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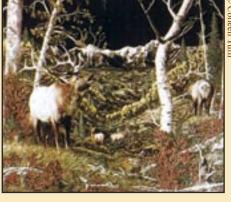
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WILDERNESS FOR TOMORROW

Forty-one years ago our founders struggled with the reality of diminishing wilderness. They became champions of habitat for the wildlife they respected and relied on. They flew to Edmonton to speak with the politicians, held public meetings, shared stories of Wild Alberta and helped others learn. They knew what we know today: our very existence, well-being and personal health depend on wilderness.

The passion of our founders burns as strongly today as it ever did. We are challenged with how to prevent inevitable losses, how to achieve a wilderness legacy, and how to secure the protection of wilderness. Mny years later, using traditional methods of confrontation and collaboration, we also seek new paths to protecting wilderness for tomorrow.

Above all we strive to remain relevant. To know our role and the mandate we have from members and supporters; to have an impact on and be an important part of present-day society and the far-reaching decisions being made about Wild Alberta.

Our programs this year addressed the inextricable links among water, wildlife and wild lands. We have covered every corner of Alberta, on foot, in the air, in cars and buses, and on horseback. We have grown our membership to represent 167 communities throughout the province and we have learned more about Wild Alberta. We have cooperated with other ENGOs and developed strategies together. We have invited industry colleagues to discuss concerns and practices, collaborating where possible and confronting when necessary. We have represented the public interest. The work is as hard as it comes. The outcomes are not always significant in the measure of land conserved or wild species saved, but we know we are making a difference.

The staff and Board are a formidable force and work as a team. Our vision for the future is clear. We are dependent on our members and supporters for their assistance financially and for advocacy and leadership. None of our accomplishments would be possible without support from members and donors and others in the foundation, corporate, and government sectors.

As we go to print with the final issue of the Wild Lands Advocate for the year 2006, we look forward to 2007 with a promise of commitment and dedication to the protection of Alberta's wilderness.

~ 13 m

Richard Secord, President

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Stewards Unite Passion and Vigilance in Care and Protection of Natural Areas, Part 1: The Golden Years

By Shirley Bray

If you measure it by the current environmental jingles like biodiversity, wildlife corridors and endangered spaces, my skinny little island doesn't seem like it has much to offer. But oh, the hours that I've spent enjoying it. And not only me. Some residents may not have time to spend with it – but their children do. Paddling around it, exploring on it, climbing the old birch trees and exulting in a beautiful little world temporarily all their own, they build warm memories where wilderness has its special place. And this is the crux of it, you know. First and foremost, wilderness must have its special place in our hearts and in our souls. Because if it is not in here, then it won't be out there.

Chel MacDonald, volunteer steward for Antler Lake, Alberta's smallest Natural Area.
 From: Partners in Preservation, Winter 2004

The life of a caring and determined Volunteer Steward is well-illustrated through the tales Dorothy Dickson tells of her years looking after the Innisfail Natural Area (NA) southeast of Red Deer along Highway 590. During the 18 years Dickson spent as steward for "this innocuous little quarter-section that RDRN [Red Deer River Naturalists] asked me to look after," Dickson did what many stewards do.

She and other volunteers worked to get an access control fence erected; she monitored changes in the site over time and made inventory lists of flora and fauna. She connected with other residents and users in the area, sent her reports in to the NA Program (now Parks and Protected Areas) staff to help them "get a better handle on the value of the area," and was lauded by those same staff for her efforts. She was one of "the eyes and ears of the government," which allocated only a few people to look after hundreds of areas.

But NAs often have pressures and problems that cannot be solved by a lone steward; their resolution can seem insurmountable for those with limited fortitude and persistence. "Because of staff cutbacks, and changes in attitude due to changes in senior staff, we don't get the backup we need," says Dickson. She launches into the tale of how a simple task at the Innisfail NA turned into a monumental one.

During Dickson's years in Innisfail, Highway 590 changed from a quiet rural road to a throughway for speeding semis transporting farmers' grain and for huge RVs heading to Pine Lake. At the Innisfail NA, vegetation had been allowed to grow in the ditch between the boundary and the road. Dangerous accidents happened when deer – and sometimes moose, coyotes, and geese – leaped unexpectedly from the bushes onto the road.

When the road was a County road, she explains, a transport staff person saw that the brush was kept trimmed. When paved roads became a provincial responsibility, the Department of Infrastructure and Transport contracted out road maintenance. But the contract people told Dickson this particular job wasn't in their contract.

The County apologetically said it wasn't in their jurisdiction anymore and they could do nothing about it except warn the province of the danger. Parks staff said the brush in the ditch was not actually in the NA, so they could not cut it. The local Public Lands land manager, to whom stewards were directed to take their concerns initially, was told to go to the Department of Infrastructure.

Dickson argued for three years with various levels of government before she finally got a utility company crew, who were cutting under their transmission lines, to cut the whole width of the ditch at the NA. But she points out that the brush will just grow



Typical signs placed by volunteer stewards at Natural Area entrances and provided by government. These signs request that users refrain from certain activities, although legally some of those activities may be allowed.

up "and we're going to go through the rigamarole again." That's the sort of thing the Volunteer Steward Program is really excellent for, she says, "but their hands are tied and the whole thing is confused between different departments" and the Parks and Protected Areas staff don't seem able to enlist the backup from other understaffed departments that stewards need.

Dickson is one of many long-time volunteer stewards who share similar tales. Having moved to Red Deer, she doesn't get out to the NA as often, but other stewards help out being the "eyes and ears" for this island of aspen and poplar woods surrounded by farmers' fields. At least she never had to deal with a load of dead pigs dumped in her NA – a story that has a prized place in the history of NA stewardship – although in retrospect the pigs might have been easier to deal with than various government departments.

The future of both the NAs and Volunteer Stewards has never been assured, but the passion and persistence of the stewards and some dedicated government staff have kept the programs going through many ups and downs. In this three-part series, we will examine the history of the NA stewards, their challenges and triumphs.

Celebratory Beginnings

The Volunteer Steward Program (VSP) was launched in August 1987 as part of Wildlife 87, the celebration of the hundredth anniversary of wildlife conservation in Canada. It was modeled after B.C.'s Ecological Reserves Volunteer Warden Program. Peter Lee, the third NA Program Coordinator, headed a group of three biologists and two technicians, including Lorna Allen, John Rintoul, Sandra Myers (the Volunteer Steward coordinator), and Bill Richards.

"My goals were to set up a public watchdog for our province's special natural places," says Lee, who now works for Global Forest Watch Canada, "and to provide training, support, and camaraderie to the stewards." Long-time stewards have many fond memories of these early years as times of abundant optimism, government involvement, and great communication.

Dickson says the VSP started as a partnership between the staff and stewards with everyone working toward the same goal. "It was such fun, such a trusting relationship," she recalls.

The Wagner Natural Area Society (WNAS) credits Lee's experience with the Society, with which he was involved from its inception, for the conception of the VSP. WNAS is held

early sixties when Public Lands field inspectors, evaluating land for sale or disposition, recommended that certain parcels be left as "wilderness areas" or "public reserves" because they were more valuable for recreation and wildlife, or were simply unsuitable for development.

