



LESSONS FROM PAST KEY TO FORESTRY FUTURE IN SOUTH EASTERN SLOPES

Jason Unger and Shirley Bray



“What makes us think we can improve on Mother Nature?” asks Russel Rowledge as we travel up the Dutch Creek Road in the Livingstone area of the south Eastern Slopes.

He is taking us on a tour of Dutch Creek where he spent a decade logging with Johnson Brothers Sawmill Ltd. He is telling us the story of a government forest superintendent who thought that nature could be improved on by planting single species tree farms.

“Why plant trees when nature will do it?” he argues, showing us the naturally regenerated forested slopes that show no sign that logging occurred here in the 1960’s and 1970’s. It was a question that was to put him at odds with the Forest Service and generated a long conflict between the company and its forest experience on one side and bureaucratic assumptions and practices on the other. It pervaded the battle for the well-being of the company and the forest in the face of changing management ideas and global economics.

Born in Nevis, Alberta, Rowledge’s family moved to BC where he trained as an electrician. He won a scholarship to Vancouver Tech where he expanded his set of skills. He proudly remembers his father’s motto: *Good feeling comes from square dealing*. “I have met more people who said that man meant it,” he says.

In Nanaimo he met Doris Johnson, a nurse and daughter of Burt Johnson. Returning to Alberta in 1952 to get married, Doris found herself part owner of the sawmill when her father died four months later. That cemented Rowledge’s decision to stay and work for the company, which he did in every capacity, from building sawmills to tree surveys, for 35 years. But the great hunting and fishing in the area were the real lures, he tells us, and still are.

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The Johnson Brothers old mill site in Dutch Creek





*Jason Unger and Russel Rowledge at the
old mill site in Dutch Creek*

He laughs as he recalls his wife's worry about taking him back to the logging camp. "She thought I was a city slicker and that I wouldn't be happy out here in the bush. But I was in trouble because I wouldn't go into town!" Because he loved being in the bush, he would often do the jobs of absent personnel, and got to know the work and the men well.

His first hand experience taught him that if the goal is to have a healthy forest with a diversity of species and ages, build on the strengths of what the forest will do itself. The forest, he learned, will usually regenerate by itself if the logging is managed to that end. The Forest Service, he learned, had the goal of growing healthy trees but was using flawed information and making repeated errors in the field that threatened to derail that goal. Since the Eastern Slopes and its forests are also critical watersheds the stakes in finding the best forest management practices were high.

Healthy Forest or Healthy Timber?

During his tenure with the Johnson Brothers, Rowledge witnessed the transition of the timber industry from selective cutting to clear cutting and from a focus on natural regeneration to scarifying and tree planting, or 'ploughing and planting' as he calls it.

When Burt and Edwin Johnson began logging in 1925 it was essentially a free for all. There were few regulations and the resource was regarded as essentially unlimited. If someone wanted to log, the Government would point them to a place where no one else was cutting. However, loggers only took certain trees and skidded them out by horse. When they exhausted one area, they simply moved to another. Eventually some rules were imposed. A stump minimum meant that only mature trees could be logged and only Douglas fir could be cut. But there was no doubt that the method worked. Over their sixty years Johnson's were able to cut some areas four times.

By the 1960's, the large trees were gone from some areas and other species were slated for logging. The age of 'timber management' had been born and forests were increasingly seen as a crop and equated with money rather than as a perpetual ecosystem. But selective cutting and stump minima were still the rule. No one replanted trees because it wasn't necessary; sufficient forest was left after the selective cutting was completed for natural regeneration to be very effective.

Into the 1970's further research and understanding by forest managers changed the concept of 'timber management' into 'forest management' and silviculture and clearcutting began their rise to prominence.

It was before and during this critical transition time that Johnson Brothers were cutting their quota in Dutch Creek, where the prevalent tree species were pine and spruce. By the time they started cutting the stump minimum had gone from 14 inches down to 8 inches.

Rowledge describes that when the company started logging in Dutch Creek, the industry standard practice was the familiar clearcut checkerboard pattern. "We didn't follow that pattern, with our cutblocks we tried to follow tree type and terrain. But they were small cutblocks, and we could leave enough trees so it still worked," he says, referring to the ability of the forest to regenerate naturally. Tree type refers to the tree species mix and age in the forest and can be mapped. "If there was an area within a cutblock with very few trees bigger than 8 inch, we could take the forestry in there and say, we don't want to log this, we'd be damaging too much to get at them, and they'd agree to let you leave it."

But the stump minimum eventually went down to 6 inches and the focus turned to true clear cuts. "When it went to 6 inches, you had no choice, you had to take everything," says Rowledge. "They would inspect and if they found fault, if you left any [trees], you would have to go back and get them," he adds, explaining that their quota would have been taken away otherwise. "That's when we started getting into trouble."

The trouble was trying to ensure a healthy forest would continue to grow in logged areas while trying to make the new system work economically for the company. Selective cutting allowed logging to take place without the need to replant, as a younger forest was left in place. It didn't cost anything to let the forest replant itself.



Regen Rumble

When clearcutting was brought in, the government started monitoring the regeneration of cut areas and conducted regeneration (“regen”) surveys to determine where and how many trees should be planted to get the accepted level of regeneration. Although Rowledge believed the monitoring was important, it was over the results of the regen surveys, which had significant implications for the future forest, that he really butted heads with the Forest Service. Events were to show that even common goals and honest intentions can be completely derailed by simple mistakes in method.

At the time, the logging company could opt for a lower stumpage fee if they accepted responsibility for ‘reforesting’, or they could opt to leave the task to government, in which case the logging company paid a higher stumpage fee. Surveys proving adequate regeneration had to be completed within seven years after a block was cut; or treatment, such as scarifying, seeding, or planting, was required.

The surveys established an adequate number of sample plots, which were 11-foot diameter circles, according to a predetermined grid within the cutblock. All vital information including the location and stocking of the plots was carefully recorded and mapped. To be considered adequately stocked, the sample plots had to contain a qualifying number of healthy trees or seedlings of a certain age and species.

Done properly, the surveys provide valid data showing the regenerative status of the cutblock. The problem was the seedlings could be very difficult to find because a three year old spruce, for example, might only be one inch tall. As well, the logged area was typically covered with slash (logging

debris) and other vegetation, such as grass. Surveys were typically done in the early spring when the new grass was short, but even then the task was time consuming.

The government and its foresters were forming assumptions about regeneration and designing policy on the information, but it turned out that there were serious problems with the data. With limited budgets in mind, the government was requiring their surveyors to complete about 100 plots a day. That meant surveyors had very little time to spend on each sample plot.

Traversing back and forth throughout the often steep cutblocks, surveyors had to follow specific compass and elevation bearings, accurately measure and locate the plot, find seedlings, tag them, record all pertinent information, and create the survey map. The tasks were straightforward but time consuming, and Rowledge maintains “hurried surveyors would very often miss smaller seedlings” within sample plots.

Rowledge says the government surveyors would find the seedlings on the skid trails and landings, where the logged trees were loaded onto trucks, “because these areas were bare dirt and the trees were obvious.” But he cautions that “a lot of seed source had been dragged over the skid trails and to the landings, so it distorts the picture.”

But, at least partly because of this kind of misleading data, it was decided that mineral dirt was necessary to grow seedlings and that they would not grow in grass. So they started to scarify or dig up the grassy cutblocks thinking there were no trees there and that mineral soil was needed for their growth.



These forests in Dutch Creek have regenerated naturally and show no sign of the logging by the Johnson Brothers in the 1960's and 1970's



Scarifying is a process where the surface soil is abraded. The combined process of clearcutting and scarification results in significant moisture loss and erosion, especially when done on steeper slopes. The slash was piled into windrows and later burned or left to decompose. This removal of cover was a Forest Service PR decision that was made because cleaner looking clearcuts did not cause nearly as much public alarm.

When Rowledge, along with his son Darrel, did regen surveys it was not uncommon to spend up to an hour and a half in a single plot looking for trees. They carefully removed slash and even used garden rakes to remove grass, scouring every square inch of the plot on hands and knees. Doing one hundred plots a day was almost unheard of. Even working long hours, they could sometimes complete only thirty plots, depending on how hard it was to find the trees.

They supported the need to ensure healthy regrowth, but it was also important to them to spend the time to find the trees, Rowledge explains, because “those trees were dollars to me, you see, it wasn’t to them [government surveyors].” Scarifying and planting meant additional costs, but if they could find enough trees to pass regen standards, the cutblocks would be left to regenerate naturally.

Things did not always go smoothly. When they first turned their surveys into the government they were so far out of line with expectations that the government would not believe them. So the government foresters went out and put in 100 sample plots in one of the blocks. Not surprisingly, with their hurried surveying they found far fewer trees.

“When the forester said he was going to take me to court, I said, good, I want to go to court,” says Rowledge. “He backed off then of course. I said the trees are there, you guys just aren’t looking for them.” It took an on-site demonstration to prove his point. Subsequently he told his regenerators to mark the trees they found with a ribbon, because he knew the forestry people were checking and they later admitted they would never have found the trees had they not been marked.

Rowledge was frustrated with the poor surveying being done by government foresters and their insistence that scarification was needed. A 6 inch stump minimum was too small to get the best regeneration potential, but Rowledge observed that because the clearcuts were small, less than thirty acres, regeneration would still occur naturally. Scarifying would only uproot those seedlings that were there.

In the late 1960’s, before the company was made responsible for reforestation, Rowledge discovered one day that the Forest Service had brought a cat in to one of their logged areas and had started scarifying. “I went out and I looked and there were trees everywhere,” he said, appalled that the seedlings were being needlessly destroyed.

He radioed down to Cowley and said, “You phone that forester, tell Roger Hamilton I want him up here. I took him out and showed him, right where they were scarifying, [there were seedlings] just everywhere.

“I showed him a three year spruce tree in Dutch Creek is only one inch tall. I mean they are slow growing, a 30 inch

[diameter] tree up here with a thousand board feet in it was 225 years old. I know, I counted the rings. I’ve always counted them. And when we logged in Castle, the same sized tree was only 125. And there is not a hundred miles between us. This is what I was trying to tell him. Your assumptions might apply up north, I don’t know, but I know it doesn’t work down here. He didn’t shut the cat down right then, but he did shut it down that night. In their mind they had to plant trees and they never even checked.

“I did learn that you could log down to 8 inch and still make it pay and have the trees come back without any planting,” Rowledge continues. “They brainwashed the public to think you had to plant. [One] forester said to me, we’re going to plant by species, just like grain farming. I said, whoa, every block we cut has got at least two species, some three, and there’s a reason for that. Don’t ask me, ask Mother Nature. And so what happens? When he left here they put him in charge of the regen setup.”

Surveying the Surveyors

Rowledge also re-surveyed plots already surveyed by the government surveyors and would often find more seedlings in them. It wasn’t always easy to find their plots because, unlike Rowledge who would mark the centre of his plots with a sturdy stake, the government surveyors would just tie a ribbon on some grass.

On one occasion he made the forester in charge come out to the plots he had re-surveyed and showed him the additional seedlings. “Now, this is proof to me that you guys are not taking enough time to look for trees,” he told the forester. “I’m not going to tell anyone else, it’s just you I want to talk to.” That forester soon transferred to Saskatchewan forestry. “He must not have trusted me,” laughs Rowledge.

