclusive public consultation. Brian Horejsi believes that the government has been trying to undermine the unity of the people by divorcing them from their public lands. One of the ways they have done this is to change the way public consultation is done by going to a stakeholder process instead of holding full public hearings.



Just before its demise, the Social Credit party set up the Environment Conservation Authority (ECA), a nongovernmental body that held extensive public hearings on the Eastern Slopes, forestry operations and agriculture in its glory days in the early 1970s. The Lougheed government subsequently pulled the authority out of the ECA and turned it into a mere Advisory Council until it was finally disbanded in the early 1990s. The Eastern Slopes Policy that came out of the public hearings in 1977 was hailed as a landmark in land-use management. But in 1984, significant changes were made without public consultation.

Every public process on public lands has brought forward the same recommendations on access, sales and surface rights

payments, but the government refuses to implement them. Public hearings are still held in the United States; these are processes that have legal procedures that must be followed. When the roadless areas issue was up for discussion under Clinton, the administration received more than a million comments from all across the nation. In Alberta, Horejsi points out, if you can't prove you have a direct interest, like an outfitter's licence or a disposition, "you can't even be of legal status to be heard by these phony tribunals like the AEUB or the NRCB."

The opposite end of the spectrum to public hearings is stakeholder participation, which Horejsi describes as "a controlled, artificial, handpicked process that is the exact opposite to democracy and unity." People are appointed to represent stakeholder interests. But every member of the public is a

stakeholder when it comes to public lands and every member has the right to be involved.

Horejsi dismisses the ability of the public to make comments on drafts. "Once you have something that's already essentially crafted, then you're just furthering the process of making sure you hear what you want to hear and that you hear from the people that you think are important."

Kauffman says the government has put considerable resources into these consultation efforts "that have given us insight into Albertans' vision for public land and guided decision making." That is the rhetoric, but the Bighorn access management planning process gives a good example of the reality.

Tamaini Snaith, who represented AWA on the planning committee, was not allowed to present scientific data and facts on the ground that were important for her arguments about protection of the area and that would have allowed the other stakeholders to understand the impact of allowing off-road vehicles into the Wildland. The information was deemed irrelevant. Nevertheless, the majority of the committee agreed with the recommendation that off-road vehicles should not be allowed into Bighorn Wildland. That recommendation was

never passed on.

When Snaith made a presentation on the issue, based on scientifically defensible information, to a Standing Policy Committee attended by MLAs, she was treated with scorn and contempt. Ty Lund, MLA for the area, ignorantly dismissed her presentation as misinformation. The government simply went ahead and put in legally designated trails for off-road vehicles. AWA is now documenting significant illegal use in the area.

"The history of government commitment to the recommendations of public lands from its own appointed bodies has been dismal," says Wallis.

Dawn Dickinson, of the Grasslands Naturalists, believes

the biggest threat to public lands in southeastern Alberta are land trades. "These trades seem almost always to be made so that grasslands can be broken for crop production. Lip service is paid to wildlife habitat and consolidation principles, but, as recent trades here have demonstrated, these considerations are not taken into account. The trades (or giveaways) are conducted behind closed doors, and are said to be 'private matters.' Yet these are public lands held in trust by the Crown as part of the Canadian Heritage.

"Trading of public lands has to be open and accountable," she says. "There needs to be a public forum for any land trades where lands have significant amounts of native vegetation. The current discretionary policy of trading public lands in backroom deals is unacceptable; this policy is wide open to political interference. There are no checks or

balances. That is simply not good enough if we wish to conserve what is left of our heritage of native prairie on public lands."

She thinks that Alberta Public Lands Division, which has no professional biologists on staff, should reinstate the Alberta Wildlife Division, which is in the same department, to fulfil the role of professionally evaluating wildlife habitat in these trades. Right now, it has only an advisory role and its advice can be and has been ignored, says Dickinson, "as any citizen who has sat on a government advisory committee well knows."

On average, says Horejsi, over the last 35 years, traditionally around 60 per cent of the people in the province have not voted conservative. "For 35 years people who have had a different vision of this land and a different vision of democracy or non-democracy and a different vision of the process have never ever seen any of their goals, wishes or visions put in place. That's more than one generation that people have been suppressed." We need to demand the fundamental right to be involved, he adds.

"All of these activities that have gone on on public lands, whether it's logging or grazing or oil and gas or ski developments, all of those are an invasion of public lands and



Lorne Fitch surveys a golden eagle's nest in the Twin Rivers Heritage Rangeland



public rights and they have never ever been sanctioned by the public. If the people in this country don't come to their senses pretty soon, we're going to be vassals. People have got to be very consistent every time an issue comes up to demand that there be public hearings and full public disclosure of all the information and one of the biggest tools that you have in an effective system, an environmental impact statement.

"Public consultation is the foundation of our democracy and they've stolen that from us. It's not by accident, it's by design. The first thing is access to information and the right to be treated as somebody who has an interest, a legal interest in those decisions."

Reclaiming Our Public Lands

In the final analysis, the blame does not rest at the feet of government alone. The public must assume its share of responsibility. "The public hasn't organized and said what it values," says Wallis. Scammell thinks the public can have great

say in their public lands "but tends to take public land for granted between crises."

There is a general consensus among those who have thought about these matters that we cannot let decisions about the future of our public lands rest in the hands of the government. In fact, it's not an uncommon sentiment that there should be a complete staff change at SRD.

"Politicians are followers," says Herb Kariel, retired geography professor. "It is our job to lead."

Nikiforuk agrees that leadership will have to come from outside government. "I have high hopes that government will come on board but as the landlord of our heritage economy, it has more often than not abdicated its role as trustee for both the public good and the interest of future generations in order to fuel growth with cheap resources."

Cheryl Bradley believes that we should all consider ourselves as stewards of public lands. Scammell's father was fond of telling him, "Look after the land and it will look after you."

"Stewardship," says Rowledge, "doesn't mean taking care of the ecosystem, doesn't mean managing the land or the forest; the only thing that we can steward is our own activities."

As stewards we need to develop what Aldo Leopold called a land ethic. "A land ethic reflects the existence of an ecological conscience," he wrote, "and this in turn reflects a conviction of individual responsibility for the health of the land. Health is the capacity of the land for self-renewal. Conservation is our effort to understand and preserve this capacity."

One of the first things we need to do is go back to basics and develop a vision for our public lands and fundamental principles that we can all agree on. Then we can judge our activities against those principles. AWA has been calling for a publicly developed public lands policy since 1987 when the Grazing Lease Review was completed. The government has shown no interest, so now AWA is going to work with people who are knowledgeable, committed, and passionate about public lands to develop a vision and principles. AWA is encouraging all interested people to submit their vision and comments in this important process.

The resulting working document "will be very explicit about what the future of public lands in Alberta is going to be about and what values they're trying to protect," says Wallis. AWA, he says, will argue strongly for conservation values being the predominant values and that public lands be dedicated to the broader public interest, not private interests.

Bradley agrees that the public has an important role to play in "an overarching discussion about visions of public lands, our values, setting our general goals and directions." She

> believes that through this process AWA can play an important role in helping Albertans to understand the develop some good information about how public lands ecological services they providing us.

In his essay "Second Chance at Paradise," William Kittredge describes his return to his family ranch in Warner Valley straddling Oregon and Nevada after a 30-year

value of their public lands and really are being used as well as what

absence. In his youth the valley was still relatively wild and filled with wildlife. After World War II, typical changes occurred with increasing development - roads, irrigation canals, and so on. "We thought we were doing God's work. We were cultivating, creating order and what we like to think of as a version of paradise."

Later he recognized the great damage they had done to the valley. "It's my theory that everyone yearns to make a positive effect in the world. But how? How to keep from doing harm?" He wrote that to act responsibly, we must first examine our own desires. "What do we really want?"

With his ranch up for sale and its possible purchase by the Nature Conservancy, he asked himself that question. Perhaps, he thought, he could have a second chance at paradise, a shot at reimagining desire. He says he wanted "a process ... with everybody involved – ranchers, townspeople, conservationists – all taking part in that reimagining. I wanted them to each try defining the so-called land of their heart's desiring, the way they would have things if they were running the world. I wanted them to compare their versions of paradise and notice again the ways we all want so many of the same things."

In his 1966 essay, "Some Approaches to Conservation," Roderick Haig-Brown asks, "Why can't we secure parks and



Clearing trails is one of the many tasks volunteer stewards take on



wilderness areas and wild rivers and the other spectacular things of the continent hard and fast in the heart of the Constitution, so that they will be safe from violation even if the biggest goddamned diamond mine or oil well or underground facsimile of the whole General Motors complex is found in one of them? Why not? Has industry some inalienable right to invade public lands wherever found and destroy them? The truth is that where land or water seems to be unclaimed, or weakly claimed, someone will try to claim them. Conservation must stake its claims, aggressively and authoritatively; ecologies are the key to the preservation of all forms of wildlife, including fish and plants. Ecologies must be recognized, assessed, understood and defined; only then can they be adequately protected."

Wallis says he has been told that Mongolia has written grassland protection into their Constitution. "They are there for the people to access and use. They are not there for private interests. It doesn't mean that they're necessarily well-managed, but at least they're not being ripped open for cultivation or other inappropriate uses." Wallis believes that because access to grasslands is more difficult in Alberta,

because many public grasslands are under grazing lease, the public is discouraged from visiting them and getting to know and value them. You can't develop a vision for something you know nothing about.

The final word goes to Kevin Van Tighem. "Looking for hope and inspiration in the post-frontier west is a daunting challenge," he writes in *Home Range*. "Since Anthony Henday, generations of outsiders have flowed into Alberta, leaving home behind and imposing foreign ambitions on a landscape they did not know or recognize. This was not their home range – but it has come to be ours. That is why we owe it to ourselves to better understand the nature of this wounded place we call home, and to put that understanding to work in restoring as much of its health and diversity as possible. It's time to find our way home."

(More information about public lands, access and sales can be found on our website. To participate in AWA's public lands roundtable, contact us at (403) 283-2025, toll-free at 1-866-313-0713 or at awa@shaw.ca)

HAVING FUN STILL VITAL TO THE CLIFF WALLIS APPROACH TO CONSERVATION

Andy Marshall

Get out in nature, have fun, make money and make a difference is Cliff Wallis's startlingly straightforward motto for life. "If you don't work on the first three, you won't have much success with the last one," he says. "They all seem to be quite compatible."

Other unfathomable, mysterious forces may exist along the way, he agrees, but, by and large, sticking with this practical recipe has gained him the reputation as one of Alberta's most respected and effective advocates for the natural environment.

Scientific rigour and love for the outdoors, combined with down-to-earth common sense and an informal and occasionally wry affability, are keys to Wallis's considerable success as a dedicated volunteer in the conservation movement and in his career as a professional biologist. Participation in both of these roles has taken him to many parts of the world.

His work for Alberta Wilderness Association as an active director since 1980 and as president in 2003, as well as leadership roles in other groups, including the Environmental Law Centre, the Canadian Nature Federation, the Alberta Native Plant Council, the Canadian Environmental Network and the Friends of the Oldman River, offer solid evidence of his ability to make a difference.

Successes include helping form a ground-breaking

alliance of environmentalists, government agents, ranchers and residents in southern Alberta to support the Milk River management plan, designed to protect the area in an ecologically sound manner.

Forging links with First Nations people and the oil and gas industry, he spearheaded the designation of the Hay-Zama Lake area in northwest Alberta as a wildland park. The federal designation of the 458-sq km Suffield Wildlife Sanctuary in southeast Alberta is also attributed in a large part to his efforts.