Most NAs are remnants or islands of natural landscapes within settled areas (the White Zone). A



Dorothy Dickson enjoys one of AWA's guided hikes in the Whaleback.

up as a flagship stewardship group: it has won a number of national and provincial awards for its work in preserving and managing Wagner Bog, as it is also known, just west of Edmonton. WNAS honoured Lee with an appreciation award in 1993 for his critical support and commitment through the many management and conservation issues.

When Lee left government in 1997 to join WWF in their Endangered Spaces Campaign, former WNAS president Alice Hendry said in her tribute, "In a way, we served as willing guinea pigs for a program that this province can look upon with pride. Without your vision and dedication, there would not be a volunteer steward program in Alberta, there would not be a Wagner Natural Area Society and there would not be a Wagner Natural Area."

Natural Area Divisions

The Natural Areas program was one of a number of government programs for the designation and management of protected areas. It had its beginnings in the late fifties and

number of NAs were simply the two sections (11 and 29) set aside in every township by the federal government at the end of the nineteenth century as school and reserve land that remained undeveloped. Many NAs are fairly small and remote. Their small size makes them more vulnerable to disturbance, but they might be the only local area left in its natural state in some places.

The government first used the term "natural areas" in 1963. A committee was appointed in 1965 to establish a system of NAs in the province as a Canada centennial project. The NA Committee was retained and worked over the next 15 years to identify potential sites for Ecological Reserves (ERs) and NAs, and to develop legislation.

The first official NAs were designated by Order-in-Council under the *Public Lands Act* in 1971. Peter Achuff was hired as the first NA Coordinator in 1974 to handle the growing administrative work of the NA program. The Natural Areas Branch became an official division of Public Lands in 1990.



Highway 590 and the boundary of the Innisfail Natural Area. Keeping the ditch clear of high vegetation is an important safety feature.

In 1981 the government amended the Wilderness Areas Act to add ERs and NAs (WAERNA Act). Alberta Recreation and Parks ran the fledgling ER program. NAs were managed through Public Lands (and the Public Lands Act) in the White Zone, through Alberta Forest Service (and the Forestry Act) in the Green Zone, or through Fish and Wildlife. All of these divisions – at that point part of Forestry, Lands and Wildlife – have shifted departments over the years, as has Parks.

A site placed under an interim NA reservation, referred to as a protective notation (PNT), under the *Public Lands Act* could either (1) become a designated NA through the *WAERNA Act* if there was high public support and no outstanding conflicts; (2) receive another type of protected area designation; or (3) be dropped from the system if it did not meet the criteria during the referral process (including unresolved conflicts or the degradation of the natural features that initially recommended it).

A PNT is considered a "red flag" when development proposals are put forward for an area. Many stewards look after these candidate NAs, and

this attention may be all that has saved these areas from being deleted from the system. Applications for dispositions in a designated NA could be approved only by the Minister, whereas those for a candidate NA could be approved at the civil service level. The PNT was always meant to be temporary, but many sites still remain in this category with the excuse that it is a slow process to get them designated. However, this did not seem to be a problem in 1971 or later in 1987.

The WAERNA Act gave NAs no legislated protection by law or general regulation: that is, it did not automatically place a standard set of restrictions beyond requiring compliance with its general intent. The sometimes contradictory objectives of NAs stated in the Act were to protect sensitive and scenic

land from disturbance and to provide public land in a natural state for public use. However, the Act does allow regulations to be made regarding administration, management, operation, and utilization, and it also allows jurisdiction to be transferred to any Minister.

The *Public Lands Act* has minimal provisions for protection. For example, people are not allowed to conduct activities that would negatively affect watershed capacity, damage water bodies, or result in soil erosion. But many activities such as motorized recreation, tree cutting, and random camping, all issues that can cause problems and complaints, may be allowed.

The main goal for NAs was to maintain their natural characteristics while providing low-impact recreation, education, and/or conservation. NAs were initially divided into these three categories, which were not mutually exclusive, but this classification is now defunct. Well-known examples include Beehive for recreation, Wagner and J.J. Collett for education, and Coyote Lake for conservation.

The vision of the program was: "Albertans increasingly view the NA

program's conservation of natural heritage and biological diversity as a valued investment in their quality of life." The objectives of the NA program were to identify, protect, and manage NAs and to facilitate public use and involvement.

In 1981 Diane Griffin, the second NA coordinator, released a list of 431 proposed and existing sites and their recommended type of designation. The overall management philosophy was to "let nature take its course." But they were a mixed bunch of sites serving a variety of purposes; this has always made it difficult to have blanket definitions for this category of protected areas. Yet some sites had features of national and international significance.

The government had a modest land acquisition budget and contributed funds for the purchase of lands for, among other sites, the Wagner and J.J. Collett Natural Areas in 1974. The Nature Conservancy of Canada (NCC) also stepped in to help purchase land at Wagner. Some sites, such as Wagner and Innisfail, soon had volunteer groups looking after them. Twenty-two sites were deleted in 1985 because they were too small, had little biodiversity, or had poor or no access. Additions and deletions have continued over the years.



Sandra Myers and Peter Lee at the first volunteer conference. Peter Lee presented Myers with a framed caricature of herself in her office with typical piles of files. The back of the picture was signed by all the staff and stewards that attended the conference. "I was so honoured and it will always be proudly hung in my office," says Myers.

Lamplight Program Shines

In 1987, along with the VSP program, the government committed to establish 100 new NAs, including Beehive, the largest, and Milk River Canyon, the hundredth. The public could get involved at any of the four main steps in the NA system – nomination of sites, resolution of conflicts, development of management plans or site management through dispositions (leases and licences), volunteer stewardship, management contracts, or public advisory committees.

Some citizens worked hard to get reservations placed on local sites they felt should be set aside for conservation and recreation. For example, Charles Truckey, an educator, helped Spruce Island Lake become a candidate NA in 1976 and an established NA in 1988, and worked with Parks staff to develop a management plan.

The Sherwood Park Natural
Area was reserved for recreation in
1969 and designated in 1971, after the
lobby efforts of adjacent landowner
Reg Gray, who enlisted the support
of the Sherwood Park Fish and Game
Association and other neighbours.
Volunteer stewards monitor the site and
Strathcona County holds the recreation
lease.

John Woitenko was one of three people who wrote the proposal in the early 1980s to get Riverlot 56 in the County of Sturgeon designated a Natural Area and helped form the Riverlot 56 Society and write a management plan. He says he became a steward because once they got it protected, he wanted to keep it protected. He praises the VSP as "a lamplight program in Canada."

In 1987, with 112 established and 145 candidate NAs and only five staff, Lee knew that public involvement would be crucial for the success of the NA program.

LeRoy Fjordbotten, Minister of Forestry, Lands and Wildlife, wrote in the first NA Newsletter in January 1988, "The protection of our natural heritage depends on public support and involvement in the Natural Areas Program. Our staff are dedicated to the ongoing management and protection of these sites. But we need your help. Alberta now has 112 Natural Areas

and our staff is not large enough to personally inspect each site on a regular or frequent basis. Your role as a volunteer steward is an important contribution that we value highly."