“I had cutblocks that they wouldn’t pass [the regen survey standards] but that’s why we drove the stakes in so we could go back and check those plots. There was at least twice I had to go back a third time to find trees to pass. They were there but I missed them. They were hard to find. That’s what I was telling the forestry, if you don’t look you’re not going to find them, none of this quick eyeball and think you’ve looked, you haven’t! Roger [Hamilton] was really shocked when he found out that our areas passed. They were going by them with their quick surveys saying the trees weren’t growing.”

Rowledge laughs as he recalls a forester with Cowley Forest Products that he was training who commented to his boss, “That Rowledge could find a tree in your front lawn if he wanted to.”

Rowledge said he went up to the forestry tech school in Hinton “to raise hell” because they were telling forestry students that trees would not grow in grass. He told the instructor, “I’m sorry, but I disagree. I know trees can grow in grass.” Rowledge smiles and shakes his head. “This guy that was running the course didn’t know what to say. I didn’t do very well with the statistics, but I did okay on the regen stuff because we went out and found more trees than anybody else.





Newer clearcuts by another company across from the Johnson Brothers old mill site

I said, I don't understand all these standard deviations and that stuff, I'm just here to tell you it's wrong telling people trees won't grow in grass, sometimes they do. And I don't care how you do the math, a survey's wrong if you don't find them."

In Dutch Creek they always found trees. However, they also did not do true clearcutting because many of the smaller trees were just not worth the time and effort to cut. They had to get special permission to leave these trees, but the trees provided a seed source and, along with the slash, helped protect young seedlings and preserve moisture.

The cover also kept out cattle that could cause a lot of damage to young and sensitive regenerating stands. The Forest Service denied cows were a problem, but the surveys and reality on the ground said otherwise. It was especially bad in the Porcupine Hills where ranchers would even place salt in the middle of the cutblocks. The Forest Service denied it, and then secretly removed the saltblocks before a scheduled meeting with Rowledge to discuss the problem. However, they ended up pretty embarrassed when they learned that Rowledge had put it all on video – cows, saltblocks, and the ground trampled right to bare dirt and manure. "Hard to grow trees in a feedlot!" laughs Rowledge.

"We never planted a single tree in Dutch Creek," says Darrel. "Yet today there is a healthy, diverse forest that's so tall and you can't even tell where they logged. We weren't trying to be heroes," he says, "we were just trying to survive. Our economic interest worked in favour of the forest."

Comparisons with government-led regen endeavors in Lost Creek and adjacent Racehorse Creek made the point even more obvious. In Racehorse Creek scarification followed

clearcutting, but regeneration was difficult. The same process had to be repeated several times until enough trees were planted that some were finally found. The area now is predominated by one species of similar age but they are not nearly as large as in Dutch Creek because of all the years lost.

Lost Creek is Rowledge's prime example of how the Forest Service did not look properly for trees. He points out that during the regen survey, alpine fir (often called balsam fir) covered the ground up to three feet high. The tiny spruce were barely visible and were completely missed by the surveyors. According to the regulations there was too much alpine fir. They did not recognize that alpine fir was the cover crop and that the slower growing spruce and pine would eventually replace it. So they did windrow scarifying and the tiny spruce and pine seedlings were destroyed. Lost Creek is recuperating, he says, "but they wasted probably twenty years."

By the mid-1980's the phrase "ecosystem management" came into vogue as it was realized that a forest is more than just trees, it is part of an ecosystem. However, Darrel notes that no one knows enough about an ecosystem to manage it. He suggests that we instead, "focus on managing our activities to fit within the ecosystem. I found it curious," he says, "that the more motherhood statements they put around management practices, the less eco-centric the practices became."

The Rowledges found that with the 6 inch stump minimum and smaller clearcuts, some areas still had to have some replanting. But their experience showed that the rules in the beginning should be to leave some trees and do accurate surveys.





Newer clearcuts by another company with single species planting of pine in the foreground

Making Sense and “Cents”

Johnson Brothers sold out in 1984, but they held on to the quota for another six years; something that Rowledge has mixed feelings about. “If we had sold the quota I might have been able to have some effect on the forestry because they were just more or less in the trial stages [of policy design] for the next ten years. People were really up in arms over the sight of cutblocks. They would equate a clean area with good logging practice, and the reality is just the opposite.” He felt that he could not really speak his mind while another company was logging the quota.

Clearcuts, implemented by and large as a cost saving measure, eventually did the reverse. It was simply supply and demand. The value per log decreased as the stump minimum decreased, from 14 inch in the selective cutting era, to the 6 inch minimum in clearcuts. Rowledge recalls that the timber market was flooded with small timber and the price went below production costs. The only way they survived the last four years was through the selling of by-products. “We found out there that was more money in livestock bedding than putting in a debarker and selling chips for pulp.”

As he shows us a panorama of the area the company logged for 10 years he tells us that with an 8 inch stump minimum some cutblocks averaged as few as five to six trees per thousand board feet. With the six inch stump minimum, they had to cut around thirty trees per thousand. “That really tells me how many trees you had to have,” he says. Cutting more for the same amount of timber feet meant “you had to work harder and your production was down because you didn’t get the volume.” The profitability for larger timber was also much greater because larger dimension lumber commands higher prices.

Darrel describes his father as a decent man who was just

tries to do what is right. Unfortunately, in this case doing what was right meant increasing the cost at the primary end – logging. As those costs are repeatedly marked up down the line, it means substantially more expensive product at the retail end. “This is a great example of how markets can be inherently destructive,” says Darrel. “Responsible practices in the forest are punished in the marketplace while irresponsible practices are rewarded.”

It becomes clear that we must consider the values of forests beyond the timber. These forest values had been recognized in the early 1970’s in the Resource Allocation Study for the Porcupine area. The study noted that the lack of moisture and shallow soils that characterized the area resulted in low forest capabilities. The study concluded that future management of the area should focus on improving habitat and conserving watershed and recreation values.

More and more people are realizing the value of our forests for recreation, tourism and the maintenance of our water source. A recent publication from the Alberta Water Works Association quantified this value showing how water treatment costs go down as the proportion of the watershed goes up.

David McIntyre, a resident of Crowsnest Pass for the past two decades, believes that a true accounting of the costs and benefits of our resource extraction and road building of the south Eastern Slopes has not been considered. “The mentality is that forested land is forested land and therefore it is suitable for a tree crop. We have no [economic] marker for priceless scenery so if there is a tree that makes the scenery priceless, we cut the tree.”

It makes economic sense to re-examine our forestry industry in the south Eastern Slopes. Costs of management and fire suppression run into the millions. The government



has estimated that the Lost Creek fire cost \$30 million to fight, and it's likely much higher. Many assert that the fire was out of control in the first place due to forestry management and fire suppression techniques used over the past generations.

Similarly, the stumpage fees paid by the companies for the public forests are undervalued. John McInnis, a former MLA and environment critic, estimated that in 1994 stumpage averaged less than 1/3 of the government expenditure on forest management (see *Reading the Entrails: An Alberta Ecohistory* by Norm Conrad). A transparent and thorough assessment of what companies pay for this public resource has yet to take place.

The federal and provincial governments have never done careful, thorough, comprehensive forestry or economic analyses of the forest industry to find out if they are making mistakes, says Darrel. Does our current management of the south eastern slopes forests make "cents"?

Past Lessons, Future Forests

In the mid-1990's, after he retired, Russel Rowledge participated in one of the working groups for the Alberta Forest Conservation Strategy, an exercise that left many unsatisfied with the resulting plans for the future of our forests. More recently he has participated in the Crowsnest Pass Public Advisory Committee (CrowPAC) which is developing the C5 Forest Management Plan (FMP) for the C5 Forest Management Unit (FMU) that runs from Waterton to south Kananaskis.

When Rowledge joined the CrowPAC he was initially listed as a representative of the local hunting community, the government being unaware that he had been involved in the forestry industry for over three decades. He took advantage of the committee's site visits to relate some of his insights to the government foresters.

He is encouraged by some of the initiatives arising from the CrowPAC and from other practices that appear to be gaining acceptance. In particular he is pleased to see that forest regeneration is moving back to tree types as opposed to the tree farming mentality.

Similarly he is encouraged when he hears of regeneration techniques involving elevation specific seeding and aerial seeding on snow cover that may be more effective means of regenerating the forest. However, when it was proposed that areas where regeneration was proving difficult could act as fire breaks, he couldn't help piping up, "That's no problem, just windrow scarify, you've got it made."

Although the draft C5 plan takes a regional rather than a one-plan-fits-all-areas approach, there are other aspects that seem to indicate that some form of tree farming remains the primary goal.

There are plans to try regenerating cut blocks with the species mix and species proportions that existed before harvesting occurred. Unfortunately this part of the plan may be undermined because if the species mix and proportion cannot be achieved at the cutblock level, the plan allows for it

to be achieved at the level of the sub-region or land management unit. So although the plan recognizes the need to maintain species diversity, it simultaneously allows for a continuation of tree farming at the cut block level. In this way the plan may not be much more than the status quo, especially if the operators opt to regenerate on the coarser sub-regional level.

Regional differences are also being recognized with regard to the green-up period in the south Eastern Slopes. The green-up period dictates the time in which blocks adjacent to the clear cut may be cut, that is to say when a company can conduct its second pass.

The green-up is most often dictated by the height of trees in the regenerating clear-cut. In many areas of C5, due to slower growth, tree height has been abandoned in lieu of a time period of thirty years. This time line proxy for tree height may mean that adjacent blocks may be cut before the trees reach a height where they become of value to wildlife.

The draft C5 plan also endorses the regeneration system of "Free-to-Grow" standards set for conifers. To be considered a crop tree a conifer must reach a minimum height requirement and have limited competition from other trees and woody broadleaf vegetation. Implied in the "free-to-grow" standard is that natural regeneration is fundamentally insufficient or at odds with management and industry goals.

The draft C5 plan also maintains the premise that we can manage and improve nature. For example, there are plans to assess the introduction of non-native species, such as Siberian larch, presumably in pursuit of greater fibre volume. The impacts of such introductions on competing and dependant plant and animal species are difficult, if not impossible to determine, given our current level of understanding of the complexities of forest ecosystems.

This is no surprise to David McIntyre, who was initially on the CrowPAC but subsequently withdrew. Citing the seeming inability or, at the very least, the lack of political will in applying scientific knowledge to forestry management practices in a meaningful way, he felt he had little choice but to leave the process behind. Rather than dealing with scientific and economic realities the process appeared to maintain the status quo.

In some ways the draft C5 plan shows that we have learned from the past. Yet in other ways it exemplifies our unwillingness to recognize that the natural forest ecosystem deserves and requires our respect. Russel Rowledge knew this decades ago.

"I miss the old days," he says in reflection. "But I don't miss the headaches – the fixing. I've never been able to really promote this idea of going back to a larger stump minimum which I'll never change from," he says. "I keep telling them they don't always have to plant trees. Sometimes, if you do it right, you don't have to do anything. You're saving money, you're making more money, and they'll grow; they've grown all *our* lives." 🌲



WILDLIFE SCIENTIST DEVOTES RICH LIFE TO EDUCATING THE PUBLIC

By Andy Marshall

Valerius Geist warned two decades ago that the Alberta government's proposal for game ranching was wrong, scientifically and economically. For years, he suffered insults, shunning and even death threats as he publicly noted the errors of the government's ways.

When the biological disaster of chronic wasting disease and the collapsing markets for elk meat and velvet finally forced many ranchers to slaughter their stock and shut shop, vindication was complete but not to be savoured.