Wallis has managed to redirect natural gas pipelines away from sensitive areas and was a leading force in stopping the proposed Meridian Dam on the South Saskatchewan River.

He has been widely recognized for his professional and volunteer activities. Special awards include the Governor-General's Canada 125th Anniversary medal and the World Wildlife Fund's Prairie Conservation Award. He will receive an AWA Alberta Wilderness Defenders Award this fall.

The latest adventure in his role as owner-operator of Calgary-based Cottonwood Consultants since 1978 has taken him for several months in the past year to Inner Mongolia. He is working there on nature reserve management planning and environmental education, advising the Chinese government on biodiversity protection and community development.

"They know they have degradation of grasslands, and air and water-use pollution," Wallis says. Ever the straight



shooter and lining up a long-favoured target, he adds: "They try to seek solutions, as opposed to here where guys in southern Alberta say 'there's tons of water, just give us more for irrigation."

Wallis, 53, recalls practicing the "get-out-in-nature" part of his motto from an early age. Born in London, he was six when his parents ended up in Calgary. "Almost the first thing they did was out with the tents and down to Waterton," he says.

Travelling with his farm equipment service manager dad, Wallis developed a love for prairie and parkland, later becoming a particularly passionate and strong advocate for what he jokingly refers to as the Rodney Dangerfield of the natural landscape – "the part that don't get no respect." He adds: "I like to root for the underdog, like native plants and songbirds."

graduating After from the University of Calgary in 1972 with a

BSc in botany and zoology, he worked for seven years for Alberta Parks, doing biophysical inventories and planning. His growing awareness during this time of the loss of the natural landscape, particularly the grasslands, sparked his involvement in the environmental movement.

Whether genetically predisposed or not, and despite being frequently in the eye of the storm of conflicting ideas, Wallis has maintained the "have fun" aspect too. Fun is just being outdoors – savouring the rush he still gets from the Milk River Canyon, the Mexican coast or Fish Creek Park near the south Calgary home he shares with his wife of 34 years, Terry. They have a 21-year-old daughter, Lindsey.

Taking pictures, putting together audiovisual presentations, birdwatching or strumming on his guitar and singing folk songs continue to bring joy. He loves to travel and relishes new experiences. A conservation project in Cameroon since 1998 has taken him to this African country several times. With a long-held interest in international issues, he notes he's been on every continent except South America.

Driven by a natural curiosity, he's trying to learn some Mandarin during his current China project.

Fun for Wallis is also seeing things get done. "I don't mind getting into controversies, as long as they're not tedious or leading nowhere," he says. "If I see results at the end, it makes it all fun."

After a lifetime in the conservation movement, which can break down the strongest advocate, Wallis describes himself as neither more or less optimistic than he was as an idealistic student. "I'm a realist," he explains. "That means roll up your sleeves and get to work. Change only happens with hard work and a little bit of luck."

Maintaining a positive outlook is another key to the success formula. "Although you're not winning all the time, you can look back and see things changing for the better," he says. "If you don't win on the issue at hand, your efforts can still help the next person raise the bar. You have to take the long-term view." In his characteristically informal and feisty tone, he adds: "It's important not to let the bastards win."

Science alone won't win the day. Passion by itself will have less effect. But combine the two, and you have a winning combination, is his belief.

Another apparently innate ability is taking on several

different challenges at the same time, although in middle age, Wallis finds himself cutting back a little. He still likes to get up early, though – the best time for him is 4:30 in the morning – and remain active long into the evening.

"There are still many good things I haven't experienced, things to look forward to," he says. He continually sees new aspects to areas he's visited many times before. He does a lot of

reading and interacting with others to keep up with his knowledge and understanding. "New challenges and new learning are all part of keeping oneself in a good spirit."

The interview doesn't explore too closely the "make money" admonition of his motto, but Cottonwood has taken on numerous and varied projects over its 26-year history, including a lot of work for the provincial government that he has tackled so tenaciously as a conservationist. "People respect the work we do is on point. It is presented in the most factual way possible."

Discussing money, however, Wallis does acknowledge the importance of linking economics with environmental protection. "You can't separate the two," he says. When he was younger, "it was all about the biology." In a pragmatic approach that has undoubtedly been another basis for his successes, today he accepts that people rarely do things for spiritual/aesthetic reasons alone. "Society needs to see what the economic benefits are, too,"

That view is behind a strategy Wallis has actively promoted to take the environmental movement debate right into the marketplace. "The most influential levels of decisionmaking are quite often around the market," he notes. That's not to say governments are off the hook – they still administer public lands and control natural resources. "You're just more strategic in how you deal with government," he says.

Wallis has a lot on his plate. But one of the projects dearest to his heart is his involvement with the Northern Plains Conservation Network, a highly ambitious coalition of conservation groups seeking to restore and conserve parts of a massive prairie ecoregion across two Canadian provinces and four U.S. states.

This is "make a difference" on a truly large scale, but Wallis is eager to make the effort.



Cliff Wallis



ALBERTA WILDERNESS WATCH

"ALL THINGS TO ALL PEOPLE": LAKELAND TODAY, BUT WHAT ABOUT TOMORROW?

Ian Urquhart



This year, supported by a generous grant from the Richard Ivey Foundation, AWA has renewed its efforts on behalf of protected areas in the Primrose Lakeland area east of Lac La Biche. The Lakeland area is well-named: more than 150 lakes may be found within a half-hour drive of the town. The area has a rich history. The

white explorer David Thompson landed on the shores of Lac

La Biche in 1798, and Lac La Biche has existed as a town for more than 200 years.

Lakeland's ecological importance cannot be overstated. It is part of the Central Mixedwood subregion of the boreal forest, an ecosystem that generally is poorly represented in Alberta's protected areas system. The area contains magnificent old-growth boreal forest stands: white spruce, mixedwood, aspen. Eighteen species of orchids may be found in Lakeland, and so too may be found rare plant species such as the pitcher plant.

Lakeland plays host to a tremendous diversity of bird life – more than 150 species were identified there in the 1990s. Richard Thomas, an undisputed expert on boreal ecology and the ecology of Lakeland in particular, has observed 20 species of warblers in the area; nineteen of those species breed in

the area but at least two of those species, the Cape May and the Blackburnian, are in danger. Their presence, especially as breeding populations, and the risks they face underline the international significance of both Lakeland and Canada's boreal forest more generally for the global community of neotropical birds.

Lakeland's dilemma is one facing much of Alberta's public lands – the provincial government's overarching management approach has been to treat Lakeland as "all things to all people." Commercial forestry, petroleum exploration and development, off-highway vehicles, livestock grazing, commercial fishing, and even ground-hugging overflights from the Canadian and other air forces operating out of Cold Lake are all activities affecting Lakeland. Clearly, the values AWA sees in protected areas have been badly,

perhaps irreparably, compromised in this region of the boreal forest

Some readers, though, might ask: "The government created Lakeland Provincial Park and Provincial Recreation Area (PRA) in 1992. Isn't this evidence of a genuine commitment to protecting Lakeland?" Hardly. It's certainly true that the government established a 147-sq km park and a 441-sq km provincial recreation area, creating a protected area with a footprint roughly the size of the Edmonton.

Formally, this decision represented a major addition to Alberta's protected areas. Lakeland was our first boreal park and it represented nearly a 25 per cent addition to the lands managed by provincial parks staff.

But as Thomas showed in The Final Frontier, a government-commissioned study for the Special Places 2000 campaign, protection in Lakeland is more symbolic than substantive. The landscape of the Park and PRA is heavily fragmented by linear disturbances - nearly 500 kilometres of linear disturbances were slashed through the park/PRA in the late 1990s. If you want to find roadless areas in Lakeland you still can, but since most of them are represented in the lakes themselves, you will have to swim or paddle to enjoy them.

paddle to enjoy them.

The situation was especially serious in the PRA. Pure white spruce stands

constitute the rarest types of old-growth forest found in Lakeland, but logging in the PRA had removed half of the white spruce old-growth originally present in the area. The picture was no prettier when considering oil and gas – roughly 40 per cent of Lakeland had been leased to energy companies. All of this, and more, led Thomas to reject the notion that the PRA made any real contribution to the goals of the Special Places program.

AWA is approaching the Lakeland project with no illusions that this history will be reversed easily. Two general objectives guide our work. One objective centres on the management regime in the Park and PRA. A final management plan has never been adopted for Lakeland. Extensive public consultations in the latter half of the 1990s failed to produce the consensus on management objectives



A 17 m wide pipeline right-of-way in the Lakeland PRA



sought by parks staff, and the drive to craft a final plan died.

With a provincial election looming on the horizon, it is time once again to put the management plan issue on the front burner and work to persuade government and the local communities that the values of protection and restoration need to have pride of place there. As Tom Maccagno, the former mayor of Lac La Biche and a long-time advocate of wilderness in Lakeland, put it to me in June: the integrity of Lakeland has to be insured. A strong statement on behalf of protection and restoration in the management plan would be an important step in that direction.

The second objective concerns securing additional protection in the territories adjoining the Park and PRA. For the past several years AWA has been lobbying Alberta-Pacific Forest Industries (AlPac) to defer from logging in the Touchwood Lake area, the area north of the Park and the PRA. Last year the company agreed to defer from logging for the year, and AWA has continued to press for a longer-term commitment from the company to stay out of the Touchwood Lake area. This is challenging for a handful of reasons.

The significance of old-growth in this territory plus the close proximity of Lakeland to the company's pulp mill at Boyle make these forests very attractive economically to AlPac. These factors are compounded by the fact that although the Touchwood Area is part of the AlPac FMA, other companies hold quotas to cut in this area. Any longer-term commitment to a logging moratorium has to involve quota holders such as Vanderwell Construction as well. Combine all of this with the industrial forestry, "timber beast" mindset of provincial managers, and the challenge heightens.

But there are signs that AlPac may be convinced to establish a moratorium in the Lakeland area. Late last year AlPac joined a coalition of industry, first nations, and environmental groups in signing the Boreal Conservation Framework (BCF). Additional protected areas are expected if this agreement is to be of any real value, and concessions from AlPac in Lakeland, although falling far short of legislated

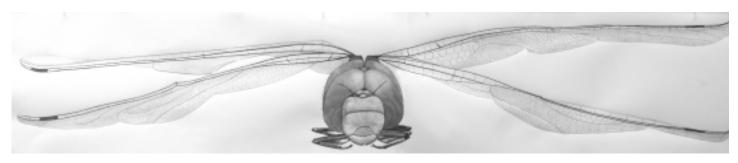
protection, would help demonstrate that the company's commitment to the BCF is more than symbolic.

The Cold Lake Air Weapons Range (CLAWR) is another protected areas target (no pun intended!) of the Lakeland project. As reported by Thomas, an inventory conducted by Westworth and Associates indicated that "as of 1993, less than 1% of the land surface of the CLAWR had been altered by various land-use practices, including military training." Compared to most of the Boreal Mixedwood subregion, it was described as "an almost pristine area." Its status as a military training ground has insulated this portion of the boreal from many of the pressures – and stakeholders – found elsewhere in northern Alberta.

The challenge here will be to try to develop a protected areas option that the Canadian military and the province will support (the province leases the territory covered by the range to Canada). But we have models to suggest and follow. There is the National Wildlife Area established on Canadian Forces Base Suffield, and there is the experience of Saskatchewan in respect to the portion of the range located there. In the early 1990s Saskatchewan was able to add nearly 350,000 acres to its Representative Areas Network, sites that all came from the air weapons range.