The public response was encouraging and at that point there were 20 individual and group stewards for 26 areas, with 166 areas still needing volunteers. Groups included Junior Forest Wardens, Boy Scouts,

was up to the stewards if they wanted to do more," says Alison Dinwoodie, a long-time volunteer steward for the Cardinal Divide Candidate NA, now part of Whitehorse Wildland Park. It was up to stewards to learn as much as possible about their sites and to contact local land managers and adjacent landowners. They were encouraged to propose projects and participate in site management plans.





The original Volunteer Steward logo (left) and the one developed in 1989 by Edmonton graphic designer, Doug Madill (right) both feature a blue heron, chosen because it is a majestic bird found in many parts of the province. The July 1989 newsletter explains that the colour scheme represented blue skies and green landscapes. Cattails represented wetlands and other sensitive areas. Trees showed the diversity of Alberta's lands. The triangle design represented not only mountains and trees, but an upward thrust and the positive nature of the program.

Girl Guides, naturalist societies, and counties. AWA and Cowley Forest Products became joint stewards of the Beehive NA and soon after started working on a management plan with Art Peter, superintendent of the Bow-Crow Forest. By 1993 there were 223 stewards (162 individuals and 61 groups) for 123 designated and 155 candidate NAs.

Among staff objectives were to actively support volunteers in providing effective management of their sites and to provide assistance and guidance for volunteers' projects. The role of stewards was three-fold: observe. record, report. They were to visit the site preferably twice a year; fill out an inspection sheet with observations, alterations, and inappropriate activities; and put up and maintain boundary signs, which the government supplied. Sandra Myers, the Volunteer Steward coordinator, was the main contact for the stewards and dealt with their reports; she remained a favourite of the stewards during her tenure.

"It was really just a kind of a monitoring effort, but beyond that it

Although Dinwoodie represented the Alpine Club of Canada, she was also a member of the co-steward group, the Alberta Native Plant Council.

Through the latter, she learned how unique and interesting this alpine area is floristically. She says stewardship of the area "became my interest in life" after she retired. "It took a lot of time and I certainly wouldn't have been able to do it if I had been working," she says, adding, "I didn't really know what I was getting into when I started, but it has certainly expanded my horizons considerably."

She emphasizes the importance of sending in inspection reports even if there is no change in the area. She says that because the stewards actually go out to the areas, they may be the only ones who notice problems and changes or who report them. They are often the only ones with time to develop valuable inventories of flora and fauna. Parks is so short-staffed, says Dinwoodie, "they don't have people to go around and inspect all these places. So if it wasn't for the stewards, these places probably wouldn't exist."

In an interview for the April 1988 newsletter, RDRN's Myrna Pearman said the personal rewards and satisfaction of stewardship more than offset the time and effort for inspections and maintenance. "It gives a sense of responsibility and enjoyment to our members in knowing that they are helping to conserve habitat and that they have some input into the protection and use of these areas." Cheryl Croucher, a CBC radio personality, noted in a 1992 interview, "When you get people involved, they develop a sense of ownership."

Carol Smith was a neighbour of North Cooking Lake NA when she decided to become its steward in 1987: "Stewards are the eyes and the heart of the Natural Areas – we're the folks who take the pulse of these spaces." This NA comprises 164 ha of aspen forests, eight major spruce bogs, and morainal lakeshore, surrounded by developed lands. It attracts hikers, birdwatchers, x-country skiers, snowmobilers, and an occasional pre-teen trailbiker.

"I discuss their interest in this area, ask them to stay on the trails and encourage them to respect other users," she said in a 1989 interview for the NA newsletter. "It is the only undeveloped place that people have to explore."

"It's an excellent area for people with the spirit of adventure to learn about our natural world," she said. "Very often I go by myself to get recharged and to feel 'plugged in' to this very special place. It's almost spiritual."

Richard DeSmet signed up as volunteer steward for the Halfmoon Lake NA in 1987 and brought in the Rainbow Equitation Society as steward for this and four other areas when he was president in 1991. He said the NA program "is the single, most powerful tool the Alberta government has to instruct people how they can adjust their way of thinking and behaviour to become more ecologically aware. Here is an opportunity for the average person to make a real solid commitment to the environment." He advises stewards to pick the brains of the program's staff and "make sure you know what they know."

Facing Challenges and Opportunities

Pearman noted that in some cases,

"it would be useful if we had more authority to ensure the protection of these natural areas." The stewards have no enforcement role and are expected to report inappropriate uses to NA program staff or the local land manager.

By 1991 "it was increasingly obvious that the staff were having difficulty keeping up with the work load," says Dickson. "They were very good about coming out as soon as they could to help solve major problems, especially where funding was needed: for example, getting contractors to clear sites of unsafe old buildings and large junk, where fencing was needed, or settling disputes over such things as slough draining.

NA, where he had been a volunteer steward since 1987, but he could issue tickets.

Jonker headed the formation of the North Bruderheim NA Society in 1991. As an official society, the group was able to obtain grants and a lease that allowed them to create enforceable bylaws for the 503-ha NA near Sherwood Park. They had concerns about motorized vehicle damage, tree cutting, poaching, and target practice that generated "lots of stray bullets." The Society prepared a management plan to identify appropriate types and levels of development to ensure protection of the site. They installed fences and signs to control OHV use.



Left to Right: Brian Ogston, Wayne Nordstrom, Sandra Myers, Peter Lee, Lorna Allen, Duke Hunter, Marilyn Pyshik, John Rintoul, Joyce Gould. This photo was taken on Peter Lee's last day with government.

"However, many stewards just were no longer willing to wait for help with any problems they felt they could handle themselves such as loose cattle, garbage dumping (including dead farm animals), vehicle use, partying, etc.," she says. "As they did not have, or want, any enforcement authority, they were warned never to endanger their own safety by confronting difficult people." Of course, she points out, there was nothing stewards could legally enforce because the supplied boundary signs only request the public not to do such things as cut trees, light fires, camp overnight, or drive vehicles in.

One steward, though, wasn't content with that restriction. In 1994 Dennis Jonker became the first and only volunteer steward to obtain Special Constable status. His powers were restricted to the North Bruderheim

Jonker said that they had had many battles and sometimes it was hard to keep going (The Steward, Winter 1994). "We have climbed and conquered every mountain. But every time we overcome one obstacle there is another one, and for that we have to have a strong team of board members – which we have."

However, Jonker's patrols ended in 2000 when funding for the Society ran out and he could no longer be paid. He said that during his tenure he spent much of his time educating OHV users about the rules, and the amount of illegal traffic in the area dropped significantly (Fort Saskatchewan Record, May 2006).

The government continued to spread the word about the VSP in 1989 through talks and media. Fifty-six new stewards had signed up by then and more kept coming, says Dickson.



"Local groups and individuals saw
the program as a way to get some
protection (though most did not realize
how little!) for their favourite places,
and naturalist and environmental
groups and school and college classes
were keen to use them for field trips
and projects. However, there were often
a few locals (particularly the hunters
and trappers) who were resentful and
suspicious that they might lose their
'rights' and some stewards got rather
nasty phone calls and complaints."

Some of the areas were considered too small to support certain activities safely. In 1992 local residents, with the support of the Innisfail Fish and Game Association, asked Dickson to apply for a county bylaw to prohibit firearm use in the area. After two years of "ineffectual waffling," Red Deer County Council got the bylaw approved by the Department of Municipal Affairs.