"It's not a joy to be right," he says from his Vancouver Island home, which he has shared since 1995 with his wife of 43 years, Renate, and where he continues his never-ending defence of North American wildlife.

In sharp irony, Geist is prepared to serve as a witness for the game farmers, who once so reviled him, in their class action against the Canadian government for its role in this travesty.

"I only asked people to do their homework, which the government didn't do," Geist, 66, explains. "Unfortunately, this is becoming a feature of North America – how much knowledge there is and how little governments pay attention to it."

An ability and willingness to bridge detailed scientific knowledge with public policy debate are a hallmark of this courageous yet gentle scientist who enjoyed a remarkable and broad-based 27-year career at the University of Calgary and who is still professor emeritus of Environmental Science.

"As a tenured professor, I felt a certain responsibility to the public to speak up on matters, no matter how much my heart was fluttering," he says.

The rolling "r" and clipped accent are testimony to 10 years as a boy growing up in Austria and Germany. He was born in Nikolajew by the Black Sea, in the then USSR, but moved in 1943 with his parents, both engineers specializing in marine architecture (his mother worked on submarines and icebreakers).

Recalling his time as a teenager attending high school in Regina – he came with his family to Canada in 1953 – he says at that early age he devoured scientific treatises to feed an almost unquenchable passion for reading and acquiring new

knowledge that has characterized his life ever since. "I became interested in large mammals, particularly mountain sheep, very early," he says.

"Val has this incredible ability to see both the big picture over the long term at the same time as he's able to delve into intimate details of specific issues," says his long-time Calgary friend Darrel Rowledge, constantly at his side during the game ranching battle. "I've never encountered a professor with such graciousness," Rowledge adds. "He was willing to go way out of his way to teach people the background to issues."

This drive to share knowledge with fellow scientists and with the public at large in an accessible way led to Geist writing numerous articles in popular and scientific journals and at least 16 books, two of which sold more than 100,000 copies and seven of which he describes as coffee table books.

His books have received several awards, and Geist has many personal honours, the most recent being the 2004 Olaus Murie Award from the Rocky Mountain Elk Foundation. In November he will receive

an AWA Alberta Wilderness Defenders Award.

When he first entered the U of C's Environmental Science department, the push was on for more interdisciplinary research, a trend Geist embraced with gusto. "It was right in my line of thinking," he says. "Gaining knowledge in new disciplines is always rewarding ... it was a great adventure in discovery."

With a BSc in zoology and a PhD in ethology from the University of British Columbia, Geist did extensive post-doctoral work at Seewiesen, Germany before ending up in Calgary.

As part of his interdisciplinary approach, Geist taught graduate courses in environmental science and human biology, in particular how to maximize health environmentally. A second line of teaching and research centred on policies for wildlife conservation and large-mammal biology. Courses he taught for undergraduates have ranged from ethology, ecology and evolution to wildlife management.

His first book in 1971 on mountain sheep won a Wildlife Society book-of-the-year award and was released in Japanese.



Val Geist outside his research cabin in the Yukon



Other books have dealt with bighorn (a children's book), mule deer, elk, buffalo (an award winner), deer of the world (honoured in France), moose, antelope and whitetail. The ideas in a 1978 book called *Life Strategies, Human Evolution, Environmental Design: Toward a Biological Theory of Health* have also held up well.

"As a professor being paid ultimately out of the public purse, I have gone out of my way to write something for the general public," Geist says.

Particularly relevant to AWA have been his efforts for wildlife conservation. He is anxious to remind people to appreciate that the conservation model established early in the twentieth century by the U.S. and Canadian governments has done wonders for wildlife populations.

Principles that protected public ownership of wildlife and that prohibited the marketing and the killing of wildlife for frivolous reasons, together with the managing by government of wildlife based on sound science, brought numbers back from the disastrous declines inflicted by early settlers during the previous century.

"Our system of conservation has been gloriously successful," he says with customary enthusiasm. But recent public policies, particularly in Canada, are in danger of undermining the progress.

The game ranching adventure was, of course, a prime example where those principles were ignored. Alberta's move toward closing off public grazing leases also privatizes wildlife, Geist explains. "Wildlife is being treated as private property – that's where we're heading right now," he says. "Handing over public land for private hunting will be the destruction of our North American model of wildlife conservation."

The provincial and federal governments have slashed research positions for wildlife, thus abandoning the ongoing search for the necessary scientific knowledge. "We need strong institutions dealing with wildlife," he says. He calls the policies in national parks "a bloody disaster." He decries the destruction of so many bears because of habituation. "We have to keep the bears afraid of humans ... the bears are better off being hunted."

Still passionate about hunting – he recently shot a bear in the northern part of Vancouver Island and relishes the sausages and other meat he gained from it – Geist sees hunters as the best motivated of all the population to maintain wildlife numbers and preserve natural habitat. That's why closing off Alberta's public lands to them will be so harmful.

In his multi-disciplinary approach, Geist introduces economics into the discussion. For example, the annual economic benefits from wildlife viewing and hunting are estimated at \$110 billion US in North America.

Ironically, at a time when Canadian public policy threatens wildlife, other countries are looking at adopting the North American model. Geist's dream is for an international treaty to enshrine the tried-and-true conservation principles.

Rowledge points to Geist's "huge presence on the

international stage." As with another internationally acclaimed scientist, water expert and University of Alberta professor David Schindler, the provincial government holds him in similar disdain, he says.

In the meantime, Valerius and Renate tend to the turkey, geese, rabbits and other livestock on their beautifully located 20 acres. Two streams intersect the property, and "I can listen to the bears catching the salmon," Geist says, joy in his voice. Although the pace of work has slowed somewhat, he maintains contact with the world through the Internet.

In his scientific fervour, he has experimented with growing 14 varieties of grape. "I am deeply into brewing. It's great, great fun," he laughs. He has also revived an earlier interest in music, playing the guitar and taking up singing again.

Among conservation projects he would like to be remembered for, Geist recalls his role in changing policies for preserving mountain sheep by moving them into habitat where they could better survive. Previously that was not considered a good idea, but, says Geist, "my contribution to the debate was a matter of clarification." Some 25 years later, mountain sheep numbers had soared by 50 per cent. He celebrated the result in a 1991 book called *Return of Royalty*.

This is just one of many successes in Val Geist's rich life to be celebrated. ❁



J. Ambrosi ©

ALBERTA WILDERNESS WATCH

YET ANOTHER GOVERNMENT SCHEME TO SELL PUBLIC LANDS RILES ALBERTANS

Dr. Shirley Bray



A new program to sell off grazing lease land that was brought out by the government this summer raised a lot more fuss than might be expected. The Farm Holding Consolidation Program allows holders of long-term grazing leases and farm development leases in the White Area an opportunity to match the highest bid in a public tender of up to one section (640 acres) of their leased land. The minimum price for the tender will be based on 85 per cent of the appraised value.

Talk of selling public land has never been popular in Alberta. Albertans value their public lands for many reasons and have never wanted them to be sold off. Nevertheless, the government has been selling public land for years, including grazing leased land. From 1993 to 2002 81,800 acres were sold. Premier Klein has said that his phone has been ringing off the hook with people calling about their concerns over this new program. So why all the fuss now?

I can identify at least three main reasons. (1) Many people are not aware of public land sales at all. Many people were not aware that grazing lease land, in particular, could be sold before this program. Although public land is sold in open auction, notice of the sale is often just local. Notice of the current program was in the form of a letter sent only to some 9,000 holders of public land leases. The fact that it was sent to a select group of people and in the middle of summer when many people are away just fuelled suspicion over the government's intent.

(2) There is a huge development push in the foothills and the grasslands for coalbed methane, tourism developments and rural subdivisions, which makes people think, with good reason, that sections sold are not going to be used for maintaining any ranching heritage. There is a lot of concern that whoever ends up with these sections will either develop them or turn around and sell them for a handsome profit to those who will develop them. The only way these sections can go up for sale is for the leaseholder to apply to buy them. The

land then goes up for public tender. Unlike the usual open auction, bidders will be required to place their final bid in the hat upfront, and the minimum bid can be 85 per cent of fair market value. The leaseholder can then choose to match the highest bid. It is a risk for the leaseholders if they wish to purchase the land because they might not be able to match the top bid. Some people are concerned that, with the current poor economic conditions that ranchers find themselves in with the BSE crisis, some leaseholders will be pressured by developers to put in an application with the promise of a kickback.

(3) There isn't a lot of trust that the government is acting in the best interests of all Albertans, even though that is the party line. It doesn't help when rumours are going around that it was relatives or friends of Mike Cardinal, the Minister in charge of

public lands, who wanted to buy public land and were pushing for some sort of deal in northeastern Alberta, which Cardinal then decided was good enough to offer across Alberta.

It also doesn't help when reliable sources tell us that the government only wants to hear from individuals on this issue and that if people speak on behalf of groups, the government will just ignore them. More recently, Klein was gauging public

interest on an issue simply by the number of phone calls made to his office. If the Government is deciding that some forms of communication are more important than others, then they should make it official and let us know.

Grazing lease land is mostly native prairie, the most threatened landscape in Alberta and home to most of our endangered species. Native prairie has never been successfully reclaimed – if we want to save it we must leave it intact. Properly managed grazing can be a compatible land use. But grazing lease land has other values that are important to the public, including wildlife habitat, watersheds and non-damaging recreation.

There have always been those in government who believe that all grazing lease land should be privatized. But their views do not reflect the majority of Albertans. Government does have some vague guidelines to determine if applications to buy public land will be accepted. One of these is that land with



Deer running through a coulee at Big Stone, Alberta. Properly managed grazing can be a compatible use of native prairie.



conservation value will not be sold. However, this guideline has been violated far too many times and the public has little recourse.

Anna Kaufmann, a spokesperson for Sustainable Resource Development (SRD), stated among acceptable forms of public input are “stakeholder feedback and legislative debate, such as Motion 507.” Motion 507 was a private members’ motion brought forward by Redwater MLA and former real estate salesman Dave Broda. It stated, “Be it resolved that the Legislative Assembly urge the Government to sell or dispose of lands that are declared surplus to the needs of the province.” If the legislative debate that went on for this motion is typical, then we should be very concerned with this form of public expression.

Broda brought this motion forward, not because it was needed, he said, since the government was already disposing of “surplus” land, including grazing lease land, but because he thought the government should be urged to greater efforts in selling public land. His main argument, echoed by most of the other “debaters,” was the myth that private land is better managed, and therefore more productive and better for the economy, than public land. But he went on at length about how there was so much grazing lease land that there was no reason to hang onto it all and fatuously suggested that administration costs for all this land, which he assumed must be high, could be better spent on health and education.

Doug Horner, MLA for Spruce Grove–Sturgeon–St. Albert, argued that if leaseholders could buy the land, all access problems would be instantly resolved. Simplistic solutions that are not in the public interest are not helpful.

George VanderBurg, MLA for Whitecourt–Ste. Anne, claimed that natural grasslands are not part of our western heritage – rather, the pioneering tradition of breaking the land for development and agriculture is. He then made the rather astonishing remark that this Motion coincides with the mission statement of SRD, which is to “ensure the sustained contribution of benefits to Albertans from Alberta’s public land and wildlife resources.”

Rev. Tony Abbott, MLA for Drayton Valley–Calmar, went on at length about the glories of privatization and the evils of a commons. He thought the government should get out of the business of owning land, forgetting that the public owns the land and the government holds it in trust for Albertans. Other MLAs made similar arguments.