Sadly, perhaps, we know all too well that politics is a critical element in the decision making regarding the future of Lakeland and protected areas more generally. It is necessary then for AWA to build as broad a coalition of support locally and provincially for our endeavours as possible. To this end, as readers of the last edition of the *Advocate* know, we have commissioned public opinion polling, polling that shows that our objectives enjoy impressive province-wide support.

Also, as we pursue these objectives we are making important efforts to secure the support and participation of local environmental groups and First Nations. Their input and support will lend additional legitimacy and credibility to our efforts to move the protected areas agenda ahead in the beautiful and threatened landscape of Lakeland.



Dragonfly - Dana Bush



MINING AND RECLAMATION PROBLEMS ON WILDLIFE MECCA OF CAW RIDGE

Vivian Pharis, AWA Director



Grande Cache Coal Corp. (GCC) is expecting approval shortly to reopen the controversial timberline B2 Pit for surface coal development on the slope of Caw Ridge, which is adjacent to Willmore Wilderness Park in the north Eastern Slopes. GCC assumed some of the mine licences in the area following the 2000 bankruptcy of Smoky

River Coal Ltd. (SRCL). When SRCL entered receivership in 2000, Alberta Environment told AWA that Mine 12 and its B2 extension pit would be reclaimed. Instead, Alberta Environment has acted since then to "maintain" the site.

It's probably impossible to actually reclaim this steep site and

likely it will not even be attempted for at least three years – that is, until after new mining has been completed. In the words of Brian Bildson, area trapper, guide, lodge owner, and watchdog, "the slope is nuked right to the height of land." Geoff Foy, head of the area's Alberta Environment reclamation team describes the B2 mine site as a "big wound on the landscape that will be very costly to reclaim, if it can be reclaimed."

Following this summer's heavy rainstorms, I decided to find out what was happening to the tailings ponds, slag heaps, and mines

scoring the hillsides around Grande Cache, which are the legacy of SRCL. I was especially interested in the B2 open pit site on the slopes of nearby Caw Ridge, a wildlife mecca of historical concern to AWA. While some of the mine licenses in the general area have been assumed by GCC, many of the old mine sites have had to be assumed by the Crown. SRCL had only been required to bank \$7.5 million for reclamation, a fraction of the final reclamation costs. But what was the situation following the 2004 deluges?

First, around Grande Cache, a number of tailings ponds were breached and several slag heaps suffered avalanches. At one point Highway 40 was closed temporarily by a mudslide near the coal processing plant. In the more precipitous lands around Caw Ridge, the rains triggered several "emergency situations," according to Geoff Foy, who is now in charge of maintaining the site for Alberta Environment. Contractors rushed equipment in from Grande Cache to prevent tailings ponds from breaching. Quite a bit of work remains to be done to clean up the site and access road, according to Foy. What has happened to the piles of topsoil pulled off the slope and waiting for reclamation day is not

known, but undoubtedly some has gone downstream.

Currently B2 Pit is in limbo, with GCC being quietly issued a 2003 approval by the Energy and Utilities Board to reopen the pit, pending an amendment approval from Alberta Environment. In June AWA filed an objection with Alberta Environment and got back a reply saying we were not "directly affected" so had no right to object. Bernd Martens of GCC and Geoff Foy both talk about "when," not "if," GCC gets approval. Martens expects it imminently and anticipates operating the pit by the end of 2004. Alberta Environment openly admits it would like to pass along reclamation costs for part of B2 and its access road to GCC.

Obviously the \$7.5 million reclamation kitty left by SRCL is being drawn down. Plans are afoot to immediately begin

reclaiming the above ground site at Mine 5 and tearing down a large service building located near Mine 9, so the funds will soon disappear. Geoff Foy hopes that emergency funds will be made available to cover the considerable costs of maintaining sites after this year's rains, so that the reclamation fund will not have to be dipped into.

Because Caw Ridge is such an important site for wildlife, including Alberta's largest herd of mountain goats, and because people have long sought the area's return to Willmore Wilderness Park, the B2 Pit, recently extended by SRCL into critical



An example of the slope instability at an abandoned Smoky River Coal Site at Caw Ridge

habitat, has long been opposed. Brian Bildson remains convinced that GCC needs the cash that can be generated from three years of mining out the cheaper surface access coal from B2 in order to fund a new underground mine on Mt. Hamel, nearer Grande Cache. Alberta Environment is eager to pass on reclamation costs associated with B2 Pit.

Undoubtedly on Caw, industry will again receive precedence over environment. In three years' time, once the mine is spent, reclaiming the steep treeline slope of Caw Ridge will be a major environmental challenge, perhaps an impossible one. Even Geoff Foy talks about "if" the slope can be reclaimed and knows of no other similar reclaimed site in Alberta. Because of past lax environmental considerations, Alberta taxpayers will be accountable for most of the reclamation of mine sites and haul roads around Grande Cache. At the least, taxpayers should now be demanding that Alberta Environment secure full reclamation funds before stamping GCC's approval for B2 Pit. Returning Caw Ridge to Willmore Wilderness Park before further damage is incurred is an obvious ecologically and economically responsible alternative to more mines.



SAVING NATURAL CAPITAL IN ALBERTA'S BOREAL - THE NRTEE

Dr. lan Urquhart

Given the state of Alberta's forests, some readers are bound to be suspicious of my title. Is there really any need to save capital in Alberta's boreal forests? Doesn't capital whether in the shape of large multinational forest companies or locally owned sawmill operations – rule our forests? Don't commercial forestry interests dictate forest policy in Alberta?

The National Roundtable on the Environment and the Economy (NRTEE) hopes to change this perspective by encouraging decision makers to recognize the importance of another type of capital, natural capital. Vital ecological

services, the services that provide us with clean air and clean water, are considered natural capital and should be recognized as a foundation for a healthy society and economy.

Through a series of case studies, including one examining the Forest Management Agreement allocated to Alberta-Pacific Forest Industries, the NRTEE is looking at how regulatory and taxation policy could be reformed to promote a balance between conservation and industrial activities on boreal landscapes that have been allocated to forest products companies.

Toward this end, the NRTEE held a workshop in Fort McMurray in early May to hear what industry, government, First Nations, ENGOs, and academics felt was needed to insure that the ecological functions of the boreal are recognized and valued. It did not take long in the proceedings to recognize the ambitiousness of the NRTEE's goal; tremendous hurdles have to be overcome if natural capital is to be given its due.

For some participants the largest hurdle to moving forward was conceptual. A senior Alberta official wondered what natural capital really meant and how we could move ahead "if we do not know what we are working towards." For others the most significant hurdles are institutional – the departmental, regulatory, and taxation structures established to promote values such as "sustained yield," values challenged by natural capital.

Monique Ross, from the Canadian Institute of Resources Law, drew our attention to the sorts of overarching regulatory and fiscal barriers to assigning real value to natural capital.

They included accounting systems that do not value environmental goods and services, unresolved First Nations claims, no comprehensive land-use planning systems, and a failure to adopt a decision-making model where contradictory departmental mandates and overlapping tenures can be accommodated for the benefit of natural capital.

For me, it was hard not to come to the conclusion that institutional tinkering will not raise the prominence of natural capital. Such a fundamental reordering of values demands a fundamental overhaul of our institutions. In order to give

> ecosystem-wide ecological values priority, don't we need to look at models of governing ourselves that are based on ecosystems, not on the discrete activities taking place in those ecosystems (such as Energy, Agriculture, Forestry, Fish&Wildlife, etc.)?

> This approach is not as novel as you might think. Daniel Kemmis, in his important book This Sovereign Land: A New Vision for Governing the West, resurrects a proposal made by the nineteenth-century American explorer John Wesley Powell. 1889 Powell urged the Montana Constitutional Convention structure government along the following lines: "I think each drainage basin in the arid land must ultimately become the practical unit of organization and it would be wise if you could immediately adopt a county system which would be convenient with drainage basins."

> One step Alberta could take toward this more ecosystem-sensitive

model of governing - one that I think the NRTEE took seriously - would be to establish a "Cumulative Effects Ministry." This agency could be modeled somewhat after the province's intergovernmental affairs ministry. It would have the authority to require agencies to consult with each other and to resolve conflicts between agencies when conflicting mandates damage natural capital.

If you are interested in the concept of natural capital and how the National Roundtable is trying to apply it to Canada's boreal forest, visit the NRTEE's website, http://www.nrteetrnee.ca/eng/main_e.htm, and click on the conservation link.



Dawn near Margaret Lake, Boreal Forest



"MINISTERIAL DISCRETION" PUT IN CHECK IN CASTLE MOUNTAIN RESORT DECISION

James Tweedie



On July 3 Honourable Madam Justice Kenny rendered her decision in the Judicial Review of Alberta Environment's failure to order an Environmental Impact Assessment (EIA) report with respect to the year-round townsite proposed by Castle Mountain Resort (CMR) for the Westcastle valley.

The area had previously been slated for resort development by the Vacation Alberta

Corporation and the Westcastle Development Authority. An EIA had been ordered at this point and conditional approval for the resort was given following a hearing before the Natural Resources Conservation Board. Unable to implement the

Board's conditions, Province rescinded the NRCB decision in 1995. subsequently **CMR** purchased the resort and proposed an expansion that would include 15 additional family dwellings, 92 multifamily dwellings, a hostel and lodge, 28 hectares of ski terrain, another lift, 200 more parking spaces, and significant increase in water use and solid waste production.

Understandably, the media has focused exclusively on this new "delay" to CMR's

L. Brodersen

Castle Mountain Ski Resort

development. The case made by the Castle-Crown Wilderness Coalition (CCWC), however, was a case against the Director of Regulatory Assurance and the Minister, Alberta Environment, for failing to uphold the purposes and intent of Alberta's Environmental Protection and Enhancement Act. Justice Kenny's 20-page decision speaks as much to the legal roles and responsibilities of different decision makers within Alberta Environment, including the Minister, and particularly the degree of discretion to be accorded to him, as it does to the facts of the case as they relate to CMR.

Prior to dealing with the substance of the CCWC's case, Justice Kenny had to establish the appropriate "standard of review" for dealing with the decisions made by the Director and the Minister. Legal counsel for both the government parties argued assertively that the highest degree of deference be shown to their decisions, with counsel for the Minister stating flatly that "the minister can do whatever he wants," and that therefore the test of "patent unreasonableness" be the appropriate standard for review.

In her decision, Justice Kenny agreed with them and was careful to re-state the definitions provided by their case law examples. With particular reference to the standard to be applied to the Minister, Justice Kenny quotes from the example provided by Minister's counsel: "the courts will intervene only if it is established that the minister's decision is patently unreasonable in the sense of irrational or perverse or ... so gratuitous and oppressive that no reasonable person could think it justified."

Having agreed to this standard for review of the case, Justice Kenny found that the Director's decision that the proposed expansion was not a "proposed activity" was patently unreasonable. Justice Kenny could not accept the

argument promoted by CMR, and apparently accepted by the Director, that "because there were some buildings on the land, along with a ski hill that was in operation, that the activity had already commenced."

"Taking that argument to its logical conclusion, any existing recreational or tourism facility could enlarge its facilities and thereby their use ... and their enlargement would never be subject to the environmental assessment process. This cannot possibly be the correct interpretation of the legislation ... which is

the protection of the environment, the need to balance environmental protection with economic factors and to prevent and mitigate the environmental impact of development."

Notwithstanding that the development was not a "mandatory activity" under the act, the decisions of the Minister and Director not to order an EIA were "patently unreasonable." Their arguments that "there would be a thorough review of potential environmental effects" rang hollow with Justice Kenny: "What is striking about these comments is that they do not identify the jurisdiction for this 'review.' The only legislation that provides for that is EPEA and, in particular, the EIA process." She therefore quashed those decisions, which was the remedy sought by the CCWC, and her decision requires them to follow the legislation.