The bylaw was subsequently vetoed by the provincial Fish and Wildlife Division on the advice of the Red Deer Wildlife office, which had received complaints from other area hunters. Noone from that office ever contacted Dickson, although she was known to be the volunteer steward. Some of the hunters reportedly wrote rather nasty letters to then-Environment Minister Ty Lund complaining about her. Subsequent meetings with provincial and local officials produced no solution.

Yet solutions were not impossible. Two years earlier, the groups had solved the problem of beavers plugging the culvert under Highway 590. The County's attempts to remove the dam in the spring over several years had had disastrous results, either draining the beaver pond while many waterfowl were nesting or flooding a downstream pond, similarly ruining habitat. The County refused to pay for the proposed beaver-proof culvert, but Fish and Wildlife stepped up with funds from the Bucks for Wildlife program, to which RDRN was a contributor.

The second decade of the NA program was capped with the first volunteer steward conference at the Strathcona Wilderness Centre in 1990, attended by an unexpected 110 people. "It was a very enthusiastic, 'bonding' meeting' with much merriment and good fellowship, says Dickson. All staff and stewards agreed with the goal of increasing the number of designated



Piles of garbage collected by stewards at the Bruderheim Natural Area.

NAs and increasing their protection.

Stewards were pleased to have a chance to share experiences and garner new ideas at the conference and to enhance their knowledge of and communication with each other and with staff. Many stewards were probably of the same mind as Des Allen, one of the stewards for Mt. Lorette: "The staff have given me a lot of support and I like the people very much. They're a long way away though and I don't get to see them often enough" (NA Newsletter, Oct. 1990).

"It's a great motivator" and I
"am renewed and inspired" were
among the comments received. Robert
Kabatoff of the Solomon Creek NA
said, "I was very pleased that the Public
Lands Division treated the volunteers
as important people or better still,
coworkers."

Dickson wrote, "With so many environmental negatives to combat, being part of such a positive program is a real joy and the people – indeed the whole atmosphere – at this meeting have helped to enhance the solace and hope I derive from my Natural Area."

The main vehicle for communications was the newsletter, which was renamed The Steward in April 1992 and ran until 1995. It was filled with a wide range of interesting items about natural history, articles on the ecological problems caused by fragmentation, the dilemma between protection and resource use (although nothing overtly political), problems and solutions, site and steward profiles, lists of site activities including development applications, and upcoming events. "It was a really helpful, informative and interesting publication," says Dickson.

Reflecting on the second decade of the NA program, the 1980s, Lee says it changed from being relatively unknown to having a high public and agency profile. "Higher profile for the program was the result of greatly accelerated public interest in the environment and our program's proactive public involvement initiatives," of which the VSP was one venture. The increased attention, he says, resulted in regional staff and other agencies taking a more active role in managing sites in their regions.

For the 1990s, he saw enormous challenges and opportunities. He

predicted that strong public support would likely continue and "necessitate further clarification of primary and secondary policy issues, including reconciliation of NAs with other conservation initiatives. New sites will continue to be established and the management activities of existing sites will intensify" (NA Newsletter, Oct 1991).

In 1992 Lee sent out a questionnaire to help determine the future of NAs, accompanied by a spiral bound guide celebrating 20 years, 1971 to 1991. Stewards were told that some of their responses were used in the draft

Special Places 2000, Alberta's Natural Heritage document released by Don Sparrow, Minister of Tourism, Parks and Recreation in November 1992.

In 1993, under the new premier, Ralph Klein, there was a major reorganization of departments and the Natural Areas, Ecological Reserves and the Volunteer Stewards programs were all transferred with the Public Lands Division to Environmental Protection. "Stewards were encouraged to take an active part in the Special Places program, which sounded very hopeful," says Dickson. The stewards had enthusiastic support from the new

Environment Minister, Brian Evans.

The questionnaire responses were used as a basis for the second stewards' conference in 1993 at the Yamnuska YMCA, called "Special Places – Special People." The very successful event attracted 165 registrants out of 223 stewards. "Looking back it was probably the high point of the Natural Areas and Volunteer Stewards programs," says Dickson.

We continue with our story on the Natural Area Volunteer Stewards in our next issue.

VIVIAN PHARIS: DEEP LOVE FOR WILDERNESS SPRINGS FROM SUMMERS ON RANCH

By Leslie Beaton Hedley

"They had lonely lives and they were full of stories," says Vivian Pharis of the trappers and wilderness dwellers who once gathered at the ranch where she spent her childhood summers. The Gold Bar, her grandparents' spread near the headwaters of the Peace, "was sort of a hub for the area.... The ranch had a post office and a school – it was almost like a little village. It was also where people would take off and go up the Peace River on big riverboats. So there were a lot of different people, amusing characters... We sat around in the evenings and these old guys would go on, like Andy Russell, storytelling."

Those tales, so intimately connected to the ranch and its breathtaking locale, planted an enduring love for wilderness in the heart of young Vivian, who grew up in the Yukon and northern British Columbia, but considers those summers in Peace River country a highlight of her childhood. Her "most abiding hobby," fossil-hunting, began on the banks of the river there, and it was there she learned to ride a horse. "I could not wait to make the daylong journey [to the ranch] and was always reluctant to return to town life and school two months later," she remembers.

The subsequent appropriation and flooding of the Gold Bar, now under a



Vivian Pharis, seen here with tools in hand in the Bighorn, has been a steward of the area since the 1970s and leads the maintenance of the Bighorn Historic Trail, part of the Adopt-A-Trail program.

reservoir created by the Bennett Dam, paradoxically sparked a fire in Pharis, then a university student. Already passionate about the natural world, her resolve to fight encroachment became stronger at the loss of the beautiful area. That theme, preserving and restoring nature, runs like a brightly coloured thread through the life of Pharis, one of this year's Alberta Wilderness Defender Award winners.

This latest honour is one of several for Pharis, who – along with her husband, Dick – received the National Survival Institute's Heaslip Award for Environmental Stewardship in 1982. A decade later, she was named one of the Calgary Herald's Women of Consequence, and in 1995 she received an award for Personal Achievement from the Canadian Council of Ecological Areas. Such tributes, however meaningful, can't begin to sum up a life dedicated to wilderness preservation.

Infused with a love of nature when she was a child, Pharis studied biology at University of Calgary. While a student there, she hiked regularly with a group of backcountry enthusiasts, among them Richard Pharis, the young botany professor she later married. After her botany degree, she completed a BEd and then taught high school biology and art for ten years.

Pharis explored her creative side by studying textiles at Alberta College of Art, as it was then known. "I was thinking of preparing for something I'd be able to do as I got older," she



Vivian (right) and Dick (left) Pharis, avid equestrians, enjoying the Bighorn

says wryly. She needn't have worried – filling her time hasn't proved to be a problem. She'd intended to specialize in wood sculpture, but "the year I went to specialize, the fellow who did wood sculpture went on two years' sabbatical."

Instead, she earned her degree in fibre arts, which has remained a lasting interest. Pharis says she got "too involved in other directions" to make a career of textiles, but she still enjoys creating beautiful things with her hands; in particular, she likes working with the tanned hides gleaned from her many years of hunting.