Only Mel Knight, MLA for Grande Prairie–Smoky, had reservations about the Motion. He wondered who would determine what land was surplus to the province and for what time frame. Perhaps land considered surplus now might be needed later. AWA is not opposed to all public land sales – some lands could be sold and others need to be acquired. But AWA wants a moratorium on sales until proper planning can be done within the framework of an overarching public lands policy that has yet to be developed.

The government will continue to flounder through public land issues until we develop a public lands policy that provides

a vision, fundamental principles and firm guidelines. The policy needs to be developed with the kind of public consultation Albertans came to expect with the development of the Eastern Slopes Policy. Then the policy needs to be entrenched in law so that the government can be held accountable. Public lands are our lands, after all, and the government is only the manager. It’s time they did their job to our satisfaction and it’s up to us to see that they do. ❁

NEW PROGRAM IS CONTRARY TO THE PUBLIC INTEREST

Dawn Dickinson, Grasslands Naturalists

In spite of its name, the Alberta government’s new Farm Holdings Consolidation Program (FHCP) evidently was not designed to help ranchers consolidate their holdings.

Most farm holdings are already consolidated in the sense that leased lands are used as an integral component of ranching operations in conjunction with deeded lands. Putting a section of lease land up for tender incurs the high risk the land will be lost to another buyer – in particular to commercial or industrial interests who would have more financial clout than someone who depends on ranching for livelihood.

The rationale for the FHCP is consistent with the government’s policy of transferring public assets to the private sector. The danger to the ranching community is that the FHCP could be the thin end of the wedge resulting in leases moving increasingly out of agriculture and into “higher value uses,” such as recreational resort development, housing subdivisions, or resource exploitation, all of which will weaken the ranching community over time.

Retention of leased lands by ranchers is the best foreseeable solution for insuring the continued flow of crucial public benefits, such as watershed protection, wildlife habitat and opportunities for low-impact recreation.

It is important to note that the FHCP provides no protection for these benefits. If, for example, a conservation easement were placed on the property as a condition of sale, the land would then remain grazing land and would continue to provide protection to watersheds and wildlife habitat.

Public lands are a common wealth held in trust by the government for the people of Alberta. To develop a program to sell off public lands to the highest bidder without any public input whatsoever is an abuse of that trust. For government to spin the program as being of benefit to ranchers obscures the fact that the incentives will operate largely to move lease lands into uses other than ranching, contrary to the public interest. ❁

(With acknowledgements to Henry Binder. This letter has also been published in Medicine Hat News and Sagebrush Chronicle.)



A LONG "HAUL" EXPECTED FOR CONSERVATION GROUPS OPPOSING CHEVIOT MINE

Lara Smandych, AWA Conservation Biologist



In May 2004, Ben Gadd was granted an appeal of the Cheviot haul road, as it was deemed his ecotourism operation may be directly affected by the development. The Alberta Environmental Appeals Board (AEAB) hearing was to be held September 27, 2004. A few weeks prior to the hearing, Cardinal River Coals Ltd. (CRC) and its

parent companies Fording Canadian Coal Trust and Teck Cominco requested a delay citing that the information presented at the provincial hearing could be detrimental to their federal case. The request was declined.

As a result of the refusal, a week prior to the AEAB hearing, CRC applied to the Court of Queen's Bench of Alberta for a judicial review of AEAB's decision to allow the Gadd appeal. Seemingly falling under the pressure of CRC, the AEAB announced they were delaying Ben Gadd's appeal hearing. CRC's case against EAB is to be held November 3, 2004.

In August, AWA joined a coalition of conservation groups – Pembina Institute for Appropriate Development, Canadian Nature Federation, Sierra Club Canada and Jasper Environmental Association – to launch a federal court case with the council of Sierra Legal Defense Fund (SLDF) against the Canadian federal government and their failure to review the environmental impacts of the new Cheviot mine.

Although the Cheviot mine has been slated for development since the 1990s, the project has undergone substantial changes to its design. The biggest changes include the construction and operation of a 22-km high-speed haul road and the processing of the coal off site. The groups

challenge that the Minister of Fisheries and Oceans has failed to comply with his duty under the Canadian Environmental Assessment Act to undertake an environmental impact assessment of these proposed changes. Although no date has been set, the case is expected to be heard early in 2005.

So, what does this mean for the future of the Cheviot mine? Although no federal authorizations have been issued, and the court actions continue to be drawn out, the construction of the haul road is well underway and almost complete. Given the

pace at which the project is proceeding, if an environmental assessment for the project is ruled, assessments will be made on completed infrastructure and on an already degraded landscape. CRC's actions speak louder than words. In this case, CRC's actions suggest an arrogance and disregard to the environment and Alberta's public lands. Just another example of putting the carriage before the horse. 🐎



Recent photo of the Cheviot mine haul road



J. Ambrosi ©



TRAIL DAMAGE IN BIGHORN NEEDS LONG-TERM SOLUTION

Lara Smandych, AWA Conservation Biologist

Significant trail damage and continuing illegal OHV activity were found in the second season of monitoring recreation impacts in Bighorn Wildland. Over the past year, I have met with members of Sustainable Resource Development (SRD) and written many letters requesting that they take immediate action to better enforce access regulations, to restore damaged areas and improve management efforts in Bighorn Wildland.

We felt that an increase in officer presence, timing of patrols in the area, trail closures, and clear and concise signs outlining regulations and penalties for non-compliance must be implemented for effective long-term management. Although some small mitigative steps have been taken, the larger problem remains to be resolved: how to prevent the damage occurring now and in the future.

AWA has identified several damaged trail sites that are in need of immediate remediation attention to prevent further environmental degradation. These sites constitute some of the worst damage and violation of land use regulations within the area surveyed. Many of these areas need to be closed, revegetated or reclaimed and signs placed to remind users to stay on designated trails.

Trail braiding from OHV and equestrian use was the most common type of damage observed in both forested and meadow habitat. Braiding produced intensive and extensive damage to soil structure, and vegetation through off trail use. We observed that the main reason for braiding was to avoid large, water/mud holes formed within the centre of the primary trail. In wet periods, these mud and water puddles, in many cases, dominate the designated trail and force users, including hikers, to go off trail.

After meeting with SRD and sending letters of concern regarding improved management of the Bighorn including the need for improved signage, and trail closures, we got a glimpse at progress. On our September monitoring trip, we were pleased to find that SRD had erected a number of new signs, had undertaken some reseeding, as well as trail closures. Our monitoring will continue in 2005 to measure the effectiveness of these efforts. We hope this maintenance

activity will continue throughout the area.

There are varying opinions as to the best solution to deal with the degradation caused by recreational activity. SRD has two main priorities: enforcement and maintenance. Since they are the only body who has the authority to enforce regulations in the area, much of the maintenance responsibility has been placed in the hands of local stewardship groups. Although we recognize the efforts of these groups to attempt to repair trail damage, one of our concerns lies in the lack of personnel

training and supervision of the work being undertaken. All work within the Wildland should be conducted by qualified individuals, and with the most natural, preferably local, materials. Simply owning large equipment does not constitute an ability to properly maintain an area.

We need to ask ourselves whether we are prepared to accept continuing degradation of our wilderness areas with attempts to

mitigate the symptoms rather than the underlying problem. Do we really want a medley of continuously patched ruts, mud holes and eroded streambeds on our trails? As wilderness continues to experience increased pressure from a growing number of recreationists, long-term solutions must be sought rather than short term band-aid solutions. AWA continues to call for legislated protection of Bighorn Wildland

and protection from poorly regulated and poorly enforced recreational activity. ❁

(AWA would like to acknowledge the following contributors: Suncor Energy Foundation, Alberta Ecotrust, Shell Canada, Wilburforce Foundation, LaSalle Adams Foundation, a number of private donors, and AWA staff and Board members and volunteers.)



Large mud hole on a trail designated for OHV use



A sign put up by Sustainable Resource Development in Bighorn Wildland

GREAT SAND HILLS GETS REPRIEVE FROM DEVELOPMENT

Shirley Bray

Saskatchewan's Great Sand Hills, one of the largest open dune complexes in Canada, is getting a reprieve from oil and gas development. After reviewing the report by the Great Sand Hills Land Use Strategy Review Committee, the government of Saskatchewan announced its decision to conduct a two-year ecosystem study of the area as the basis for future management.

The Review Committee was struck when there was significant public opposition to opening protected areas in the GSH to drilling. Oil and gas companies such as Anadarko, the government of Saskatchewan and a local Rural Municipality want to open environmentally sensitive land not currently zoned for drilling, but not protected by legislation either.

The goal of supporters of protection of these environmentally sensitive lands was to get a moratorium on all activity related to expansion of development in the GSH until a cumulative EIA could be conducted and its recommendations implemented.

The government's decision includes the following:

- (1) The province will undertake a two-year major environmental study of the area to be conducted by one or more internationally known scientist in ecosystem management, with a budget of \$4 million.
- (2) Legislation will entrench the increased size of protected areas; the prime protection zone will increase to more than 365 sq km, four times the current size.
- (3) Drilling can continue in areas where oil companies already have leases, but no more mineral rights will be sold.
- (4) Rezoning of environmentally sensitive (ES) lands on which mineral leases have already been sold will proceed.

Remaining ES lands on which mineral leases have not been sold is to be protected by a two-year moratorium pending the results of the study.

For a history of this issue and to view the final report and recommendations, see our website and WLA April 2003. 🍁

OILSANDS PROJECT IN McCLELLAND WETLAND AREA REVIVED

Shirley Bray

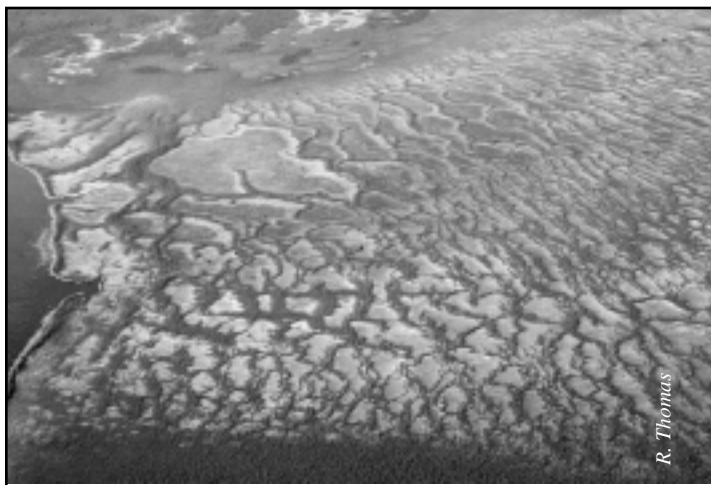
In early 2003 the McClelland Lake Wetland Complex, about 70 kms north of Fort McMurray, won a reprieve with the deferral of TrueNorth Energy's plans for its Fort Hills oil sands project. The project threatened to destroy a large patterned fen that is part of the ecologically significant wetland complex. Now UTS Energy Corp., which formerly held a 22 per cent share in TrueNorth, has bought out the company and owns the rights to the project. It is rumoured that UTS may modify the project to avoid the fen.

In May 2004 Sierra Legal Defence Fund went to federal court to challenge the controversial decision to limit the scope of an environmental assessment required under the Canadian Environmental Assessment Act for the project. The Department of Fisheries and Oceans chose to limit the assessment to an examination of one small creek within the project area instead of investigating

the impacts of the 10,600 hectare project as a whole.