The clear message from this decision is that even a minister is accountable to the legislation from which he derives his authority. The decision can be viewed as a temporary setback for CMR's private development agenda, or



it can be seen as a refreshing reassertion of the purposes and intent of our environmental protection legislation, and as a constraint upon the unfettered abuse of "ministerial discretion" that is equally applicable to all aspects of government.

Local and regional field staff in Alberta Sustainable Resource Development who argued for the need for an updated EIA for the Westcastle valley should derive some confidence from this decision, and it will hopefully render them better defended against overbearing senior management whose edict in 2002 was that the department would avoid an EIA at all costs.

(Previous articles on this topic can be found on AWA's website.)

WHITEHORSE WILDLAND PARK AND CHEVIOT MINE: EXPLORING ISSUES AND OPTIONS

Alison Dinwoodie

Cardinal River Operations (CRO), operated by Elk Valley Coals, started in March this year to push its huge haul road from the Luscar Mine site up the McLeod valley toward the old mine village of Mountain Park in the middle of its Cheviot Mine permit area. This haul road is a different proposal from the initial plan.

The original corridor, which was approved after the EUB/CEAA Environmental Impact Hearings in 1997, was to

have had three separate components: a rebuilt railway to haul processed coal from the mine site, an upgraded public road to accommodate all mine traffic as well as public vehicles, and an additional right-of-way for the power line. The current proposal will leave one large scar on the landscape, with heavy truck traffic 24/7, but there are a few points in its favour, compared to its predecessor.

The haul road should have less impact on the McLeod River than the railway line, which would have

required major disturbance of a considerable amount of the river banks. The haul road corridor is being built further up the hillside, with wider bridges, rather that culverts, over the main creek crossings at Whitehorse and Prospect Creeks, which should minimize the concerns of DFO and the fisheries and harlequin duck experts; also there will be "water management structures" to prevent run-off into the river.

Secondly, it is all in one disturbed corridor (and it is a large one!) with the haul road parallel most of the way on the uphill side of the rebuilt public road; there will be less traffic on the public road, as all mine traffic will be on the radio-controlled private haul road. The power line will be incorporated in the same footprint, rather than a separate disturbance area. Last but not least, there will be no large processing plant at Mountain Park, which means no associated tailings ponds etc., and most of the regular mine traffic will go directly to Luscar. Also, as far as the Cadomin residents are concerned, the haul road and truck noise will be over the hill away from

the village almost entirely, rather than moved to its back doorstep.

But, and there is a very big BUT, what will the grizzly bears and other wildlife think of it? There is no doubt that the constant heavy traffic day and night will constitute a major deterrent to wildlife movement through and across the very narrow McLeod corridor. Parks Canada, wildlife biologists, and many others have expressed considerable concern. What

is sometimes referred to as a "high speed" road is actually "high speed" for 300-tonne trucks – that is, about 35 to 45 kph. So while speed undoubtedly kills wildlife, this is referring more to highway speeds over 70 kph. According to the mine people, grizzly bears and other wildlife have become habituated to similar traffic at the Luscar Mine site.

But there is the additional hazard in the McLeod valley of the adjacent public road, separated from the haul road itself by one-and-a-half metre-high earthen berms (by

regulation, half the height of the truck wheels), with gaps for drainage and to allow wildlife escape. The traffic on the gravel public road will be faster (up to 90 kph) and more irregular, but also compounded by the fact that the County now allows off-highway vehicles to use it. As a result, there has been a big increase in OHV traffic in the area. Unfortunately, no reliable traffic figures are available as no adequate monitoring was done before the road closure. All this unpredictable traffic will also contribute to wildlife habitat avoidance.



Groups of OHV riders near Mountain Park ATV staging area, July 2004

What happens next?

CRO has applied for a License of Approval for its first pit at the old Cheviot Creek West Pit site. They hope to get approval soon and to start active mining toward the end of the year. Once mining starts, access to the west of the Grave Flats road will probably be restricted north of the old Mountain Park townsite. The public road should be open by

that time, allowing direct access to the Cardinal Divide and Mountain Park OHV Staging Area. There will still be access, by foot only, along the west ridge of the Cardinal Divide and along the base of Tripoli and Cheviot Mountains, as this is within the Whitehorse Wildland Park (WWP) boundaries.

The whole question of access, apart from obvious restrictions at active mining sites, is to be reviewed soon by a regional access management committee. Decisions regarding OHV access during and post-mine reclamation is going to be the next big concern.



Cavalcade of OHV's waiting to go into the mine permit area to the ATV staging area

What can we do?

Assuming there are no further delays (depending on Ben Gadd's appeal for an EIA) and active mining starts, the best thing to do is to keep a close eye on the mine and make sure it lives up to its commitments. As stewards of the WWP, this is one of the roles that the Alberta Native Plant Council (ANPC) and Edmonton Section, Alpine Club of Canada (ACC) have been playing for several years now – but that could be the subject of another whole article!

One of the major factors considered as contributing to the cumulative effects of the mine at the 1999 Hearings was that of OHV access, the need to protect the land adjacent to the mine as a buffer between the mine workings and Jasper National Park (JNP) and concern that OHVs would be displaced to this and other more sensitive areas, such as the Cardinal Headwaters.

The Mountain Park area at the centre of the Cheviot Mine permit is at present a great playground for OHVs, as it is crisscrossed by old mining roads, exploration trails, etc. – "pristine" it ain't, as some would have you believe! I should perhaps clarify that in addition to the Mountain Park staging area for OHVs, Mountain Park is the recognized old mining village site on the Grave Flats road and includes the recently refurbished local cemetery, where the Mountain Park Environmental Protection and Heritage Society has been putting in a lot of hard work. The village site and cemetery have been recognized by the mine as a valuable heritage site and are not included in the mine workings. So I find the term

used by some of the environment groups of a new Mountain Park or Mountain Wildland Park a bit confusing.

In addition, the presence of the existing Whitehorse Wildland Park has been underestimated. This extended the previous Cardinal Divide Natural Area, as recommended by the Panel in 1997, to provide an essential buffer between the mine and JNP. (Cheviot Mine is not "adjacent" to JNP as is frequently stated – the Whitehorse Wildland Park is!)

A Forest Land Use Zone (FLUZ) is also in existence, extending from Highway 16 south to the Brazeau river, along the borders of JNP and basically all the Prime Protection Alpine Zone 1. It includes the Luscar and Gregg Mines as well as Cheviot, so legislative means of controlling OHV access already exists. Between the Whitehorse Wildland Park – where a large number of the significant plant species are already protected, the Mountain Park heritage site, and the FLUZ, we already have substantial protection for some of the land of concern to environmental groups.

But, and again a big BUT, there needs to be effective control and limitations on OHV access in these sensitive areas. The Cheviot Mine held a stakeholders access management plan meeting recently, the stakeholders being almost entirely those with an interest in motorized recreation access. As a steward of the adjacent WWP, I had requested to be included, but unfortunately I was unable to attend, so I sent in a written submission.

I pointed out the various recommendations and conditions



Cardinal River Operations haul road and public road from the Luscar Mine site up the McLeod valley towards the old mine village of Mountain Park in the middle of its Cheviot Mine permit area. Access from Cadomin to Whitehorse Creek campground and the Mountain Park area has been restricted, except on long weekends when CRO has been providing escorted access. Due to weather and other delays, the re-opening of the public road may not be until about mid-September.

Specific details of closures are updated regularly on Elk Valley's web site: http://www.elkvalleycoal.ca. Note: if you do want to try this road at the holiday weekends, 4WD vehicles are essential (no cars allowed!) and if our experience is anything, make sure you have a spare tire and know how to change it! Cardinal Divide and the Mountain Park OHV Staging Area are still accessible by going the long way round from the south, by Highway 40, then about 54 km west along the Grave Flats road towards Cadomin.

This is very rough and slow going - you have been warned!



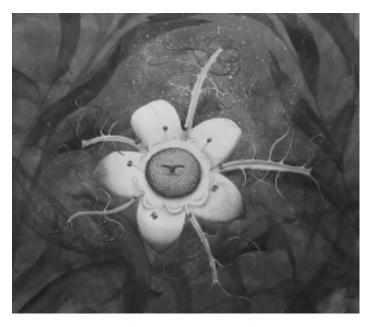
that are required to be met – in particular, the need for better regional access planning, taking into account all the cumulative effects of roads for oil, gas, forestry, and mines, as well as OHV recreation. As a result there is going to be such a meeting, but details are not yet available.

More local and non-motorized recreation groups need to be involved who are willing to stand up against the very vocal OHV lobby groups. Whitehorse Wildland Park needs your help to maintain its conservation character and more public awareness of its important role as a buffer for the mine. And we need to find a more acceptable place for OHV recreation and a new OHV staging area that do not impinge on these sensitive ecological areas. The FLUZ covers approximately 1,000 sq km (mostly inaccessible mountains), while the whole Coal Branch Integrated Resource Management area is roughly 8,400 sq km, so there are many alternatives for OHV users.

I am looking to the future, when the Cheviot Mine workings to the west of the Grave Flats road are reclaimed using the best techniques available, becoming a showpiece for mine reclamation for plant and wildlife diversity. By excluding OHVs, legislated through the FLUZ, this could become a very valuable addition to our future protected areas, along with the existing Mountain Park heritage site and Whitehorse Wildland Park.

This, I feel, is a reasonable and readily achievable prospect, as many of the pieces are already in place and would have a lot more local support (apart from the OHV lobby!) than a hypothetical completely new "park." A Friends of Whitehorse Wildland Park has recently been formed for local people to help with particular projects in the WWP. But the more support, the better!

For more information, or offers of help, contact Alison



Bishop's cap - Dana Bush

Dinwoodie, (780) 437-7183 or Lara Smandych, AWA, at (403) 283-2025 or 1-866-313-0713.

(Alison Dinwoodie has been a spokesperson for the CDNA / WWP Stewards for over 20 years. Alison notes that "this article was suppose to have appeared in the June WLA, but due to human error (mine!) it missed the boat! But it can now be updated a bit more.")

CHEVIOT MINE REQUIRES NEW ENVIRONMENTAL IMPACT ASSESSMENT

Lara Smandych, AWA Conservation Biologist



Although mining has yet to begin at the Cheviot Mine site in the Cardinal Divide area, much work has been completed on private haulroad that will service the mine and that is due for completion in early Fall 2004.

The current Cheviot Mine proposal has been substantially modified from the

original project proposed in 1996. The new mine project is described as a "satellite" of the Luscar mine. The proposed rail line and the processing plant have been eliminated and changes have been made to the haul road.

In 1999, an Environmental Impact Assessment (EIA) was conducted in the original mine site area. It was deemed that this EIA adequately addressed environmental considerations associated with the private haulroad and no further assessment activity would be required.

However, due to the changes in the new proposal, particularly for mine access, the current haulroad and associated impacts are no longer adequately covered by the old EIA and should require a full review under the Canadian Environmental Assessment Act (CEAA). A new and full review under CEAA would ensure the maintenance of the integrity of the area. The area encompasses, among other things, prime grizzly bear and fish habitat, and harlequin duck populations.

AWA believes that the Department of Fisheries and Oceans (DFO) must take greater interest in the new mine proposal and the associated impacts. DFO must only issue authorizations for the project once full knowledge of the cumulative and environmental impacts are known.

Immediate action is required to ensure the modified cheviot Coal project receives a full, new environmental review to assess and disclose the full range of impacts. The ecological integrity of this significant and diverse area must be protected.