Pharis's pursuit of art was to provide an unexpected boon to the Alberta Wilderness Association: while at ACA, she found time to volunteer at the nearby AWA office. She began to devote her time to the organization in new ways, one of which was taking volunteers on horseback trips into the Bighorn to clean up camp areas, a project undertaken in conjunction with the Forest Service.

"We would bag about two tonnes of garbage a year," she recalls. "It took ten years to make our way through the Bighorn." When the Forest Service developed the Adopt-a-Trail program, AWA adopted the historic Bighorn trail and Pharis has continued to lead the way in keeping this area maintained. Her knowledge of the Bighorn enabled her to edit AWA's recent book on the

area, as well as write a number of the chapters.

Pharis has been an AWA Board member for almost two decades. Back in the 1980s, while serving for seven years as the organization's president, she was one of AWA's representatives and a strong force in helping to develop integrated resource planning for the Eastern Slopes of the Rockies, with her area of focus being the Bighorn. Though she would like to see these IRPs updated, she is proud of the work done to preserve the Eastern Slopes and to protect public lands from being sold. It was a different era, she says.

"The media was right behind us. That was back in the heady days when we were making a lot of progress as a young organization... We were in on the fundamental decision-making; we wouldn't get our way, necessarily, but we had valuable input... We had a voice." The government was much more open to public input then, Pharis says, but she is hopeful the "closed door" attitude of the current government will give way with new leadership.

Pharis preserves nature in her hobbies as well: she has raised chickens for many years, and last year she purchased forty Columbia Rock chicks, now just coming into laying. "I'll end up with about 20 Columbia Rocks, which is an old breed," she says. She has developed an interest in another

heritage breed that is quite rare: "The" Canadian horse. When she came across a book on Canadian horses, she knew one of these could replace Dick's 26-year-old mare. After seeing some of the horses at Spruce Meadows, she was sold on the breed, and the Pharises are now proud owners of a true Canadian.

Preservation and restoration has taken root in Pharis's life "downunder" in New Zealand as well, where she and her husband winter while working at their vineyard. About a hundred years ago, when the area near Christchurch was converted to agriculture, Pharis explains, "they just denuded everything. There's no native vegetation left, so there's a big process on right now to try to bring the native vegetation back. I started doing this... along with my vineyard manager... Now [one of the universities there] has developed a whole program to help vineyards introduce native plants, and I'm working with them as well, on our property."

With all this work, you might well wonder, is Pharis able to develop the art she studied years ago?

"When I get back home, I seem to have so much to do out at our acreage and with AWA, I just don't get time," she says. At the moment, she's content to undertake the occasional textile project, but she also enjoys listening to CBC radio and reading when she can.

Her love of the Eastern Slopes has not abated: "I continue to live in this province, though I hate the politics, because I love these Eastern Slopes," Pharis says. She also remains constant in her love of fishing and hunting – particularly grouse-hunting with one of her "various Labrador retrievers" at her side. And you can be sure that, wherever the landscape, she'll keep a sharp lookout for fossils.

Wilderness encounters, a love of beauty, the companionship of horses and dogs, a fascination with fossils – though the birthplace of these enduring themes is now underwater, it seems the Gold Bar's legacy still thrives in every aspect of Vivian Pharis's diverse life.



Who's in Charge? The Secret Standoff in CFB Suffield

By Dr. Shirley Bray

There's a story told in Suffield of the time EnCana drilled a well in a wetland, going against the rules of the Department of National Defence (DND). When DND told them to remove it, EnCana argued about the definition of a wetland, even though DND had given them clear definitions and a map. DND gave EnCana a choice – remove the well by a certain date or be barred from the Base. On the eve before the deadline, and after much dithering on the part of EnCana, the company finally removed the well. DND won that battle, but the question is, why did they have to fight it at all?

Canadian Forces Base (CFB) Suffield is one of those blank spaces on the map that grips the imagination of the wilderness traveler. Its 2,690 km² appear as the largest roadless area left in prairie and parkland Alberta, holding out the hope of no fences, no alien species, no engineered structures, no roads and no human busy-ness. A closer will be brought to bear on the final decision. To understand what may befall the SNWA, we must understand the history of the oil and gas interest in CFB Suffield and the regulatory and management context with respect to environmental protection. The findings are startling. There are glaring holes in the fabric of environmental stewardship trees, that are largely unclassified. A conservation assessment in 2002 by World Wildlife Fund Canada identified the sand hills straddling the Alberta-Saskatchewan boundary, of which CFB Suffield is a part, as one of six relatively unfragmented blocks of native grassland in the Northern Glaciated Plains of Canada.

Prairie buffs cannot visit CFB Suffield unless they have business with the armed forces of Canada. Glimpses into CFB Suffield can be caught along 50 km of Secondary Road 884, the Base's west boundary. A four-day canoe trip down 100 km of river that skirts the east boundary allows long, reflective gazes punctuated periodically by signs warning that setting foot on



The South Saskatchewan River sweeps around a peninsula of land called the Bullpen (right) in the southern part of the Suffield National Wildlife Area.

look, however, reveals a startling reality that belies first impressions.

The military, grazing interests, and the oil and gas industry are a potent combination of human users that have not only placed their inexorable stamp on the landscape, but have created a labyrinthine management regime that defies easy comprehension. Regulations and agreements play out against a backdrop of history and politics.

As EnCana proceeds through the hoops of an environmental assessment and a public hearing for their infill drilling proposal in the Suffield National Wildlife Area (SNWA), we need to comprehend the forces that

that should cloak this significant prairie ecosystem.

The 458 km² SNWA encompasses fragile sand dunes and sand plains. over 1,100 native prairie species including 13 federal Species at Risk and 78 provincially listed At Risk species. Yellow rail in the Dishpan Lake area outside of the SNWA swells the number of SARA species to 14 for all of CFB Suffield. Throughout CFB Suffield, including the SNWA, there are numerous sites of historical significance including medicine wheels, bison kill sites, and stone cairns. As well there are abundant paleo sites, notably dinosaur remains and fossilized

List of Abbreviations AEC: Alberta Energy Company Ltd. CEAA: Canadian Environmental Assessment Agency CFB: Canadian Forces Base DGE: Director General of Environment DND: Department of National Defence EUB: Energy and Utilities Board GAC: Grazing Advisory Committee Geographic Information System GIS: LWD: Land-spraying While Drilling MOA: Memorandum of Agreement MOU: Memorandum of Understanding PAA: Partial Assignment Agreement PFRA: Prairie Farm Rehabilitation Administration SAA: Surface Access Agreement SEAC: Suffield Environmental Advisory Committee

SIRC: Suffield Industry Range Control Ltd.

SNWA: CFB Suffield National Wildlife Area

CFB Suffield is not allowed without permission from the Base Commander.

Lack of public access prevents most people from seeing both the beauty and the problems in the area. It is only through the diligent efforts of environmental interests that we have been able to start to find our way through the management maze and politics of CFB Suffield.