The MLWC came under threat when the government, without following due process, changed the Integrated Resource Plan for the Fort Hills area to allow industrial development. TrueNorth hired a group of wetland scientists from the University of Alberta to study and rate the wetland complex and promised them a million dollar research grant. The team's study did not pass through any formal peer review but was criticized for its sloppy methods by a wetland expert (see WLA Oct. 2002). Formerly rated as a unique wetland, the team downgraded it to be merely representative, in spite of the acknowledged lack of

information of wetlands in the area. A formal hearing was convened over TrueNorth's proposal. The proposal was allowed to proceed, but TrueNorth chose to delay it for financial reasons. 🍁



McClelland Lake Wetland Complex showing part of the lake and the patterned fen



WHY ARE THEY GIVING AWAY OUR WATER?

Heinz Unger



Government-appointed basin advisory committees (BAC) representing the South Saskatchewan River Basin (SSRB) have been deliberating for the past couple of years to arrive at recommendations for water conservation objectives (WCO) for water management plans for the four sub-basins of the SSRB. Three of the sub-basins – the lower reaches of the Bow River, the Oldman River (including the southern tributaries), and the South Saskatchewan River – have been over-allocated to varying degrees.

In recent Alberta Environment reports (SORAB and one by Cows and Fish), these rivers were diagnosed as being in part degraded, with some stretches even severely degraded, due to large water allocations, mostly to irrigation districts, the highest volume users. Only the Red Deer River is still in reasonably good shape and has sufficient flow left in the river for in-stream needs.

The advisory committees for the Bow, Oldman and South Saskatchewan Rivers struggled to find small flow increases to reverse the trends of past large abstractions; they are trying to conserve a bit more water for the aquatic environment, especially the riparian habitat. Despite the obvious lessons of past allocations without regard to river ecology, the BAC for the Red Deer River recommended to Alberta Environment to set the target for conservation very low – at only half the scientifically determined in-stream flow needs (IFN).

It is understandable that the municipalities in the Red Deer River sub-basin want to reserve sufficient water allocations for their future population and economic growth. But it seems that the reason behind this BAC recommendation may be a perceived need to reserve a sufficiently large allocation for the Special Areas Water Supply Project (SAWSP), a proposed huge Alberta government water scheme. The \$170 million scheme happens to be mostly in the riding of the provincial minister for agriculture. Based on the economic analysis of similar schemes, such as the Meridian Dam, it is unlikely that such a project would be economically feasible without large government subsidies.

The proposed scheme involves a huge pumping scheme (over 350 feet vertical lift) abstracting 20 to 30 per cent of the Red Deer River low flows this year near Stettler, a six-foot diameter pipeline, large canals and reservoirs, and irrigation of over 30,000 acres, including over 10,000 acres of backflooding. Although annual O&M costs of \$2 million and \$11 million annual benefits are suggested with a payback period of 15 years (but no details are given in the undated estimate on the Special Areas website), it is not shown how the local farmers will repay the large capital costs when even the annual O&M costs would add up to about \$40,000 per irrigated section of land.

How is it that some people refuse to learn from the past and don't use foresight when making decisions that will affect our environment in the long term? We cannot have special and still wild places – the Red Deer River flows through Dinosaur

Provincial Park, a UNESCO World Heritage site – without healthy rivers running through them. This river is a resource that belongs to the entire province, and we should not let a short-sighted, government-appointed committee guided by local self-interest, and possibly serving vested interests, sign away a river's future health.

The lower Bow,

Oldman and South Saskatchewan Rivers with their dying cottonwood groves should be a lesson and a warning to all of us.

Government still has to formally decide on this potentially fateful recommendation, but unfortunately, there will be only a token public consultation later this year. Often these sessions are actually more information dissemination exercises, and Alberta Environment may have made their internal decision by then. The public was represented in the process through a broad range of selected stakeholders on the BAC, but environmental interests were in the minority. There also was a brief consultation session with an expanded group of invited stakeholders earlier this year when these insights were gained. However, despite the potential long-term implications for a wide area, the public at large, including the media, have been virtually shut out of this process, which has been taking place behind closed doors. ❁



Red Deer River near Drumheller

N. Douglas



MAGNETITE EXPLORATION WORK CONTINUES IN LIVINGSTONE

David McIntyre

The Friends of the Livingstone Association discovered recently that more magnetite exploration work was being conducted along the eastern slopes of the southern Livingstone Range. This activity was occurring within one of North America's largest and most significant bighorn sheep lambing areas, inhabited by approximately 200 bighorn sheep.

The noted exploration activity was subsequently reported to various government of Alberta officials. The officials later reported that the current activity appeared to fall within the guidelines that had been established last year, before Micrex (the mining company in question) withdrew its application for a magnetite mine in the Burmis area. There is currently no active application on file with the government.

It's one thing to know that further exploration work is being conducted within apparently government-sanctioned bounds. A very different image emerges when you stand on site, right next to the lambing area, to see, and hear, the full impact of the operation. Meanwhile Shell Canada is establishing a gas exploration wellsite on the opposite (west) side of the narrow, north-south trending Livingstone Range. 🌿

(David McIntyre is vice-president of Friends of the Livingstone Association.)



Looking west, toward the eastern slopes of the Livingstone Range, within one of North America's largest (approximately 200 animals) and most significant bighorn sheep lambing areas, a drilling rig releases a cloud of rock dust as it bores through an overburden of sandstone en route to the thin, underlying stratum of magnetite (an iron-rich, magnetic rock that's worth about twice as much as an equal weight of hay). A large bulldozer, a front-end loader and two ATVs are also working within the same area. The pictured workers wear earplugs and yell to communicate in order to be heard above the noise created by their machinery. No bighorn sheep were seen (during lambing season) within the traditional lambing grounds on the date (June 17, 2004) this photograph was taken.

ENCANA'S "RUTHLESS PLANS" FOR PRAIRIES RAISE PROTESTS FROM RESIDENTS

The following letter was sent to the Chairman of the Alberta Energy and Utility Board, September 21, 2004.

Dear Chairman:

I am a citizen of East Coulee, Alberta. I am writing you to voice my concerns about EnCana Oil and Gas Partnership's developments in south/central Alberta. While I am concerned that the level of development that is occurring already is rapidly turning my neighbouring world into an industrial landscape incompatible with other land uses, I am especially alarmed at their ruthless plans for future developments, in particular their plans/proposals to

- suspend drilling spacing units;
- apply for four gas wells or more per section;
- request for inter-well distance to be reduced;
- request for minimum distance from a producing well to the boundary of the holding area to be 300 m;
- exponentially increase their initial "CBM"¹ (coal-bed methane) development proposal of only 700 wells in total, to one now involving thousands of proposed wells OVER AND ABOVE their existing and future natural gas developments; and
- proceed without an accurate and comprehensive

Cumulative Effects Assessment (CEA) for the entire proposed CBM development, including socio-economic factors, safety, small town by-pass for oil and gas vehicles, sensitive habitat protection, road damage and repair, etc.

These are not concerns that go away when they are typically divided up into more palatable, piecemeal, project-by-project, lease-by-lease, county-by-county chunks. The ecotype (Great Plains) that these developments are occurring on is the most endangered on the continent. It is outrageous to allow a corporation with a history of insensitivity to social² and environmental³ concerns like this one to proceed with such massive and ruthless projects without first conducting a full Cumulative Effects Assessment for their cumulative developments (past, present, and proposed) for the entire Great Plains landbase to which they hold tenure, in which they address

- negative impacts to native grassland (very little native grass remains – we need to protect what is left);



- negative cultural impacts (already occurring);
- negative socio-economic impacts;
- negative impacts to historical values;
- negative noise impacts (already occurring);
- negative visual impacts (already occurring);
- negative wildlife habitat impacts (already occurring);
- negative impacts to wildlife (already occurring);
- negative air quality impacts;
- negative road impacts (already occurring);
- negative impacts to health, safety and well being (already occurring);
- negative impacts to watershed/riparian zones (e.g., how much unrecoverable water will EnCana need to take from already beleaguered rivers like the Red Deer?);
- negative impacts to water wells (has EnCana/the EUB truly addressed all possible methane gas escape from CBM/NGC activity and into our water , water quantity and quality?);
- flares often blowing out in the wind, resulting in unburned gas being released;
- etc.



EnCana is, in my experience, a corporation that requires constant monitoring, not only in light of its history (AEC) of social and environmental irresponsibility, but due to its very size. If we as a people are to allow corporations of this magnitude to exist, then we must be prepared for the negative repercussions. What are the social consequences of allowing a single “person” to so dominate a landscape?

Feeding a beast of this size is going to have tremendous impacts. When this bull-in-the-china shop moves on the landscape, things are going to be broken (sometimes irreparably), and all kinds of feet are going to be stepped on. All kinds of feet are being stepped on. Herein lies the rub. How

do we get this corporation to quit stepping all over our feet, to plan for socially responsible developments on an order of magnitude that are guaranteed to enhance our quality of life on a scale that outweighs the erosion that is mounting?

It is EnCana’s responsibility to solve this problem, not ours. They can start with a full (not piecemeal, project-by-project) a priori CEA for the Alberta plains. They will then likely need to proceed by curbing their appetite for development. Federal regulation of all activities of a corporation of this size may be indicated.

Let them make their billions if they must, but keep them off our feet. Make them understand that it is their responsibility to act responsibly (not just say they will), and to determine ahead of time what “responsible” means to the people whose lives they are affecting.

Thank-you.

Jonathan Wright

1. Now being called in some applications “NGC” – natural gas from coal – in a likely attempt at subterfuge given the negative realities recognized as stemming from CBM.

2. Parent company AEC has demonstrated a callous – and famous – disregard for concerns about gas-well flaring. Such disregard for social concerns can lead, and has led, to the creation of “radical” type individuals/protestors.

3. I have personally witnessed and documented the environmental degradation caused by EnCana’s activities on the native grasslands of one of our most celebrated National Wildlife Areas, as well as the damages their activities have done to populations of listed species – damages for which they did not attempt to atone until they were publicly revealed. A full CEA in this case might have avoided such erosion of our nation’s interests.

(A handful of Rosebud-area residents also wrote letters of protest to the AEUB prior to this letter by Jonathan. One Rosebud area resident wrote many letters of protest. Rosebud-area people voiced concerns in an emergency meeting wherein EnCana tried unsuccessfully to remedy recent inappropriate consultations in the area.

Subsequent to this letter, forwarded to EnCana by the Wheatland Surface Rights Group, and the joining of a number of communities in protest – verbal and written – one of EnCana’s vice presidents said that EnCana now wants to openly consult with Wheatland County communities about long-range plans. Time will tell whether residents are satisfied with how the company is making reparation and changing the way they operate. Individuals, especially with communities working together, can make a big difference. EnCana’s first upfront, long-range planning for development in the County of Wheatland will be presented at an open house in the Rosebud Community Hall October 21, 2004.)



WILDLIFE MONITORING AT CHINCHAGA

Jessica Ernst and Jonathan Wright



In 1997, in order to address knowledge gaps, Pioneer Natural Resources Canada Inc. (Pioneer) retained Ernst Environmental Services (EES) – a non-government environmental organization – to monitor furbearers in the Pioneer Chinchaga gas field. EES also anticipated the opportunity to make contributions to the knowledge base available on woodland caribou (*Rangifer tarandus caribou*), grey wolves (*Canis lupis*) and a host of other boreal species.