PUBLIC PARTICIPATION IN FOREST PLANNING IN THE SOUTHEASTERN SLOPES

Jason Unger, AWA Conservation Specialist



Forestry policy and management in this province is in dire need of review. Wilderness protection in our forests will only result if significant steps are made to address the unsustainable status quo.

Currently, a review and drafting of a Forest Management Plan (FMP) for the C5 Forest Management Unit (FMU) is taking

place at the direction of Alberta Sustainable Resource Development with the advice of the Crowsnest Pass Advisory Committee (Crow PAC). The draft plan will be available for public comment this fall or winter.



Logging in the south Porcupine Hills

A recent AWA review of the draft plan (which admittedly may not reflect the plan presented for wider public consultation) raises many worrying questions. These questions, if left unanswered, should attract the ire of concerned Albertans.

The C5 FMU, running from Waterton National Park to Plateau Mountain in Kananaskis Country, contains significant stands of pine, fir, and spruce that are subject to timber quotas from four timber companies. The plan itself is based on the Canadian Standards Association – Sustainable Forestry Management (CSA-SFM) and reflects principles espoused by the Canadian Council of Forestry Ministers. At one time, AWA was involved in the committee that was developing the CSA-SFM standard; however, AWA withdrew in 2001 due to the lack of substantive guidelines that would provide some guarantees that the planning goals and principles would be met.

It appears that this withdrawal may have been prophetic, as the current plan, while containing broad statements of laudable goals, is lacking in substance and detailed criteria that will govern operations. Granted, the plan is not yet completed and will be subject to further public comment; however, the lack of certainty in the current draft makes formulating criticisms difficult.

Similarly, issues of how the plan will be applied to day-today timber operations remains elusive and ill defined. Scientific and regulatory capacity to ensure that FMP is based on valid and reliable groundwork is also lacking. This groundwork and basic biological data is required if biodiversity and habitat protection goals are to be met.

The main concern is that the planning process will prove to be no more than a bunch of "sustainability" rhetoric. This concern is bolstered by the fact that to truly implement some of the objectives will require operations that may be in conflict with current forestry policy, guidelines, and regulations. At the most basic level this conflict is illustrated by the Forests Act being expressly geared to sustaining the timber supply. This conflict needs to be resolved if the plan is to uphold a truly "sustainable forest" paradigm.

The most transparent and concrete way of ensuring sustainable forests is to legislate those goals, something that is barely acknowledged in the plan. Although the plan does acknowledge this, it is restricted to statements that it may conflict with current policy and regulation, there is no discussion as to how this conflict should or will be resolved.

These inherent difficulties with the FMP are unlikely to be resolved by the time the draft plan is presented to the public, and therein lies the importance of broad-based comment being provided by the public. The importance of participating in this process becomes evident when one considers that the future of our forests includes the future of our water, the future of our recreation, the future of our wilderness, the future of our air, and the future of our health.



The Hunter - Dana Bush



PARTICIPATING IN WATER POLITICS

Jason Unger, AWA Conservation Specialist

With the recent news that Alberta is debt free, one must wonder if we can all retire, comfortable with the knowledge that everything must be hunky-dory if the books are in such great shape. Of course, no one who has concern for Alberta's wilderness and environment will take this as a sign to sit on one's laurels.

Alberta's political parties should take heed as well, with

the possibility of a fall election on the horizon. The fiscal balance has done little to resolve one of the most dominant topics in the last year, both in media headlines and in the minds of Albertans – that is, water.

As much of Alberta enjoys what appears to be a wet spring and early summer, water issues remain. The past few years of drought, the receding of glaciers, and the battle over enhanced oil recovery using freshwater all

point to water being a primary concern for Albertans in the years, if not generations, to come.

The recent Environmental Appeal Board decision regarding the Alberta Environment approval of Capstone Energy's water withdrawal from the Red Deer River for enhanced oil recovery is a case in point. The idea of taking potable (or near potable) water and pumping it into the ground is a use of a vital resource that is contrary to the public interest, not to mention ideas of living sustainably. The argument that the amounts being diverted from surface waters (and effectively from the hydrological cycle) are inconsequential appears to be a non-starter in this province.

Overallocation (with the Oldman River basin being a prime example) and environmental degradation in some of Alberta's rivers is already at a point where wilderness values are being irrevocably threatened. The unprecedented growth in Alberta is bound to continue, and with it the increased stress on much of the province's resource.

The realization that must be made among the public and politicians alike is that managing water use is only part of the issue. Planning for protection of the water source is of equal import. The ongoing receding of glaciers makes protecting

> source waters that much more relevant for years and generations to come.

The Rockies and the Eastern Slopes are the wellspring of life in Alberta, and proper planning, management, and protection of these headwaters is required if the quality and quantity is to meet our evergrowing needs. This requires public participation in the process.

For some the political process in Alberta may indeed feel like hitting one's head

against a brick wall; however, the importance of water to our individual health and well-being and the health of our wilderness demands that we participate and hold the decision makers to account.



The Bow River at Edworthy Park

At the end of May, the government announced the new Alberta Water Council, consisting of 24 Albertans and representing various sectors and interests. According to the government news release, the Council will provide direction and guidance on the implementation of the water strategy. For more information on the roles and members of the Council see the Alberta government news release for May 31, 2004.

ABRAHAM GLACIER RESORT DENIED AGAIN!

Lara Smandych, AWA Conservation Biologist

Alberta's wilderness has experienced another victory. The Clearwater County Subdivision and Development Appeal Board (SDAB) has denied the appeal for the Abraham Glacier Wellness Resort. The SDAB upheld the decision made by the Municipal Planning Commission to refuse the development application for the resort, located in the Whitegoat Lakes Development Node near the Bighorn Wildland. AWA commends the County for their decision to make the environment a priority.

Reasons for the decision included the following: "The scope, scale and density of the proposed development will have a detrimental impact in this particular development node." The SDAB found that the proposed development would be "more appropriately located nearer an established service centre." The Board also "concluded that the development could not be accommodated without adversely impacting adjacent uses and the environment of the area."

The proponent is appealing this decision.



SECRECY SURROUNDING NEW ATRL-LITE PROCESS

Lara Smandych, AWA Conservation Biologist

The Alberta government has recently proposed a review process for small tourism developments on public land called ATRL-Lite. Under ATRL-Lite, small tourism operators would be allowed to develop operations on public land. Since little is known about this process, AWA sent letters of inquiry to the Minister of Sustainable Resource Development, Mike Cardinal. According to the letter of response received, proposals considered under this process would "take up a very small land base, have no permanent structures, create minimum disturbance to the landscape, and have minimum impact to resources. These small scale, low intensity developments will typically provide the public with non-intrusive access to recreation opportunities on public land with no significant impacts."

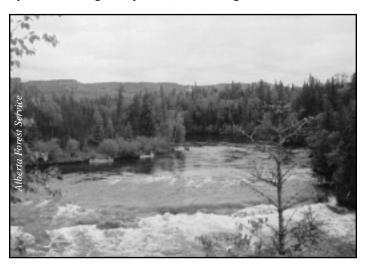
However, this process seems to be shrouded in secrecy. In July, upon inquiring about the process, Martha Kostuch, president of ALERT was refused by the Alberta government 70 out of 83 pages of documents. Among the reasons given for withholding the documents were that the disclosure would be expected to reveal advice being considered by the government, or that it would affect the financial interests of a third party.

The only relevant information received in this information package was the disclosure that "small-scale commercial operators have indicated that Sustainable Resource Development's current referral process and requirements represents a barrier to their efforts to acquire a lease on public lands, given the small scale of their proposals and the relatively low capital investment. A Minister's Report to modify the referral process and requirements for small-scale proposals has been presented through government processes and received support."

Although the government has pledged to continue to consult with public land and resource management agencies, other provincial government agencies, and municipal authorities before any small-scale developments are approved, AWA is concerned that Albertans are being shut out of this important public land issue. AWA has repeatedly expressed concern over the lack of a public lands policy in Alberta. AWA believes that since the ATRL-Lite process deals with proposals for public lands, Albertans have the right to know about and comment on tourism developments being proposed. Citizens of Alberta must be afforded the opportunity to discuss the future of their lands, regardless the size of the development.

CLEARWATER-CHRISTINA RIVERS DESIGNATED AS CANADIAN HERITAGE RIVERS

The Clearwater-Christina Rivers in northeastern Alberta are the first Alberta rivers to be recognized under the Canadian Heritage Rivers System (CHRS). The CHRS is a national river conservation program through which federal, provincial, and territorial governments, and numerous other stakeholders, cooperate to recognize, protect, and manage Canadian rivers of



Clearwater River

outstanding natural and/or cultural values and recreational opportunities.

Alberta joined the CHRS in 1994, the last province to do so, based upon the recommendations of the Canadian Heritage Rivers System Advisory Committee established in 1991 by then Environment Minister Ralph Klein. The CHRS designation does not restrict economic or recreational activity in or along the river as long as those activities are in accordance with the management objectives to conserve outstanding natural, cultural, and recreational resources.

The Clearwater-Christina Rivers were nominated for designation in 1996 and the Clearwater River Committee — comprised of stakeholders in recreation, industry, and environment, with local river interests — was formed. According to the CHRS website, The management plan for the Clearwater/Christina Corridor is a written commitment of all users to share leadership as stewards of the river and to cooperate, educate, understand, and respect each other and the river environment.

For more information see the Alberta government news release for April 19, 2004.



ANOTHER DELAY FOR MILK RIVER FEASIBILITY STUDY

Shirley Bray

The latest news that we have heard is that we should not expect any news about the Milk River Basin Preliminary Feasibility Study until September. The study, which was originally due in June 2003, was completed in December 2003 and given to the Environment Minister in January 2004, and the public announcement was to be late spring 2004. We have heard unofficially that government is planning to invest another \$200,000 this year and \$400,000 next year in continuing the study of storage options in the basin.

We asked John Donner, Assistant Deputy Minister, if he could tell us what the benefit-cost ratio was in the final report that came out in December 2003, so we could see if the numbers had changed from the October 2003 draft (see WLA April 2004). He told us that he had not seen the report and that even if he had, he would not be able to tell us. Why all the secrecy?



At the end of June, AWA hosted a hike to the Twin River Heritage Rangeland led by Cheryl Bradley. We hiked along the ridge on the north side of the Milk River downstream from the confluence of the north and south branches. In the valley by the river we could look upstream to the two bluffs that mark the proposed site of the Milk River dam.

HOWSE PASS HIGHWAY DREAM LIVES ON

Dr. Herb Kariel, AWA Director



Once again there is talk of extending Alberta Highway 11 beyond its junction with the Icefield Parkway at the Saskatchewan River Crossing, over Howse Pass and down the Blaeberry River valley, to connect with the TransCanada Highway north of Golden near either Moberly or

Donald.

Constructing a highway through Howse Pass has been dreamt about since the 1940s, when trailblazers, led by Ernest Ross, drove "westward across country" over an unimproved road from Nordegg as far as the Banff-Jasper Highway. In 1967 this route – Highway 11, now also called the David Thompson Highway – was completed as a gravel road as far as the Icefield Parkway at the Saskatchewan River Crossing. It was subsequently paved and was realigned with construction of the Big Horn Dam and the filling of Lake Abraham between 1971 and 1973.