The Players

In 1941, DND began using CFB Suffield as a station for research into biological and chemical defence. Since 1971, they've also used it as a live fire training area, one of the largest in the western world. Not only do Canadian troops train here, but also a large contingent of the British armed forces under an agreement signed in 1971 with the United Kingdom. The Base Commander is responsible for all activities on CFB Suffield. The Base Commander reports to a General in Land Forces in the Western Region (Edmonton), who in turn reports to the Commander of Land Forces in Canada, who reports to the Chief of Defence Staff, who reports to the Minister of Defence.

Fortunately, several generations of military men stationed at CFB Suffield were and are enamoured with wild prairie. Those who participate in Alberta's Prairie Conservation Forum speak passionately about their connections to the prairie landscape and its wildlife. In 1971 Base managers



The endangered western hognose snake is too often a casualty on one of the many access roads in Suffield.

zoned large areas underlain by sandy soils along the South Saskatchewan River and in the Middle Sand Hills out of bounds for military training because of their sensitive nature (restricted development zone). The Minister of National Defence, in 1992, signed a Memorandum of Understanding (MOU) with the Minister of Environment to include these sensitive zones in the SNWA. Regulations establishing the SNWA came into force in April 2003.

Less than one-fifth of the area that is now CFB Suffield was converted to cropland by pioneers early in the 1900s. These areas were returned to permanent cover when farming ended because of drought and expropriation, but unfortunately the reclamation species of choice was crested wheatgrass, a persistent and invasive species originating in Europe and Asia. Halting its invasion – as well as that of other aggressive alien plant species including Russian thistle (tumbleweed), Russian

pigweed (kochia), downy brome, and leafy spurge – is one of the biggest environmental challenges facing managers of CFB Suffield today.

Under a 1977 MOU with Prairie Farm Rehabilitation Administration (PFRA), cattle-grazing occurs in portions of CFB Suffield not used for military training. Livestock grazing does not occur in the Middle Sand Hills. A Grazing Advisory Committee (GAC) consisting of representatives of Canadian Wildlife Service, Agriculture Canada, Alberta Public Lands, and Alberta Environment guides grazing management on the PFRA pastures with objectives to maintain the ecological integrity of the grasslands while providing supplementary grazing for local ranchers. The GAC meets annually and makes recommendations as needed to the PFRA pastures manager and the Base Commander.

The petroleum industry has pretty much had its way with CFB Suffield since the mid-1970s. A total of 12,000 to 14,000 wells have been drilled. Currently there are about 8,000 active gas wells and 1,200 active oil wells, with lifespans of two to three decades. There are also 11 compressor stations, 8,000 km of pipelines, dozens of remote sump pits, an industry gravel pit, numerous water dugouts and pumps, and about 280 industry vehicles a day traveling the thousands of kilometers of roads and trails that crisscross the Base. Gas well densities are as high as 16 wells per section, and oil well densities, concentrated in the northwest corner of the Base, an astounding 70 wells per section.

Over 1,100 gas wells were drilled in the SNWA prior to 2004, when the Base Commander implemented a drilling moratorium due to environmental concerns. EnCana's proposal to drill a minimum of another 1,275 shallow gas wells in the SNWA alone - at least 425 wells a year over three years – would result in a density of up to 16 or more wells per section, and the installation of more than 200 km of additional pipeline. Associated with the wells would be new infrastructure, including access roads and water development, areas for disposal of drilling fluids (sumps), and increased compressor capacity.



This 1978 well site, like many others from the 1970s and 1980s, needs restoration. The invasive crested wheatgrass was used as a reclamation species at that time. Although companies now clear less native prairie per gas well, the cumulative effects of increased well density (from 3 or 4 to 16 per section) counteracts the reduced impact per well. Oil wells still require a 100 m x 100 m pad.



This recent well site in the Suffield block shows extensive and unnecessary disturbance that is not perpetrated in other native prairie habitats or in the Suffield NWA. Industry and the military (tank tracks) have failed to use common access routes in this area, increasing the amount of damage to this sensitive landscape.

Rules of Engagement

Canada's title to CFB Suffield does not include mineral rights. These are owned by Alberta. In the early to mid-1970s, the government of Alberta determined that there were substantial reserves of natural gas and oil under CFB Suffield. Memoranda of Agreement (MOAs) with the government of Canada, in 1975 for gas and in 1977 for oil, accommodated Alberta's strong desire to develop these reserves, provided there was no interference with military use. In areas where military training occurred, gas well structures were to be below surface with protective coverings.

Fifty sections in the northwest part of CFB Suffield were designated a special oil production area. The Base agreed to forgo military training in that area for two decades because aboveground structures were required to produce the oil.

The 1975 and 1977 MOAs identify Alberta Energy Company Ltd. (AEC) as Alberta's assignee to develop oil and gas on CFB Suffield and to be subject to all the rights and obligations of the MOAs. Mineral leases were granted exclusively to AEC, which became the sole operator on CFB Suffield. AEC at the time was a provincial Crown corporation, originally incorporated in 1973. It is not clear what, if any, financial consideration there was for the Crown

in the interest of all Albertans in the granting of these rights.

In 1975, citing as a key selling point "inaugural assets including oil and gas exploration rights to the 600,000-acre Suffield Block in southeast Alberta," the Alberta government divested itself of a one-half interest in AEC. Alberta government holdings in AEC were gradually reduced and fully divested in 1993. Through the 1980s and 1990s, AEC grew to be a very wealthy corporation, due in no small way to the windfall profits from production of thousands of gas wells and several hundred oil wells drilled in CFB Suffield.

Under the 1975 and 1977 MOAs, the only financial compensation to CFB Suffield, as landowner, was Alberta's agreement, through AEC, to pay the costs for range control. This consisted of two radio-equipped vehicles and the wages of personnel needed to ensure that industry access on the Base did not interfere with military activities.

AEC was not charged fees for surface compensation, which everywhere else in Alberta are negotiated by industry with landowners, or leaseholders in the case of public land. Presumably, as with other companies, royalties from the gas and oil production flowed to provincial coffers and EUB exacted a levy based on the volume of production. What DND got was loss of their use of a

portion of CFB Suffield and decades of trouble trying to coordinate industry activity with military activity.

The MOAs recognized that the Base Commander has jurisdiction and control over all access to the Base and the authority to coordinate activities. To accommodate this role, "representatives of Alberta or its assignees" agreed to meet with the Base Commander once a year to review a proposed development plan for the upcoming year and would obtain his approval prior to entry on CFB Suffield.

Alberta or its assignees also agreed to repair any damage to the Base, to maintain a condition reasonably equivalent to that occurring at the time the MOAs were signed, and to indemnify Canada against any liability arising from oil and gas activities. Areas along the river and in the sand hills that had been zoned out of bounds for military training were also zoned for special protection from oil and gas activity.

To ensure that environmental protection objectives were met, the 1975 MOA established the Suffield Environmental Advisory Committee (SEAC), consisting of one representative from Environment Canada, one from Alberta Environment, and one from the Energy Resources Conservation Board (now the Energy Utilities Board). SEAC was charged with reporting annually on its activities to Canada, Alberta, and the Base Commander and to provide advice when requested. The Base Commander retained final authority for project approvals.

In the late 1990s, with several thousand wells drilled, AEC asked the Alberta government to post mineral dispositions to deeper formations under CFB Suffield (below the base of the Upper Cretaceous Fish Scales zone at about 815 m). Alberta complied and put rights up for auction.