The Chinchaga monitoring study has been conducted annually over the past seven winter seasons (Nov/Dec to mid/late March), with EES and Pioneer currently preparing for the eighth winter. The study at Chinchaga is of a non-reductionist (essential for cumulative effects assessment completion), descriptive and quantitative science nature and has been conducted utilizing new and traditional low invasion and conservation research technologies.

EES makes it a priority to select only limited invasion technologies especially when monitoring listed species such as the vulnerable wolverine (*Gulo gulo*) and threatened woodland caribou. The work to date has involved the following:

- ongoing literature review;
- consultations with other authorities world wide;
- snow-tracking methods;
- random sampling in the field over time;
- photo documentation;
- remote-camera monitoring of wolverine, fisher (*Martes pennanti*), marten (*Martes americana*) and other wildlife; and
- analysis of glucocorticoid (stress hormone) levels in caribou, moose (*Alces alces*) and wolf faeces, with initial samples of wolverine faeces collected in the seventh winter currently being analyzed.

This article briefly outlines a sample of key findings for some species monitored at Chinchaga with added context derived from related literature.

The study takes place in the wilderness area known as Chinchaga (after the Chinchaga River) and straddles the provincial border in Alberta's northwest. The area includes approximately 1,100 sq km of contiguous lands on both sides of the provincial boundary. It is an area that has not been host to industry other than oil and gas extraction; commercial fur-trapping had not occurred at Chinchaga since prior to 1996. Chinchaga has been a very good environment in which to monitor forest carnivores in relation to a single disturbance type. As of 2003, the resumption of fur-trapping, while detrimental to the mark-recapture type database being

compiled through remote photography, provided the opportunity to begin to compare the effects of fur extraction with those of oil and gas extraction.

Remote cameras have proven to be an excellent method of data collection at Chinchaga since the technology was initiated there in the fourth year (2000/2001). The applicability of photographic data to capture-recapture models has been tested successfully in numerous parts of the world on a host of species ranging from felids to whales. At Chinchaga, EES has effectively demonstrated that identification of individual marten, fisher and wolverine can be performed using the cameras to document unique features – especially the markings of the throat, chest and groin area. Recaptures, recognizable from previously documented photos, have been catalogued from year to year for each of these species. Remote photo monitoring by EES at Chinchaga has concluded that mustelids can be non-invasively identified to the individual, with the following number of individuals identified so far:

- 26 marten;
- 4 fisher; and
- 5 wolverine (a listed species provincially, federally and globally).

Considering that wolverine is a challenging species to study, and that no pursuit, capture or handling was required to obtain the above results, these findings are significant.

Wolverine

There are concerns in Alberta that there may be declines in wolverine populations. It is not known whether the wolverine population of boreal-forest Alberta is reproducing or whether it consists primarily of dispersers from better habitat in British Columbia. Camera station evidence from the monitoring at Chinchaga suggests that the latter may be more likely. Trends emerging from the snow-tracking data are beginning to lend support to this idea.

An analysis of the snow-tracking data from years one through six reveal that of twenty-two documented wolverine trails (this does not include trails of what was likely the same individual elsewhere in its travels), 77 per cent of the wolverines involved were traveling from British Columbia eastwards into Alberta. These observations, supported by the camera station results, might be attributed to the following:

- wolverines at Chinchaga are dispersers from cordilleran British Columbia and are for the most part not successful at setting up territories and reproducing in Alberta;
- reproduction of wolverines in boreal Alberta is much lower than in British Columbia;
- Alberta is a population sink for dispersing British Columbia wolverines due to fur-trapping.



Extensive snow tracking of wolverine at Chinchaga has lead EES to theorize that during midwinter conditions of powder snow, continuous climax conifer cover is very important to this wide-ranging species. We believe this is because the buffering effect on snow-depth of this type of cover helps the wolverine to avoid entering into a condition of energetic stress. Areas of clearcuts where no linkages of climax conifer cover are preserved are likely detrimental to the dispersal and winter survival of wolverine.

Woodland Caribou

Woodland caribou have never been considered abundant in the boreal forest. In Canada, it is believed that during the three decades prior to 1950, more caribou were hunted (100,000 to 200,000 annually) than the animal's natural increase, thus decades of over-hunting may have resulted in extensive detrimental effects from which Alberta populations are still recovering. Non-traditional hunting of woodland caribou in Alberta flirtatiously opened and closed from 1948 until 1980, when finally it stayed closed.

Management guidelines for industry were put into place in 1996. Extensive telemetry research has been and continues to be conducted in Alberta.

Management guidelines have been expanded on with implementation in 2001. Additional mitigative measures are being considered by some, including predator and moose control. Many things have been and continue to be done to conserve caribou in Alberta. But, currently, are the right things being attempted and the optimal things being planned for? From the time hunting season was closed, have woodland caribou populations continued to decline? And if so, to what extent are populations declining because of the oil and gas industry? Alberta's estimated caribou population almost tripled from 1986 to 1996, perhaps responding positively to the cessation of non-traditional hunting as listed:

- 1986 – 1324 to 1868;
- 1991 – 3300;
- 1992 – 3000 to 3500;
- 1996 – 3600 to 6700.

Caribou populations are difficult to quantify and behaviours difficult to determine because

- they occur in naturally low numbers;
- they are often dispersed in small groups often over wide ranges;

- they are an elusive, almost ghost-like species, difficult for many researchers to detect because they blend in so well with their habitat and move in and out of forested areas; and
- surveys can encompass many miles before groups are or are not encountered.

Some researchers state that because of these reasons the only way to study caribou is by telemetry. More than 450 caribou have been collared in Alberta and more continue to be captured and collared annually. In spite of the increasing population estimates listed above and without analyzing effects from study activities or past over-hunting, Alberta telemetry researchers have recently concluded that woodland caribou are in decline and that the declines are largely because of the oil and gas industry. These recent conclusions are based on telemetry data and modeling using telemetry data.

There is a growing concern worldwide that many



Woodland caribou in Chinchaga

conservation studies using telemetry are not investigating or reporting study effects. Globally, many researchers are reporting negative capture and handling effects, especially on ungulate species; however, in Alberta telemetry studies on caribou to date, study effects, including mortality, are ignored or likely

hidden in attribution to other factors. Ethical considerations when using wild animals in studies include assessing the impact of the research on study populations. Already twenty years ago the Canadian Council of Animal Care (CCAC), whose Animal Welfare Protocol Alberta researchers are to follow, emphasized that improper restraint, especially of frightened animals, can lead to major physiological disturbances that can result in any one of a series of deleterious or even fatal consequences.

In 2000, EES speculated that non-invasive monitoring of stress hormone (glucocorticoid) levels in woodland caribou scat collected at Chinchaga, relating to industrial disturbances and infrastructure, would be useful to assess conservation needs of this sensitive species without complicating the data with the harmful effects that come with telemetry activities. EES speculated that scat stress hormone evaluations of telemetry activities on caribou may provide some vital baseline information that is missing in Alberta telemetry studies. Many caribou have been and continue to be collared in Alberta without *a priori* or *a posteriori* efforts to determine possible study effects, including fatalities. EES has requested cooperation, with no success to date, with the Alberta Boreal



Caribou Research Program and British Columbia caribou telemetry researchers to collect scat from recently chased, captured, handled and collared caribou. Telemetry activities may cause increased stress levels detrimental to caribou survival and reproduction. EES speculates that these stress responses would be reflected in the stress hormone levels analyzed in scat collected 24 hours post collaring.

Recent faecal stress hormone studies have indicated that some human activities can result in elevated stress hormone concentrations, for example in

- spotted owl due to deforestation of habitat;
- cheetah due to immobilization;
- a male spotted hyena due to its translocation to a new enclosure which resulted in a five-fold increase compared to baseline concentrations;
- moose due to increased recreational snowmobile activities; and
- elk and wolf due to increased recreational snowmobile activities.

Some faecal stress hormone studies have shown possible habituation to human activities where stress hormone levels were found to remain unchanged in animals studied in areas of increased human activity. Mean stress hormone levels in Chinchaga moose scat collected by EES distally from oil and gas activities and pre-activity were surprisingly higher than the mean stress levels in moose scat collected proximally to and during activities. This suggests a decreased stress response due to possibly experiencing increased protection from predators alongside oil and gas activities – perhaps a similar learned behaviour as observed with ungulates in the 1996 Banff–Bow Valley study. Continued scat collections at Chinchaga will provide further understanding of habituation in ungulates, and possibly other species, to petroleum activities.

Levels of stress hormones in caribou scats collected by EES over three seasons at Chinchaga (the fourth season’s samples are currently being analyzed), including samples collected proximally and distally to the gamut of oil and gas activities, have been found to fall within a fairly narrow, consistent range. ANOVA tests have revealed no significant difference in stress hormone levels between caribou scat samples collected proximally and distally to oil and gas activities or infrastructure. Caribou scat samples collected at Chinchaga have shown no elevated levels of stress hormone in caribou over time during the activity season or annually.

The stress hormone data collected at Chinchaga suggests that, in the absence of direct persecution, caribou are not stressed by oil and gas development activities, including seismic shooting and related activities. Caribou field observations and photo documentation at Chinchaga over the past seven years have shown a non-displacement response to vehicular traffic, linear corridors and petroleum infrastructure and activities there. The Chinchaga findings are contrary to those derived in telemetry studies on caribou elsewhere in Alberta.



Wolverine in Chinchaga

Effects of Oil and Gas Activities and Fur-trapping on Furbearers

The return of fur-trapping to Chinchaga provided a unique opportunity to compare the immediate effects of fur-trapping with years of intensive, closely encroaching oil and gas activities on furbearers. This comparison was made possible because of the existing data-base of remote camera data collected during the previous winters when oil and gas activities were the sole anthropogenic disturbance type. The comparison can best be illustrated by comparing camera station results from the period post-trapping in the sixth study year with the results from the corresponding period of the previous two winters when there was no trapping. The following compares these results:

CHINCHAGA RESOURCE EXTRACTION

Oil and Gas only (2001, 2002)	Oil and Gas and Fur Trapping (2003)
Mean # Marten Images 30.5	Mean # Marten Images 0
Mean # Fisher Images 9	Mean # Fisher Images 0

The oil and gas activities surrounding these camera stations during the three winter seasons when the cameras were actively collecting data included the following:

- surveying, construction of well sites;
- clearing, maintaining access;
- daily use of access;
- drilling of wells;
- weeks of pipelining activities involving
 - clearing of heavy climax timber growth;
 - piling and burning of timber;
 - a multitude of vehicles, construction equipment, personnel.
- helicopter overflights to service wells;
- snowmobile activity related to well-servicing;
- recreational snowmobile activity;



- reclamation of well sites;
- clearing of access to an adjacent radio-repeater station;
- clearing of site for above repeater station;
- construction of repeater station;
- annual rollback of access utilizing bulldozers for access control;
- two-to-three times weekly visitations by primary observer to service the camera stations, usually on snowmobile.

The effects of a little under two weeks of fur-trapping activities resulted in the most dramatic negative effects so far observed in the seven years of wildlife monitoring at Chinchaga.

Displacement of River Otter

Snow tracking of otters (*Lutra canadensis*) has documented the individuals at Chinchaga to develop an aversion to oil and gas related water-extraction activities on water courses, as well as the portable, "clear-span" bridges used to allow vehicle traffic to ford creeks. Water extraction activities caused the otters to abandon traditional travel routes for the duration of the extraction period, and clear span bridges caused the animals to leave the creek-beds they were traveling in to avoid going under the bridges. This latter behaviour was learned over time, as during the first year of the study otters regularly passed beneath the bridges. Avoidance of the bridges necessitated the abandoning of the creek-beds that had previously allowed for safe passage beneath the access routes. The otters would instead cross the access road some distance from the bridge – risking traffic mortality – only to regain the creek-beds once the bridges were well behind them. Nonetheless, there was no documented traffic mortality of otters over the seven winters of study.