An editorial published in the *Red Deer Advocate* on April 28, 1977 was titled (incorrectly, in retrospect) "The final chapter on the Howse Pass." It states, "Let's hope the federal government's latest word on the proposed Howse Pass highway is the last one. The idea is dead, dead, dead and we're better off that it is."In June 2003 the president of the Red Deer Chamber of Commerce requested Alberta Economic Development Authority to include the proposed Howse Pass Highway in a study of Alberta's transportation sector. "More specifically, we encourage an analysis of the need for the Howse Pass Highway."

While there are many arguments both pro and con for building the proposed highway, proponents are concerned primarily with economic issues, mainly private gain, while opponents strive to maintain the ecological integrity of what are now relatively untouched wild areas.

Over the years a spirited debate has taken place between these two groups. The *Rocky Mountain Mountaineer* has supported it, while the *Red Deer Advocate* has argued against it. One editorial in the *Advocate* stated, "Wilderness left untrammeled makes far more money ... than any other use – by a margin of three to one. To spoil a wilderness area is to reduce its ability to support jobs and business" (April 28, 1997).

Supporters usually base their arguments on perceived economic gain and individual profits. They contend that progress is desirable regardless of the cost and that nature exists primarily to serve humans. They sometimes call those who wish to preserve the area narrowminded and inflexible, and in more extreme statement, "#)*&\$^& environmentalists," "Fascist-Commies," and "obstructionists and killers."

More specifically, they argue that constructing the highway would decrease air pollution and gas consumption, as well as cut shipping costs for central Alberta and produce other economic spinoffs. They also state that environmental impacts could be minimal or least mitigated by fencing the portion of the highway within Banff Park. They claim that Alberta would not have to pay because the highway would be built primarily by Parks Canada and the BC government, or no government would have to pay because it could be a toll road.



Opponents focus primarily on legal and environmental considerations, which in this case are intertwined. A critical argument is that constructing the highway would contravene Parks Canada policy and the designation of Howse Pass and upper Howse River as a wilderness area. No development of any sort is allowed there without an act of Parliament to change that status.

In Trust For Tomorrow: A Management Framework for Four Mountain Parks (1986) specifically states that no new roads will be constructed in the Mountain Parks. This is corroborated in the 1988 Banff National Park Management Plan, which was published following a public consultation process lasting more than five years. Because of its association with Canada's native people and the fur trade, the area was also designated as a National Historic Site in 1978.

Environmentalists are also concerned that highway construction would destroy important wildlife habitat and interfere significantly with wildlife migration. Howse Pass contains critical breeding and winter range, especially for elk and their predators. The upper valley provides year-round habitat for mountain goats and is an important denning area for bears, including grizzlies.

Opponents also point out that several of the arguments for the highway are questionable. The

route would reduce traffic volumes on the TransCanada Highway by only three to ten per cent and would cost \$200 million (1984 dollars). It would also lead to development of one of the only two passes remaining in their natural, essentially undisturbed state. (The other is Athabasca Pass.) In all other passes, railways, highways, power lines, and pipelines have been constructed. Highway construction would also lead to incremental destruction of the ecological integrity of the national parks.

The most complete and credible economic, legal, and environmental appraisal may be "The Howse Pass Highway Proposal," a position paper prepared by the Red Deer Naturalists in 1989. It addresses the concerns of those who wish to preserve the area in its wild state, such as the value of retaining wild land, parks, and wildlife, and the transgression of Parks Canada policy if a highway were constructed.

It also points out that the supposed economic benefits are not as advantageous as many proponents envision. While the road would provide a shorter route of easier grade than those now in use between Red Deer and British Columbia, it could even have negative economic impacts on central Alberta and Red Deer in particular.

It cites the 1981 West Central Alberta Tourism Destination Area Study, which points out that the Howse Pass route could

even siphon tourist traffic away from Red Deer and central Alberta. The shorter route would effectively bypass Red Deer, since it has little to offer tourists when compared with the mountain national parks, the Okanagan, and other destination points in B.C. Furthermore, Rocky Mountain House would no longer be considered a midpoint between these other destinations and Red Deer, and the entire West Country Tourist industry would suffer.

With the bicentennial celebration of David Thompson's explorations in 1807, attention will focus on Howse Pass in 2007. Special activities are being planned for Rocky Mountain House, the Rocky Mountain National Historic Site, and other communities, in the hope of attracting many tourists.

According to Bruce Leeson, Senior Environmental

Assessment Specialist, Parks 1979 Canada. in the Government of Canada made a long-term commitment to the TransCanada Highway as the major transmountain public vehicle corridor. Up to October 2003 the Canadian government had spent \$85 million to upgrade the highway, with an additional \$50 million since then. The province of British Columbia is currently not interested in constructing its portion of the proposed highway. Most residents in and around Golden wish to see the



Howse Peak

TransCanada through Kicking Horse Pass continue to be upgraded, rather than constructing one over Howse Pass.

Russ Younger, a Blaeberry Valley resident, says, "I think that a highway through Howse Pass would destroy what is presently a semi-wild valley that is still accessible for tourists and locals to enjoy and experience the backcountry without requiring special skills. It does not require special transportation, yet gives people access to venture further if they so desire; and it has the beautiful Mummery Glacier to not only view but to hike to without special skills or equipment. The valley, as is, is a gem!"

For now, Howse Pass and the Blaeberry River valley are protected from commercial development and are off limits to highway construction, but the situation can always change. A different government could, for example, turn management of the national parks over to the provinces. Alberta has expressed a desire to do just that, at least for those parks located within the province. If that came about, more commercialization and development would inevitably take place.

The Broader Context

Given the protection that Howse Pass currently enjoys and the obstacles that would have to be overcome to construct a highway through the pass, it is hard to understand why



individuals continue to clamour for its construction, unless we consider it in its broader context – that is, not to think of this issue as another brush fire, but rather to look for the commonality and generality of environmental issues.

Land-use conflicts rest on differing individual viewpoints. Environmentalists value and believe in protecting and preserving wild lands not yet disrupted or impinged upon by "civilization." They believe that "small is beautiful" and that people should be good stewards and live in harmony with nature. They also tend to oppose the extremes of technology, or doing something just because it is possible. Generally they work for the common good.

Persons holding the opposite viewpoint, typically those who wish to develop areas, assign economic considerations a high,

if not the highest, priority. They believe that nature exists to serve humans; that progress in and of itself is desirable; and that people rightly deserve more than what they already have. They also have a generalized faith that science and technology can and will solve any problem.

They tend to value everything in monetary terms, whereas environmentalists recognize that there are also other values, such as peace of mind, good health, a healthy environment, or the beauty of a sunset. These cannot be

expressed in monetary or economic terms; even so, they may be assigned a value for legal purposes. An individual may, of course, hold a position containing elements of both viewpoints, although the tendency is for one or the other to prevail.

Aldo Leopold succinctly expressed the contrast in A Sand County Almanac: "We abuse the land because we regard it as a commodity belonging to us. When we see the land as a community to which we belong, we may begin to use it with love and respect."

Because the economic attitude is all-pervasive in our society, it is up to environmentalists and environmental organizations to make the general public aware of the other values. In the long run, without environmental health there are no economic returns.

This means that environmental organizations, such as AWA, need not only to make the public aware of the importance of protecting specific areas and environments, but also to hold governments, politicians, and corporations accountable for their They must chart the course to preserve the environment locally and globally, regardless of how difficult or tiring it may be to swim against the current. As Brock Evans, the renowned environmentalist, noted, this battle to protect the environment requires "endless pressure, endlessly applied."

During the almost thirty years since I first enjoyed the mountains of the Howse Pass area, I have continued to visit and appreciate "our mountains." At the same time, I recognize that continued vigilance is needed if future generations are also to see and appreciate them as they were when David Thompson and other explorers first glimpsed them, almost 200 years ago.

Howse Pass of Yesterday

The recent interest in Howse Pass reminded me of my own trip in the summer of 1976 when I traveled up the Blaeberry River valley to attend the Alpine Club of Canada's general mountaineering camp at the Freshfields. After driving as far as possible on the gravel and dirt forestry road from Moberly, we parked the cars and unloaded our baggage to be carried to camp by a string of pack animals. Shouldering our day packs and grasping our ice axes, we proceeded on foot on the old but freshly flagged trail.

> In about two hours, close to the outwash lake from the Freshfield glacier, I was awed to see a tree upon which, in 1807, David Thompson had carved his initials and a message. This fur trader, explorer, and geographer in the employ of the North West Company, had camped in this area. He was waiting for the snow to melt before continuing down the Blaeberry River to reach the Columbia River. Drawing upon Thompson's journals, Johansen and

> Gates described this trip.

From his headquarters at Rocky Mountain House on the North Saskatchewan River on May 10, 1807, Thompson, accompanied by his wife and three small children, three men, and ten pack horses, set out for the mountains where he was to spend most of the next 12 years. On June 10 Thompson and his party were in the "stupendous a[nd] solitary Wilds covered with eternal Snow, a Mountain connected to Mountain by immense Glaciers, the collect of Ages a[nd] on which the Beams of the Sun makes hardly any Impression." Here he waited 14 days for the snows on the highs to melt.

"The Weather was often very severe, cloathing all the Trees with Snow as in the Depth of Winter, a[nd] the Wind seldom less than a Storm we had no Thunder, very little Lightning, a[nd] that very mild; but in return the rushing of the Snows down the Sides of Mountains equaled the Thunder in Sound, overturning everything less than solid Rock in its Course, sweeping Mountain Forests, whole acres at a Time from the very Roots, leaving not a Vestige behind, scarcely an Hour passed, without hearing one or more of these threatening Noises."

On the 24th of June they crossed the heights and came to the welcome sight of a ravine "where the Springs send their Rills to the Pacific Ocean," and followed down the Blaeberry River, "a Torrent that seemingly nothing can resist," until on June 30 they came to a river where, "thank God, we camped all safe."



Blaeberry River valley



This was the Columbia River, though Thompson did not know it. Nor is this surprising when one examines a map of the region. It will be noted that the Columbia has its source in two lakes, the lovely large Windermere, and to the south of it, shallow reedy Columbia Lake. From these lakes, the Columbia flows north some 700 miles before it turns around the Selkirk Range to take up its long southwesterly course. Thompson was looking for a river that flowed to the south and west, not to the north.

Howse Pass Today

Among the many spectacular mountains near Howse Pass are the Freshfield Groups (Blackwater Range, Waitabit Ridge, Mummery Group, Conway Group and Bernard-Dent Group); the Forbes Group and Glacier Lake to the west; and the Kaufmann Peaks, Howse Peak, Ebon Peak, and Mt. Chephren, all in Banff National Park to the east. On its west side, the upper Blaeberry River valley borders the Mummery Group and on the east side lie some peaks of the Waputic Mountains, including impressive Mt. Laussedat, visible from the road.

Because it is a spectacular climbing area, at various times the Alpine Club of Canada has thought of building a mountain hut. The Lloyd MacKay/Mount Freshfield Hut was erected at Niverville Meadow in 1984, but was dismantled in 1989 because of its declining use – Parks Canada wanted it removed.

Proceeding down the Blaeberry Valley, the area is still wild and remote. Soon, however, the results of earlier logging operations are visible. Several slopes were logged to treeline and are fire scarred because "fires got out of control" when slash was burned. Although early reforestation efforts were only minimally successful, natural reseeding has now revegetated the cutover land. Fortunately, current logging practices are much improved.

The lower Blaeberry Valley, closer to the Columbia River, was opened by the hard work of clearing the land and homesteading and logging operations. The broader part of the valley now contains some hay and cattle farming and a mix of homes of varying sizes and types of construction. One of these is owned by a daughter of Eduard Feuz, one of the Swiss guides hired by the CPR to guide clients at Glacier House in an effort to attract tourists. During the last few years several bed and breakfast places, small cabins, lodges, retreats, and similar accommodations have sprung up.