For other companies to access properties on CFB Suffield, however, some surface access rights assigned to AEC under the 1975 and 1977 MOAs had to be transferred back to the provincial government. An amendment, the Partial Assignment Agreement (PAA), was signed in 1999 by Canada, Alberta, AEC, and a new entity called Suffield Industry Range Control Ltd.

(SIRC), a private corporation also known as Range Safety. SIRC was charged with controlling and directing industry access on CFB Suffield.

Under the 1999 PAA, AEC assigned to Alberta and SIRC, "as agent for and on behalf of Alberta," the right to permit access to other holders of mineral disposition under CFB Suffield. In exchange, AEC reserved all the "rights, interests, benefits and advantages" originally granted to it, including exemption from paying surface compensation on any wells drilled on leases held prior to the PAA. At the time of writing this article, the PAA is open to legal interpretation on liability with respect to these grandfathered wells.

According to the PAA, new leases, except those obtained by AEC, are subject to a Surface Access Agreement (SAA) with Alberta and SIRC. The SAA requires new lessees to submit an annual activity plan, comply with access restrictions, and complete all reclamation specified by SEAC, SIRC, and others.

As well, annual surface access fees and surface compensation are paid to SIRC. Surface compensation paid by operators, other than AEC or its affiliates, flows through to Canada in care of the Base Commander while surface access fees fund SIRC's operations. EnCana continues to contribute toward vehicles and personnel needed for range control as per the 1970s MOAs. It is estimated that the company pays about 10% of what companies must pay elsewhere for surface access.

In 1999, when the PAA was being negotiated, Canada also negotiated precluding access to deep rights (below the Fish Scale Zone) underlying the proposed SNWA: hence mineral leases would not be available for sale. AEC supported this exclusion, speculation being that deep gas reserves in that area are not of very great importance; subsequently, Alberta signed off on the agreement.

In 2002 AEC merged with PanCanadian Energy Corporation to form the EnCana Corporation. PanCanadian also had roots in public largesse: it was created in 1958 by Canadian Pacific Railway (CPR) to hold the mineral rights associated with federal land grants to CPR in the 1880s. Today, EnCana has an enterprise value of about US\$50 billion.

A handful of other companies operate in a relatively minor way in CFB Suffield, most under farm-out agreements to EnCana. They include Breaker Energy, Harvest Operations Corporation, 7th Energy, and Penn West Energy. Direct Energy has some freehold rights in the SNWA. EnCana has divested itself of some of its properties, including a gas storage facility and oil mineral dispositions. EnCana, however, continues to hold the lion's share (95%) of mineral rights under CFB Suffield.

environmental management at the national level, and this is then applied as appropriate at other levels, but it is a thin thread that links to CFB Suffield.

The Base Commander has begun to hire staff with environmental and oil and gas industry regulatory expertise in an attempt to address the deficiency in stewardship. The current staff of three is overwhelmed, and about a dozen new staff positions are reportedly planned to deal with management, monitoring, and reclamation. Lack of Base capacity to review development applications and monitor industry activity means there is a high level of uncertainty and disagreement about environmental



Both cattle and industry use dugouts like this one for water.

Conflicts and Constraints on the Environmental Front

The Base, as landowner, does not have the capacity to fulfill its stewardship role in managing and monitoring industry activity on CFB Suffield. For almost three decades, the only expertise available to the Base Commander to assess the environmental aspects of proposals and the conduct of the industry was from distant advisors on SEAC. Within the last decade a position was created at CFB Suffield to manage the environmental aspects of military activity.

Also, at DND headquarters in Ottawa, there is a Directorate of Conservation and Environment. The Director General of Environment (DGE) has responsibilities for establishing policy and providing advice to DND in all aspects of

impacts and industry adherence to rules on CFB Suffield.

The lack of on-site capacity resulted in a situation where Range Safety/SIRC was signing off as landowner on development applications to EUB. SIRC is supposed to be an agent of Alberta, but a Google search for SIRC on the World Wide Web leads immediately to EnCana's website. Is this a situation of the proponent and regulator being one and the same? The current Base Commander is moving to remedy the situation. He is asserting his authority to approve applications to the EUB and confining SIRC's role to that of gatekeeper in monitoring movement of industry vehicles on the Base. Affected parties are bristling over this proposed change in practice.

Over the last few years, EnCana and other companies have been required to support their development

applications with environmental overviews. The rationale by the Base Commander is that these overviews enable more environmentally sound decisions. There have been disputes about whether industry needs to comply, given that the MOAs and PAA do not specifically require them. EnCana is refusing to release these overviews to non-government environmental interests on the grounds that they contain proprietary information that would hurt their business interests if made public.

The Oil and Gas Conservation Act administered by the EUB applies in CFB Suffield just as it does anywhere in Alberta regardless of land ownership. Federal environmental requirements supersede those of the province where overlap occurs (e.g., rules for hydrocarbon storage tanks under the Canadian Environmental Protection Act). EUB staff in Calgary review applications and issue well licences, pipeline permits, and approvals for other industry facilities.

Staff from the EUB's Medicine Hat office conduct routine inspections of drilling rigs and facilities and respond to operational emergencies such as pipeline breaks, spills, and well blowouts. However, due to provincial

Industry Activity Facts in CFB Suffield

CFB Suffield: 2,690 km²

Oil Producing Area: 128 km²

SNWA: 458 km²

Wells drilled since mid-1970s:

12,000 to 14,000

Producing gas wells: 8,000

Producing gas wells in NWA: 1,100

(prior to 1992)

Gas well density: up to 20 wells/section

Gas well density in NWA: 2 to 8 wells/

Producing oil wells in oil-producing area

(1 ha pad): 1,200

Oil well density: up to 70 wells/section

Pipelines: 8,000 km

Roads/trails: thousands of kilometers (precise information not available)

Industry vehicles/day: 280+

Remote sumps: dozens (~50 wells/sump)

Compressor stations: 11

Dugouts for industry water supply: 11 in SNWA



This 2005 reclamation of a badly rutted access route by EnCana in the Suffield NWA shows some of the challenges of trying to restore native prairie once it is disturbed. Although an approved seed mix was used, the site is dominated by non-native species that have gone to seed and can spread to nearby disturbed areas. Another access route has formed to the right creating a larger disturbance.

government downsizing and with such a large amount of industry activity on CFB Suffield, there is heavy reliance on voluntary compliance.

The 1975 and 1977 MOAs specify that regulations under Alberta's Land Surface Conservation and Reclamation Act, administered by Alberta Environment, are to apply on CFB Suffield. Since the late 1990s, this statute no longer exists, having been rolled into the Alberta Environmental Protection and Enhancement Act. Regardless, Alberta Environment maintains that it does not have authority on federal lands and therefore cannot enforce regulations regarding reclamation. In addition, it has been suggested that the provincial fund for reclaiming orphan wells may not be available in CFB Suffield.

The key environmental objectives on CFB Suffield, according to the 1975 and 1977 MOAs, are "to maintain a condition reasonably equivalent to that occurring at the time the MOAs were signed" and "to repair any damage." What the condition of the Base was prior to industry activity, however, is not documented, and there is no clear definition of what "equivalent condition" means.