A significant databank has been collected so far over the seven years of wildlife monitoring in relation to gas field development at Chinchaga. New information on a number of species has been collected. New technologies have been tried for a number of years with excellent and interesting results. Some results have led to intriguing contradictions. One of the most valuable contributions so far that has come out of the Chinchaga work is that it is due diligence and appropriate wildlife management for researchers to study a species, especially those listed (e.g., wolverine, caribou), using methods that avoid negative study effects. Negative study effects may provide distorted results with possibly meaningless conclusions as well as resulting in fatalities. EES believes that commonly used invasive methods of study have not yet been adequately studied to determine possible consequences the study effects may cause. Because there are alternate methods of study that do not require capture or direct handling of animals, there is no need to conduct studies using invasive methods. This is especially so for listed species. Low invasive methods of study have other advantages in that they are usually more economical than telemetry methods and

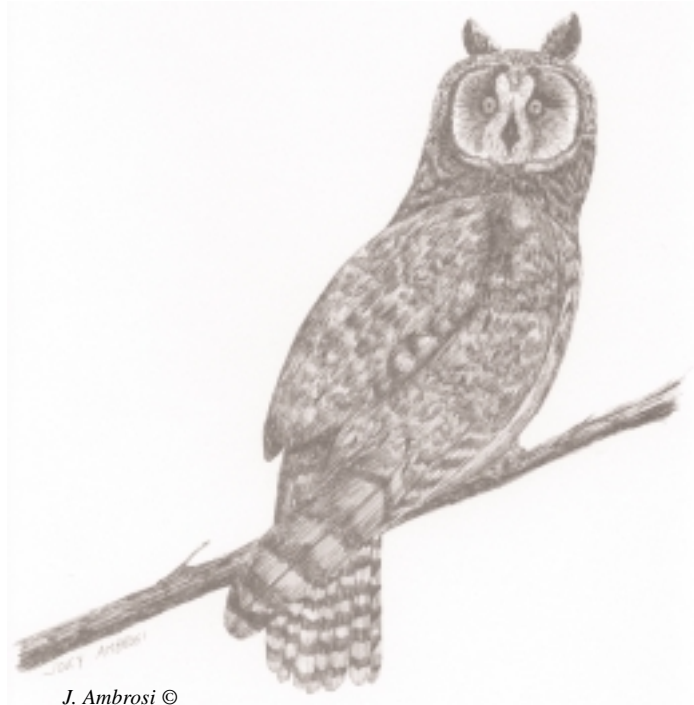
result in less negative cumulative impacts.

EES speculates that study methodology may have something to do with why caribou at Chinchaga appear to respond differently to oil and gas activities and infrastructure than in studies in other parts of Alberta. EES also speculates that telemetry study effects may be more harmful and in some cases more fatal than some researchers are willing to admit or publish. EES has a number of ideas and thoughts on this touchy subject. We save them for another day. ❁

ABRAHAM GLACIER RESORT APPEALS COUNTY DECISION

The proponent of the Abraham Glacier Wellness Resort, 1006335 Alberta Inc. has applied for leave (permission) to appeal the refusal of the development permit made by Clearwater County earlier this year. The appeal will be heard on November 9, 2004 at 9:30 am in the Court of Appeal in Edmonton. Although no new information may be submitted and attendees will not be allowed to speak to the issue, AWA encourages anyone who is concerned about the resort development to attend the hearing. All support for Bighorn Wildland is welcome and appreciated.

For more information and background on the Abraham Glacier Wellness Resort issue, please visit www.AlbertaWilderness.ca. ❁



REMOTE WILLMORE WILDERNESS A PLEASURE AND CHALLENGE TO EXPLORE

Vivian Pharis



As we did in the summer of 2003, my husband and I, this year accompanied by a new adventurer from Sherwood Park, trekked into the Willmore Wilderness Park from the Big Berland takeoff point, southeast of Grande Cache. We knew to avoid the worst trails, and with the weather very much in cooperation, had a splendid trip. We also knew to curtail our trip and to spend more time exploring a smaller area. The Willmore is a big place, and with the trails and the weather often impediments, we have found it wise not to plan too ambitious a Willmore venture.

Each camp was a layover, with a day ride on the second day giving us a chance to more thoroughly explore some gem spot like Rocky Pass, the ridges above Adolphus Pass and the top of the Hoff Range. The packhorses also readily approved this plan, as they got a day of rest after each workday.

Adam's Creek is the obvious first destination from the Big Berland takeoff. We avoid it, as the area has attracted a summer outfitter and become popular for short trippers who can easily reach the area on old industry roads. Up the Berland River beyond Adam's Creek, the trails, which are a mix of overgrown roads and original horse trails, soon deteriorate into willow tunnels with nasty bolder-filled river crossings and steep deadfall-filled ascents and descents. Here and there are trail respites, where local outfitters have cut the deadfall or you



Bighorn sheep in Willmore

strike a piece of well-placed original trail that remains in reasonable condition. As the locals will tell you, such rough trails serve to maintain the area as remote.

The interior of the Willmore is so large and, so far, relatively unused that we were almost always able to find an unused camp. This meant excellent conditions for the horses, with plenty of feed, shelter and access to water. Interestingly, this year we encountered several groups of backpackers braving the trails for a chance to experience real wildness.

More astonishingly, we met a mountain biker on the top of Rocky Pass, which is well-named for its expanse of massive boulders. He was on a five-day mission to cross the Willmore from Grande Cache to Rock Lake and by day two had made it to the top of Rocky Pass. He did confess that he had underestimated his food needs and had already consumed half his ration. As we emptied our saddle bags of lunch remains to give him, he told us he was practicing to develop a mountain biking business in the Himalayas!! We wondered how serious he would be about such a venture after he had humped his pack and bike the rest of the way to Rock Lake.

We were pleased with Community Development Minister Gene Zwozdesky for the strong stand he took this summer to thwart the latest lobby by OHV enthusiasts for a route across the Willmore from Grande Cache to McBride in B.C.

This year wildlife seemed much more in evidence than in 2003, although we again failed to see caribou. Bighorns were fairly frequent and twice we encountered, at a good, safe distance, a large grizzly bear. Bear diggings were everywhere, and why shouldn't they be, since the Willmore is some of their last, best habitat in the province. 🍁



Hoff Range in Willmore Wilderness



ALBERTA TAXPAYERS NEED TO KNOW FULL COST OF NEW GOVERNMENT PROTOCOL TO PROP UP GAME FARMING

AWA News Release, September 16, 2004

The Alberta Government has released a new game farming protocol that allows imports of deer and elk into the province in a bid to "increase marketing opportunities." AWA is astounded by this move for three main reasons: the threats to wildlife, the growing public cost, and the lack of markets. AWA has long maintained that the threats of disease and commercialization to wild populations make game farming untenable under any protocol, and urges the Alberta government to maintain the ban on commercial imports of cervids.

"If there are no markets, why does our government fantasize that they exist, and continue to prop up this failed industry?" asks Vivian Pharis, AWA Board of Directors. "Most game farmers are at rock bottom right now, and are undoubtedly existing only through subsidy programs. And now we are going to give them even more under this new protocol. Taxpayers need to be told the full cost of continuing to support this futureless and dangerous industry."

Even many game farmers now acknowledge that the industry is not viable. The public overwhelmingly rejects penned hunting, and there are virtually no markets for game meat or for antler velvet, especially for products originating in North America, because of Chronic Wasting Disease (CWD). CWD has spread throughout North American game farms and into the wild.

"Both the timing and content of this announcement are astonishing," says Darrel Rowledge, Director of the Alliance for Public Wildlife. "Virtually everyone now accepts that the

industry is not sustainable. An expert panel on CWD at the Canadian Cooperative Wildlife Health Centre at the University of Saskatchewan just reported that CWD "*is arguably the most important issue in the management of free-living cervids in North America, with the potential to reduce cervid populations in the long-term, and to create major socio-economic impacts...*" yet the Alberta government seems bent on perpetuating the problems and their costs."

Alberta's game farm industry has been subsidized through farm support programs and costly cleanups following outbreaks of TB and CWD. It is estimated that hundreds of millions of dollars have gone into it so far. Dr. Gerald Hauer, a government veterinarian and spokesperson for the protocol, confirmed on September 14, that Alberta taxpayers will be footing the bill for the considerable risk assessments associated with each potential new importation, as well as for CWD testing of every deer or elk slaughtered in the province.

The new protocol allows Alberta to open its borders so that Saskatchewan animals may be processed at Alberta's one federally licensed game slaughter facility. However, it also opens the door to importation of elk and deer from anywhere. AWA continues to be alarmed about the possibilities of diseased game farm animals infecting wild game populations. Saskatchewan has had the worst outbreaks of CWD in Canada and subsequently infected deer have been found in the wild. AWA believes it is inevitable that flighty elk and deer will escape during transport. Rounding up and killing such escapees is costly and often ineffective. ❁

JOEY AMBROSI BRINGS HIS PASSION FOR THE OUTDOORS INTO HIS ART

John Geary

If you've ever hiked in the southern half of Alberta's Rocky Mountains or fished in the Rockies, you've probably seen Joey Ambrosi's work.

That's because the Blairmore, Alberta resident has contributed writing and artwork to several volumes, including *Fly Fishing the Canadian Rockies*, *Hiking Alberta's Southwest* and *Hiking Alberta's David Thompson Country*. Ambrosi authored the first two and contributed maps, charts and sketches to the third.

Ambrosi, who has had no formal art training, does not really consider himself an artist, but he loves the outdoors and loves to sketch what he sees there, in pen and ink. His first inspiration to capture nature in a sketch came when he picked up a copy of a B.C. nature magazine during his first year of university. "The cover artist always did pen and ink sketches and I thought I'd like to try it," he says. "So I went down to the

store, bought a pen and ink, tried it and I really liked doing that style of art."

He began to draw pictures of North American wildlife to give as gifts to his family and friends. Later on, he got involved with the Sierra Club and produced several sketches to help raise funds for the organization. He has dabbled in oil and watercolour paintings at the request of friends, but he still prefers the pen and ink medium. Whatever medium he chooses to work in, he does it strictly for relaxation.

"Those are all things I've done in my spare time, for my own personal pleasure," he says. "It's just something I enjoy doing and kind of caught on to.... It's a hobby more than anything."

Ambrosi usually requires a full evening to produce sketches like the ones displayed in this issue of the *Advocate*. He uses photos for reference, and draws a rough outline





Joey Ambrosi and his son Tyler at Mt. Assiniboine Provincial Park

lightly in pencil, then completes all the details in ink, erasing the pencil marks once the ink is dry. "I usually work either from a photo in a book or a photo I've taken," he says. "I have thousands of slides of the Rockies, and I consider myself a photographer more than an artist."

Between his art, his writing, hiking and working fulltime, Ambrosi certainly keeps busy. He holds two Masters degrees, one in history, the other in environmental design. His love of history led him to produce an 82- page booklet, *The Courthouse (Recollections from the Past: A History of the Blairmore Courthouse)*, in 1999. Blairmore's School Foundation of the Nippon Institute of Technology – where Ambrosi works as an instructor – currently owns and operates the courthouse.