In spite of the overwhelmingly fabulous scenery and general attractiveness, Howse Pass and the Blaeberry River valley are seldom visited because of their remoteness. A gravel and dirt forestry road extends as far as Wildcat Creek and an unmaintained trail over Howse Pass is used by hikers and horseback riders. The remote and wild forested valley is pleasant to travel, as it provides fabulous scenery and agreeable hiking and random camping opportunities.

(I thank Martha Kostuch for inspiration and for the suggestion to research the proposed Howse Pass Highway; Alberta Transportation staff, Parks Canada staff, Bernie Schiesser, and Russ Younger for information provided; and Pat Jackson for valuable comments on earlier drafts.)

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ARTIFICIAL SELECTION, SUSTAINABLE HUNTING AND BIGHORN SHEEP CONSERVATION

Dr. Marco Festa-Bianchet

The ancestors of domestic sheep were likely similar to today's mouflons in Iran and neighbouring countries. Those wild sheep have hair, not wool, and usually produce one lamb a year. How were they transformed into domestic sheep that produce fine wool and litters of three or more lambs? Through artificial selection of individuals with desirable characteristics as breeding stock.

How humans exploit wild animals can also become a selective pressure.

For example, fish from heavily harvested stocks mature at a younger age and smaller size than fish in unexploited populations, and tuskless African elephants are becoming more numerous in heavily poached populations. In Alberta, recent evidence points to a reduction in horn size in an isolated population of bighorn sheep after decades of selective hunting under the "4/5-curl" regulation, underlining the importance of evolutionary theory for wildlife management.

A paper published last year in *Nature* by David Coltman and collaborators reports that bighorn rams on Ram Mountain, southeast of Nordegg, have horns that are about 25 per cent shorter than rams in the same population 30 years ago. Much of the decline in horn length is likely due to environmental effects: as the population increased in density from 1980 to 1992, rams grew shorter horns, likely as a result of decreasing forage resources. When the population declined after 1992, however, the horns of rams continued to decrease in size. Analysis of pedigree data (mothers are identified by ewe-lamb associations, fathers through DNA analyses) indicates that rams have horns that are genetically smaller than those of their ancestors just three or four sheep generations ago. How did this happen?



Research by Coltman at Ram Mountain and by Jack Hogg at Sheep River shows that bighorn rams can father lambs either by defending an estrous ewe or by "stealing" copulations using alternative tactics. A subordinate ram cannot challenge a dominant ram that is defending an estrous ewe, but if several subordinate rams attempt to separate the ewe from the defending ram, eventually they may create opportunities to mate with her.

Large-horned rams are dominant and can defend estrous ewes, while small-horned rams are subordinate and resort to

alternative mating tactics. Because rams increase in both body mass and horn size with age, only mature rams, typically those aged eight years and older, can successfully defend estrous ewes.

Not surprisingly, mature rams with very large horns father more lambs, presumably because large horns are correlated with high social rank. Among younger rams, however, horn size appears to play no role in reproductive success. If the way to obtain matings is through stealth or agility (mating quickly

while avoiding reprisals from the defending ram), horn length may make no difference.

By five years of age, bighorn rams have horns that are about 80 per cent as long as those they will grow if they live to nine or ten years, but larger horns will make little difference to a ram's reproductive success until he's eight years or older. Enter the "4/5-curl rule," in use in Alberta for over 30 years to prevent the harvest of young rams. A fast-growing ram can be "legal" at four years of age, and many are "legal" at five years. Therefore, a ram with large horns will not reap a fitness benefit from those horns until he's eight years or older, but he is at risk of being shot by the time he's four or five years old.

An apparent evolutionary response to trophy hunting was evident at Ram Mountain. That population is isolated, so it is likely that the selective effect of removing large-horned young rams would be stronger than where immigration of genes from protected areas such as National Parks should dilute the effects of selective hunting.

On the other hand, Ram Mountain is not an easy place to hunt sheep, and on average, only about a third of legal rams were shot each year. In areas with good motorized access, the harvest pressure is likely much higher. Consider, for example, the area between the Crowsnest Pass and Waterton National Park, with a dense network of roads and trails and few restrictions on motorized access. That area produced the former world record ram near the beginning of the last century and has all the right environmental conditions to produce very

large rams. Yet, when the definition of "legal" ram was moved from "4/5-curl" to "full-curl," it took over five years before a full curl ram was taken.

Observations at Sheep River, where harvest pressure is lower because the most easily accessible sheep ranges are closed to hunting, suggest that rams grow full-curl horns only one to three years after reaching 4/5-curl. Could it be that many years of very high harvests "selected out" the genetic traits favouring large horns between the Crowsnest Pass and Waterton? A recent study in the Okanagan shows a 10 per

cent decline in horn size over 25 years in an area with unrestricted "3/4-curl" hunting, but no decline in a nearby area with a limited number of permits.

Unfortunately, the bad news does not end there. Recent analyses suggest that traits associated with large horns in rams are correlated with traits that increase ewe fitness. Artificial selection for small horns may lead to poor reproductive performance at the population level, possibly explaining why the Ram



Bighorn Sheep in Highwood Pass

Mountain population has recently performed very poorly, despite being at low density for several years.

The Crowsnest-Waterton population also did not recovered as expected from a pneumonia die-off that affected it over 20 years ago. Many hypotheses can be proposed to explain that poor recovery, but the possibility of a selective effect of trophy hunting on population performance cannot be discounted.

These important results raise fundamental issues for wildlife conservation. If the selective effects of hunting are widespread, managers should pay attention to them. Think for example of the "5-point" rule for elk hunting: a large bull elk with only four points will do very well. If the results obtained on Ram Mountain are confirmed elsewhere, clearly hunting regulations should be changed. To counter or lessen the selective effect, rams must not be shot before their large horns allow them to pass on their genes to future generations. That could be achieved by either issuing a limited number of permits or by changing the definition of "legal" ram.

In either case, there would be fewer hunting opportunities and a smaller harvest (but also less crowded hunting areas). If, however, the results obtained at Ram Mountain do not reflect what is going on elsewhere, more restrictive regulations may unjustifiably decrease hunting opportunities. Clearly, a cautious approach is warranted.

Most wildlife managers welcomed the study for actually injecting data into the discussion, but some advocacy groups



took it as a frontal attack on trophy hunting and reacted with hostility. A few people still cherish the idea that fast-growing rams have higher natural mortality, despite data to the contrary. I very much look forward to data suggesting that these conclusions are wrong, but so far I have not seen any.

Alberta has long been a leader in the management and conservation of bighorn sheep, and is likely to keep that leadership role. Already, the definition of "legal" ram has been changed from "4/5-curl" to "full-curl" in a few areas, and plans are underway to examine data from bighorn rams harvested in the province over the last 35 years. If the selective effect reported for Ram Mountain is prevalent elsewhere, the size of ram horns should have declined over time, and the decline should have been greater in areas with higher hunting pressure and fewer opportunities for influx of unselected genes from protected areas. The foresight of wildlife managers in collecting horn measurements from harvested rams over many years should allow to test these hypotheses.

Ram Mountain now offers a unique opportunity to test how the selective effects of hunting may affect horn growth and population dynamics. Partly because of a series of years of high cougar predation and partly because of continuing poor reproductive performance, the number of bighorn sheep declined from 232 in 1991 to 41 in 2003. Despite five years with fewer than 100 sheep in the population, there is little evidence of recovery: ram horns are small, age of primiparity is late, lambs are born late, lamb survival is low, body growth of young sheep is poor. That could be due to a delayed effect of the high population density from 1988 to 1996, or it could be a genetic effect. We know that at least five per cent of genetic diversity has been permanently lost. The way to test these alternatives is to introduce sheep from elsewhere. If the problem is genetic, "hybrid" offspring with greater genetic diversity will perform better than "native" sheep.

We have previously suggested a transplant, but Alberta Fish & Wildlife disagreed. We have now sharpened our arguments, assembled more data, and will again propose a small-scale infusion of sheep from elsewhere. The government's opposition to our plan is due partly to reluctance to accept the genetic data and partly to a policy concern.

Generally, it is a very bad idea to move sheep around. With a single exception, there have been no transplants of bighorn sheep within or into the province: wherever bighorns occur in Alberta, they do so naturally and may have local adaptations. Fish & Wildlife is often pressured to transplant large rams (from places like the Cadomin area) to elsewhere in the province, to bring in "genes for large horns." It is a sign of the professionalism of F&W biologists that they have resisted those calls.

Horn size is largely determined by environmental conditions, and genes that lead to large horns in good habitat will not produce large horns in poor habitat. The

consequences of moving animals around are unpredictable, potentially introducing new pathogens or parasites, or detrimental genetic effects if they "break up" local adaptations. In most of the province, there is no justification for sheep transplants and there are many reasons to avoid them.

For example, there has been a major decline in numbers of sheep in the Sheep River population in Kananaskis Country,

due mostly to cougar predation but possibly also to disease transmission from cattle and increasing recreational use of the winter range. In that case, bringing in new sheep would not solve anything and may create new problems.

Why, then, is a transplant justified for Ram Mountain? First of all, it's an isolated population, so any effects would be confined in space. Sheep in the Brazeau Range (Ram, Shunda, and Coliseum Mountains) are likely the only really isolated bighorn population in Alberta. Second, we have ample data to suggest a genetic problem caused by years of selective removal of large-horned rams: this is not a "natural" situation; it's manmade and needs fixing. This population may go extinct over the short term: it has declined by 83 per cent in less than two sheep generations. Third, Ram Mountain is the site of a long-term study of marked bighorn sheep. Introduced sheep would be marked and genotyped, as are all the resident sheep. transplant would provide key data for managers interested in the selective impacts of trophy hunting.

The current controversy over the selective impacts of trophy hunting need more experimental data, not more hot air. Ram Mountain is clearly the best place to provide those data.

(Marco Festa-Bianchet is a professor at Département de biologie, Université de Sherbrooke, Sherbrooke, Québec, J1K 2R1.)



Juncus in Anthesis - Dana Bush



ARTIST DRAWS ON SCIENTIFIC AND AESTHETIC INFLUENCES

Andy Marshall

The crab spider stares right at you – innocent, all teeth, as in a high school grad photo. The swirling purples and greens in the background lend an exotic tone.

Normally the size of your fingernail, the creature in the watercolour picture is about three feet across. When people glance at it in Dana Bush's busy northwest Calgary home, they don't immediately register this is actually a small spider in all its arachnid splendour.

It's part of a series of insect paintings by Bush, 48, done in her spare time. She views her magnified subjects through a dissecting scope. Among other critters, the collection includes a slug, a dragonfly, and a lace bug.

"I've been drawing pictures of things people don't normally look at. I guess it's a series on the unwanted and the unloved," she laughs.

By profession, this energetic, multitalented woman is a senior vegetation ecologist with AXYS Environmental Consulting. She's worked there for eight years, preparing management plans for environmental impact assessments of projects from pipelines and heavy oil projects to water reservoirs.

The job draws on her broad scientific knowledge of plants, gained from her undergraduate degree in plant biology from the University of Calgary; her many years of consulting, writing, and speaking about plant ecology; and her 1998 masters degree from the University of Edmonton, where her thesis was on native seed mixes for diverse plant communities.

Her paintings of bugs and plants have bridged in a remarkable way her artist's eye for the aesthetic beauty of the natural world with

her scientist's power of observation.

"I'm a very literal artist. I don't enjoy drawing from my imagination," she says from her home, which she describes as cluttered with art, books, CDs, dogs, and plants. At the same time, she believes that being an artist has helped make her a better scientist.

"I see way more as an artist than I ever learned as a scientist," she explains. That's why she believes schools would produce far better scientists if they didn't neglect art so much.

Proof of her conviction was her minor in art as part of her U of C Bachelor of Science degree. Because the home she shares with her husband and their 18-year-old daughter is close to the Alberta College of Art & Design, she has also attended several programs there over the years.

In the push and pull between her love of art and ecology, the latter has probably won out, she says. She has too little time left to paint, meaning she doesn't produce enough to supply a gallery and she has therefore not tried to sell any of her paintings.

"I don't regret at all going in the ecology direction," Bush says, her manner vibrant and friendly. Although the desire to do more painting is never far from her mind, it competes with other passionate interests, including cross-country skiing, hiking, canoeing, SCUBA diving, knitting, gardening, dog training, and international travel.

In her art, what interests Bush more than the finished product is exploring the insect or plant as she paints it – finding out more about it, and interacting with it. "My

influences are more spirituality and science than the world of art."

An outstanding example of her dual interests in ecology and art is her *Compact Guide to Wildflowers of the Rockies*, a 10- by 15-centimetre, 144-page treasure of a book, first published by Lone Pine in 1990 and still producing royalties for her after a third printing. Sales of the flower guide, which fits into the smallest backpack pouch, are estimated at more than 20,000 - a bestseller by Canadian standards.

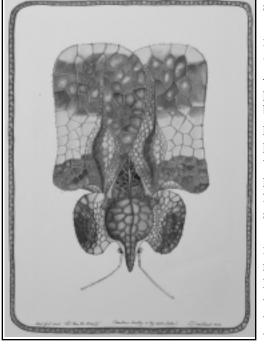
Bush not only did the exquisite illustrations, she also wrote the easy-to-read text and devised an identification key that's a godsend to the amateur wildflower enthusiast. "Doing that book was really how I learned to paint ... they were my first watercolours," she says,

laughing again.

Born in Edmonton, and then spending her first four years overseas in Turkey, Spain, and Libya before returning to Alberta's capital, Bush appears to have come by her dual preoccupations honestly. Falling just short of acquiring a masters in biochemistry, her mother was for a period a fabric artist. Her father was a geologist and part-time potter. It was during her high school days in Calgary that Bush became particularly connected to science and art.

Among her current affiliations are memberships with the Federation of Alberta Naturalists, the Alberta Native Plant Council, and the Canadian Land Claim Reclamation Association. Through her efforts with the latter two organizations and through her career, Bush has become particularly focused on rare plants.

Her outlook on their fate varies. "On my optimistic days,





I think we have a fair amount of influence," she says. "On my cynical days I feel I'm polishing the brass while the ship goes down."

Clearly, fragmentation and linear disturbance from pipeline, well site, oilsands, and other industrial development have diminished Alberta's plant diversity, she says. Yet despite the fact that only three species of plants are formally protected by provincial legislation, the Energy Utilities Board (EUB) has adopted the Alberta Native Plant Council rare plant guidelines for its decisions on oil and gas development.

"So, we manage to get protection for these plants and do

rare plant surveys," Bush says. Ten years ago the EUB did not even consider the issue of rare plants.

She remains grateful for the environmental activism of groups like the Alberta Wilderness Association. "If it weren't for the activists, I would be on the extreme," she explains. "It would be much more difficult to get things done."

Her zest for life remains undaunted. Always eager to take on new projects, Bush notes: "I'm going to have to be reincarnated at least three times to get through my current life list."

ASSOCIATION NEWS

A TALE FROM MOLLY'S MOUNTAIN

William Davies

When I search for that something which tips the scale in favor of the spiritual ...

an answer is always given.- Anon

The October morning dawned while the chilled north wind played with cold fingers a haunting melody on the taught guy wires that anchored the fire lookout tower to its lofty tundralike perch on the mountain's summit. The natural musical arrangement mimicked the sounds of a moorland whistle. Inside the one-room cabin at the base of the tower, Molly, the seasonal fire lookout, lay snug in her bed. She lay motionless – listening. She did not want to awake to the reality of this day. This was the morning she had long dreaded would arrive. Not like Christmas morning, which still thrilled her with child-like anticipation. This morning would be totally different. This morning she'd have to close the fire lookout and cabin, vacating it for the winter to all but a few rodents. Today, she would have to come down from the mountain.

October 20, the day to pack her gear, prepare for the next season's supplies, finalize winter maintenance, and secure the melodious tower guy wires. Then it would be time to bid a regretful goodbye to another summer of inspiration and her numerous hibernating friends of the alpine, each of whom she had affectionately named. Time again to manoeuver Audrey, the old green-brown forestry 4x4 Jeep, down fourteen miles of jostling, rutted, mountainside track. Down into the valley to the forestry base camp, where fire warden Jack would be waiting. Yes, today, Molly would come down from her alpine hermitage on the eastern slopes! But right now, for only these last few precious moments, she wanted only to remain in the embrace of the mystic Celtic world of the whistle song-in-thewire. To remain in the charm of the melody before she had to set foot on the cold cabin floor. Any minute now Jack's voice would be heard crackling through the radio receiver. He'd be calling in from base station, asking Molly when she would be coming down.

"Play on maestro," Molly uttered. "Play on."

'Phrrrttt,' "Base to Molly... come in Molly, over!" There

was a short pause of silence. 'Phrrrtt,' "Base to Molly... come on girl, I know you are up there listening to me. What's the matter... is the floor too cold?" Molly just lay there.

"That damn Jack," she miserably muttered. "He's so pestering punctual, even on my last morning," she said while glancing sideways at her spring wound alarm clock, rhythmically ticking away atop the burl-wood nightstand. "Why couldn't he just once... one time, especially today, why couldn't he just radio me late?"

Molly snatched the bed quilt with her left hand and flung it over against the wall allowing the trapped radiant warmth to escape into the room. She sat up and set her feet on the floor, immediately aware that Jack was right. The floor was cold! She leaned forward and reached down for her pair of woollined slippers, but hesitated to pick them up. Staring down at them, then looking across the wooden floor of the one-room cabin lookout, she sighed, then pulled her hand back to massage her lap.

Biting her bottom lip she pondered, "Today I'm braving this awakening coldness! I'm going to experience all of what this day and I can mutually give each other." Molly entertained thoughts like this with natural, rhythmic tempo, like the crest and fall of ocean waves. She wouldn't be anxious if others thought them silly or whimsical. Again Jack's voice crackled over the radio.

"Hey, there must be ice in the coffee pot this morning. Or maybe you were just rode hard and put away wet!" A veteran horseman, Jack said this knowing it would get a rise out of her. Over the years they had worked together there endured a "hard-to-understand Molly" whom Jack had yet to know. But he determined in his mind she walked with a full-time shadow, a variation.

Spread on the floor beneath the radio desk a few steps from her bed lay Molly's hand-woven rag-rug. She'd bought



it at a Hutterian Brethren colony when she was hiking coulees along the Milk River photographing male sharp-tailed grouse. Stepping tenderly in her bare feet, Molly quickly ran across the cold hardwood floor, stopping on the rug's woven warmth. She motioned to depress the call button on the two-way, but hesitated instead to look out the window at the panorama.

"Ahh, it is so beautiful up here. Peaceful."

'Phrrrttt,' "Molly!" Jack's voice boomed in aggravation, "What time will you be ready to come down from the mountain?"

"Ready?" Molly questioned aloud. "Not now, not ever ... will I be ready to come down from this mountain!" she replied in her solitude.

(Congratulations to William Davies, winner of our Wilderness Awareness Month Writing Contest. Many thanks to all who participated.)

In Memoriam James Peard

James Peard passed away earlier this year at the too early age of 31.

James first worked with AWA in the fall of 2001, as part of his Masters of Teaching student teacher program through the University of Calgary. He had already had some



environmental education experience, and so he was able to contribute a great deal to the program through his work. His enthusiasm was recognized immediately by the classroom teachers with whom he worked, and indeed he was complimented after one of his first presentations for "a dynamic presentation to my most challenging class!"

So we were delighted when James came back to work with us the following summer as outreach assistant. He worked to put together a program of AWA displays around the province, as well as helping organize hikes and an Open Day at AWA's office in Calgary. After returning to finish the second year of his teaching program, James continued to help out with AWA's work, particularly at the fundraising casino events.

We thoroughly enjoyed working with James. He had a sharp wit and a ready sense of humour, and a knack of communicating his love of all things natural, particularly to kids. We will all miss him, and our thoughts go out to Kari and family.

OPEN HOUSE HIKES PROGRAM

Saturday August 21, 2004 **Beehive Natural Area hike** *With* James Tweedie

Saturday September 11, 2004 FULL Whaleback hike
With Bob Blaxley

Sunday September 26, 2004 **Burstall Lakes (Kananaskis)** *With* Vivian Pharis

OPEN HOUSE TALKS PROGRAM

CALGARY

Location: The Hillhurst Room, AWA, 455-12 St.NW

Time: 7:00 - 9:00 p.m.

Cost: \$5 per person: \$1 for children Contact: (403) 283-2025 for reservations **Pre-registration is advised for all talks**

Tuesday October 26, 2004 Corridors for Cougars With Cheryl Chetkiewicz *To be confirmed

Tuesday November 9, 2004 Conservation of the Parkland Natural Region in Alberta With Ron Bjorge

Notice of Annual General Meeting

Alberta Wilderness Association and the Alberta Wilderness Institute
November 20, 2004
11:00 am
For more information: (403) 283-2025
All members are welcome to attend.

Annual Lecture and Awards

Does Our Wildlife Have a Future? Why the North American Wildlife Conservation Model is Globally Important With Dr. Valerius Geist

November 19, 2004 6:00 - 9:00 pm AWA Office, 455 – 12 St. NW, Calgary Cost: \$25 Phone: (403) 283-2025 Information and Reservations on-line:

www.albertawilderness.ca



SUPPORT ALBERTA WILDERNESS

"Our quality of life, our health, and a healthy economy are totally dependent on Earth's biological diversity. We cannot replicate natural ecosystems. Protected areas are internationally recognized as the most efficient way to maintain biological diversity"

- Richard Thomas

Alberta Wilderness Association (AWA) is dedicated to protecting wildlands, wildlife and wild waters throughout Alberta. Your valued contribution will assist with all areas of AWA's work. We offer the following categories for your donation. The Provincial Office of AWA hosts wall plaques recognizing donors in the "Associate" or greater category. Please give generously to the conservation work of AWA.

Alberta Wilderness and Wildlife Trust - an endowment fund established with The Calgary Foundation to support the long-term sustainability of the Alberta Wilderness Association. For further details, please contact our Calgary office (403) 283-2025.

Membership - Lifetime AWA Membership

□\$25 Single

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Alberta Wilderness Association			
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	Sustainer	\$500	
	Associate	\$100	
	Supporter	\$50	
	Other		

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☐ I wish to join the Monthly Donor Programme!

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I would like to donate \$_____monthly. Here is my credit card number OR my voided cheque for bank withdrawal. I understand that monthly donations are processed on the 1st of the month (minimum of \$5 per month).

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awa Galazoo4

We invite you to join us at AWA Gala 2004, an evening of support for the Alberta Wilderness Association.

The evening promises fine food, fabulous auction items and fun on the dance floor in a new and impressive venue—the African Safari Lodge at the Calgary Zoo.



Saturday October 16, 2004 Tickets-\$100 per person or \$85 for AWA Members Call for tickets or order online www.albertawilderness.ca or 283-2025.

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