That facility is the branch campus of a Japanese university. About 20 students from Japan attend the school annually. Ambrosi teaches them outdoor education. He says teaching people from another country reminds him of how lucky we are in Canada to still have wilderness. "We take a lot of things for granted, here. All the boys I teach come from Tokyo, which is like having the population of Canada in one city.... They come here, and they are awed by our mountains, amazed by our nature – they just love it. I can see what we have here is really special."

Ambrosi spent three summers working with the Sierra Club while attending university and worked with AWA

indirectly, when the association worked jointly on some projects with the Sierra Club in the early 1980s. He feels working to protect our wilderness is very important, so we can pass its heritage on to the next generation. His parents bestowed their love of the outdoors on him, and he's now passing that on to his 10-year-old son: this past summer, the two did a week-long backpacking trip in Mount Assiniboine, his son's first trip in the B.C. park.

Ambrosi is currently writing a history of Invermere, B.C., where he grew up, so he has not done much drawing recently. But he knows he will come back to it eventually, as it's one of the ways he expresses his creativity. He says everyone needs to find ways to truly enjoy expressing their creativity, whether as an aspiring writer, photographer or artist.

"Just do the things you love and do them for your own enjoyment," he says. "I do a lot of hiking because I love it – I love to get out and away from computers, cell phones – and anything else that can get a hold of me.

"My love of the outdoors is why my art is focused on animals and landscapes – they're things that are close to my heart." 🍁



ASSOCIATION NEWS

AWA'S 10TH ANNIVERSARY STEWARDING THE BIGHORN TRAIL

Vivian Pharis

TRAIL IS IN GOOD SHAPE, BUT SRD TURNING BLIND EYE TO PROBLEMS



This year marks the tenth year that AWA has maintained the historic Bighorn Trail between the Bighorn River in the south and the Wapiabi, Blackstone and Chungo Gaps through the Bighorn Range. Our early years of hard work to reopen this trail have paid off in that we have recently been able to ride and work through the entire trail in a week. This was the case in 2004, despite the trail being in its wettest July condition in ten years.



Garbage left at a camp in Bighorn Wildland

While the actual trail remains in good condition, several of the twenty or so old outfitter camps scattered along it are suddenly deteriorating. This year and last, we documented these and developed a detailed, illustrated report for area overseers, the Alberta Forest Service branch of Alberta Sustainable Resource Development (SRD).

Outfitters have traditionally been required to clean up their camps and remove anything unnatural by the end of hunting season in November. The camps are supposed to be checked for compliance each fall by SRD. Lately, a more lax attitude seems to be being tolerated. Last year we reported a particularly damaged camp and asked that it be closed for rehabilitation. We were told it would be, but this year we saw that no closure was in effect. Now it and three other camps have become heavily impacted by overuse, new corral development, piles of furniture, toilet and shower stalls left on site, and much increased weed problems.

One camp sported about a half-acre canola field on an eroded site along the Wapiabi River, already in flower in late July. At least 15 different weed species were identified in the

four worst affected campsites, along with increased areas of erosion, newly killed trees, corrals left full of manure and heaps of camp furniture on site.

One summer outfitter was apparently using a subalpine meadow to graze up to 40 horses, many of which had been on site for a month when we encountered them in late July. A new cabin has suddenly appeared on public lands in remote Wapiabi Gap. A brand new Department of Fisheries and Oceans sign at the entrance to the new Wapiabi Recreation Area, warning ORV operators to be responsible users of bulltrout habitat, had been ripped off its posts and broken in half.

AWA met with SRD personnel in early September after submitting our report about these things. To our surprise, instead of being met as colleagues with a joint interest in the health of the Bighorn, we were greeted with skepticism and defence. The meeting left us questioning the stewardship role of the agency charged with responsibility for the Bighorn Wildland and its critical watersheds. Our monitoring work on recreational use elsewhere in the Bighorn gives us further concern about the will of SRD to properly steward these critical public lands. ❁

AWA NETWORKS TO FURTHER CONSERVATION GOALS

Throughout the province there are many initiatives that AWA is involved in where we work with colleagues to further conservation goals. During September AWA hosted the CPAWS Board of Directors at a meeting to discuss program priorities and the coming year. We are looking forward to participating in the Y2Y Network meeting in November. A group of enthusiastic students has joined us for the sixth year of our cooperative teaching program with the University of Calgary. This year the students will be developing a teaching module on watersheds. Lara Smandych, AWA's conservation biologist, presented a poster on AWA's research on recreation use in Bighorn Wildland to the Interdisciplinary Research and Management of Mountain Areas conference in Banff. AWA Past President Cliff Wallis is representing AWA at a Northern Plains Conservation Network meeting in Lewiston, Montana. During September we have been contacting folks throughout the province to initiate dialogue on Alberta's public lands. ❁



GREAT DIVIDE TRAIL GETS MAKEOVER WITH KEEN CREW

Nigel Douglas, AWA Outreach Coordinator

A chainsaw is a funny thing. Give an apparently sane and rational person a chainsaw, and a glazed expression drops over their eyes. A distant smile appears on the face, and they begin to look around for a likely looking tree, attacking it with roaring relish and cackling gleefully as it topples to the ground with a resounding crash.

Or maybe that's just me.

Having been involved in management of protected areas for many years, I was quite familiar with the fact that most practical environmental work involves cutting things down, digging them up or setting fire to them. So a week-long trail maintenance trip to the Cataract Creek section of the 1,200-km Great Divide Trail got the chainsaw trigger finger twitching again. Stihl Canada generously loaned a chainsaw and two brush-cutters, which proved invaluable in fighting rampant vegetation and clearing deadfall.

AWA had worked closely with other groups such as the Great Divide Trail Association (GDTA) in the 1970s and 80s to set up this long distance trail running along the continental divide between Waterton and Kakwa Lake, north of Mount Robson. So we were very interested to be approached by Dan Wallace and Wayne Marshall, two instructors from the Southern Alberta Institute for Technology, who were keen to start a program of improvements to some of the more overgrown sections of the trail. Three original members of the GDTA – Dave Higgins, Jeff Gruttz and James Prescott – were also delighted to see the trail attracting attention again after a period of relative neglect. The GDTA's old tool supply was dusted off, fixed up and pressed back into service again.

In August 2004, a group of nine enthusiastic trail workers (with the addition of original GDTA participant Chris Morrison, and Dave Higgins' son Andrew, as well as two AWA staff, two dogs and a horse) set up camp at the old Perky's Cabin and then got to work. Some sections of the trail were completely overgrown, and Dan and Wayne put the Stihl brush-cutters to good use. Other sections needed re-routing to avoid boggy or steep sections, and two stream crossings were replaced under the expert supervision of Jeff Gruttz. People

who had worked on this trail 20 years ago soon settled back into the old rhythm, and the amount of work achieved was impressive. All in all, around 3.5 km of trail was repaired, cleared and blazed.

It was immensely gratifying to see the Great Divide Trail, which involved so much work by so many people over so many years, beginning to stir back to life. Dave Higgins has been working on the Trail for 30 years, and he observed after the trip: "Interesting how things work out sometimes. As of last summer I'd pretty much concluded that my GDT days were over, and it was time to move on to other projects – it was just too discouraging to see the area degrade more and more from logging, ATV use and grazing. After (this trip) I'm feeling quite the opposite – in fact I'm considering a goal of completing the trail from Hwy 3 to the Elk Valley Road (at Aldridge Ck) by 2007, and doing what I can to reverse the degradation."



Crew clears a portion of the Great Divide Trail



The trail crew. Left to right: Wayne Marshall, James Prescott, Andrew and David Higgins, Dan Wallace, Jason Unger, Jeff Gruttz, Nigel Douglas, Star and Chris Morrison

With a core of committed people again dedicating their time to the trail, it now seems that the GDTA is beginning to rise from the ashes. Plans are already afoot for another trail maintenance trip in the summer of 2005, possibly in the Baril

Creek area of Kananaskis, and AWA is looking forward to continuing a highly productive partnership. In fact I can feel that chainsaw trigger finger getting twitchy again. 🌲

DISPLAY VOLUNTEERS

Join our display team and help raise awareness about wilderness and wildlife conservation in Alberta. AWA's display team travels to a range of different places – including farmers' markets, visitor centres, and festivals – with a display, talking to people about the work we do.

We always need extra volunteers who can help out to staff a display. Training is provided, and new volunteers are usually teamed up with experienced regulars. For more information, please call Nigel Douglas, AWA Outreach Coordinator, (403) 283-2025.



READER'S CORNER

*sunrise
glistening snow tracks
hare poetics*



Vivian Demuth has published a wonderful little poetry chapbook called *Breathing Nose Mountain*. Vivian works summers as a fire lookout at Nose Mountain in the Kakwa River area. She has generously offered to donate a portion of the proceeds from the sale of the book to AWA. Vivian says "the poems arise from my experience as a fire lookout and many of them are ecological narratives." The book is available at www.longshot.org. Vivian also hosts an annual *Poetry on the Peaks* event which is described at www.dialoguepoetry.org/mountain_mt_nose.htm. Vivian is a poet and fiction writer who has been published in literary journals and anthologies and lives in New York City outside of the summer season.



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

Tuesday, November 30, 2004

Where Does Your Water Come From?

A Forum Looking at the Sources of Calgary's Water
With guest presenters from the City of Calgary,
Bow River Basin Council and others.

** To be confirmed**

OTHER EVENTS

Wednesday, November 10, 2004

The Peace River Parkland

With Margot Hervieux

Time: 7:00 p.m. – 9:00 p.m.

Location: Fish Creek Environmental Learning Centre
(West end of Fish Creek Provincial Park).

Admission: \$6.00. Seating is limited.

Contact: For more information and to book your seats
in advance, phone (403) 297-7927.

Annual General Meeting

Saturday, November 20, 2004

The Annual General Meeting of Alberta
Wilderness Association and the Alberta
Wilderness Institute will be held in Calgary
on November 20, 2004 at 11:00 am. Please
call the office for further details (403) 283-
2025. All members are welcome to attend.

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 ☐ \$30 Family

Alberta Wilderness Association

- | | |
|--|----------|
| <input type="checkbox"/> Wilderness Circle | \$2500 + |
| <input type="checkbox"/> Philanthropist | \$1000 |
| <input type="checkbox"/> Sustainer | \$500 |
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| <input type="checkbox"/> Other _____ | |



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☐ I wish to join the Monthly Donor Programme!

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).*

AWA respects the privacy of members. Lists are not sold or traded in any manner. AWA is a federally registered charity and functions through member and donor support. Tax-deductible donations may be made to the Association at: Box 6398 Station D, Calgary, AB T2P 2E1. Telephone (403) 283-2025 Fax (403) 270-2743 E-mail awa@shaw.ca Website <http://www.AlbertaWilderness.ca>

ALBERTA WILDERNESS AND WILDLIFE TRUST

ANNUAL LECTURE AND AWARDS

Friday, November 19, 2004

Does Our Wildlife Have a Future? Why the North American Wildlife Conservation Model is Globally Important

With Dr. Valerius Geist



Reception - 6:00 pm / Awards - 7:00 pm

Lecture - 7:30 pm / Cost: \$25

AWA Office, 455 - 12 St. NW, Calgary

Contact for reservations:

(403)283-2025 or toll-free 1-866-313-0713

Information and reservations on-line:

<http://www.albertawilderness.ca/>

Events/Lecture.htm

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