It was not until the mid-1990s that the Canadian Wildlife Service and DND began to address this in the SNWA by funding a comprehensive biological inventory in an effort to create a benchmark to guide management plans. Because of problems with weed invasion on industry sites, the Base is just starting to insist that maintaining equivalent condition includes restoring native vegetation. Industry is resisting.

An inventory of non-native species distribution along disturbances, including the SNWA, is underway. One-third of pipelines constructed during 1997 to 2005 had crested wheat grass established on them. Invasion of non-native species from industry access trails and pipelines is a big threat to native plant communities. Washing of industry vehicles prior to entry is a suggestion that is meeting resistance.

The Base is promoting natural recovery for small pipelines (disturbance width 1 to 2 m) and minimal disturbance well sites. Seed mixes are to be employed for larger disturbances only, where soil and sod-stripping occurs. The ultimate goal is to have companies use seed collected from the Base, but this is not yet happening. Reclamation techniques and targets are a controversial topic in discussions between the military and industry on CFB Suffield.

The number of abandoned wells is estimated to be between 350 and 600. Estimated cost to reclaim wellsites is \$20,000 to \$40,000. CFB Suffield is justifiably worried about their liability, given the situation over herbicide use at CFB Gagetown. EnCana field staff say the company is liable. Alberta Energy has been assured that Alberta is not liable, but their lawyers are looking into it. The Saskatchewan government's requirement of a \$10,000 bond for each well is worth considering, especially since Alberta's fund for reclaiming

orphan wells reportedly does not apply on CFB Suffield.

Again, the Base does not have capacity to oversee abandonment and reclamation of sites. The Base Commander currently is trying to obtain a full inventory of abandoned wells and determine who is responsible for their reclamation. To date, no reclamation certificates have been issued for several hundred abandoned well sites on CFB Suffield. This is another environmental management conundrum subject to dispute on CFB Suffield.

Spraying drilling waste on native prairie is not allowed on public lands in Alberta. Previously a frequent practice in CFB Suffield, land-spraying while drilling (LWD) is now allowed only on pipeline right of ways. A 2003 study by Alberta Sustainable Resource Development, only recently released, documents significant problems with LWD on native prairie, including high application rates harming vegetation and breeding birds, especially during periods of drought.

The study, which used several examples of industry activity in CFB Suffield, also identified major operational issues, including failure of companies to comply with guidelines. A controlled study of LWD using experimental plots on CFB Suffield is currently underway, supported by Agriculture Canada, DND and EnCana. Operational issues related to LWD continue to fester.

Alberta Environment grants water licences under the provincial Water Act to industry operating on CFB Suffield. Ground or river water is provided for industry and cattle in dugouts. Monitoring and enforcement to ensure the honouring of licensed limits for water extraction are lacking.

With official gazetting of the SNWA in April 2003, special rules, the Wildlife Area Regulations of the *Canada Wildlife Act*, apply. DND was delegated the responsibility for administration of the area and those sections of the *Canada Wildlife Act* that apply to it.

The Regulatory Impact Analysis Statement that accompanied the amending regulations states that the SNWA contributes to environmental objectives of both DND and Environment Canada and reflects the government's commitment to environmental stewardship. Activities occurring in the SNWA cannot interfere with the conservation of wildlife. Moreover the Statement indicates that any changes in land use would need to be compatible with the spirit, intent and policies of a legislatively protected natural area as stipulated in the wildlife area regulations.

Buried in the document is a statement that shallow gas recovery will continue subject to the environmental screening protocols specified in the 1975 and 1977 MOAs and the Wildlife Area Regulations. Any gas recovery projects in the SNWA are subject to the *Canadian Environmental Assessment Act*, with DND as the responsible authority.

Since 1975, SEAC has conducted annual inspections of petroleum industry activities and programs on the Base and advised the Base Commander on environmental protection requirements. Review of SEAC minutes over the last several years reveals some special measures by industry to minimize environmental impacts. For example, EnCana has used low-impact drilling techniques in the SNWA, supported wildlife studies, and alleviated threats to snake populations by rerouting traffic and implementing seasonal drilling restrictions. There are, however, a myriad of concerns with the environmental effects of industry activity and with environmental management.

A summary of key concerns raised during SEAC meetings (1997-2005) follows.

- Absence of a fundamental database to support management: There is no complete GIS database of industry facilities (well sites, pipelines, remote sumps, roads/trails) available to decision makers. Locations and reclamation status of abandoned wells are not known.
- Lack of cumulative effects assessment: The environmental focus is on minimizing and repairing disturbances related to individual sites and there is no monitoring of overall effects on



Land spraying of drilling waste. Improper application can impede vegetation growth. Alberta no longer allows this practice on native prairie, but it is still allowed on pipelines in Suffield.

the prairie ecosystem in the long term. The assumption is that gas well densities up to 16 per section are neutral to ecological integrity, which is unfounded.

- Degradation of wetlands: A 2000 report commissioned by DND found degradation of developed wetlands and dugouts used by AEC for a water supply. Report authors recommended restoration of developed wetlands, setting limits on water withdrawal by industry, and ensuring that industry activity avoids wetlands. Spills in 2000 and 2003 contaminated wetlands. EnCana is slow in undertaking clean-up and remediation. Despite advice to industry to avoid wetlands, drilling still occurs in or near wetlands.
- Problems with disposal of drilling waste: Problems were identified in the handling and storing of drill cuttings by industry as recently as 2003. A 2003 audit of remote sumps found four failed EUB criteria for oil content. EnCana is excavating these and attempting to bring them up to standard. A 2003 survey of sites where drilling waste had been spread on native prairie in CFB Suffield found significant problems, but the report of results was suppressed.
- Potential air quality effects on troops: Concerns over potential gas leaks and exposure on troops training on CFB Suffield.
- Off-road vehicle travel: In 2004, 145,652 vehicles accessed CFB Suffield. Regulating such a high level of activity is difficult and travel off approved trails occurs.
- Sand hills impacts: High-density drilling and construction of pipelines in the sand hills has made extensive and noticeable impact that will be difficult to remediate.
- Impacts on wildlife: There is a lack of monitoring and investigative studies of effects of industry activity on wildlife. A study on snakes in the SNWA found high mortality because of roads. Summer drilling was suspended in important snake habitat.
- **Reclamation inadequacies:** There is lack of agreement on reclamation objectives, protocol, and evaluation

criteria. The reclamation goal for the Base is revegetation with native species, either through seeding or natural encroachment, but many non-native invasive species (e.g. crested wheatgrass) occur on disturbed sites. There is a lack of data on how much prairie has been disturbed, how much is undergoing reclamation, and how the ecosystem is responding.

The End Game

According to SEAC minutes, the Base Commander asked EnCana to restrict its drilling in the Middle Sand Hills and SNWA due to environmental sensitivity and the goal of preserving nature. EnCana responded that the corporation has an obligation to its shareholders to proceed. This statement begs the following questions: Have citizens of Alberta and Canada not already given enough to EnCana and its shareholders? Has the prairie not already suffered enough? By what rationale does EnCana believe it is entitled to free rein in such a significant protected area?

These and many other questions will be debated during the panel review by the Canadian Environmental Assessment Agency (CEAA) and the EUB of EnCana's proposal to drill an additional 1,275 wells in the SNWA. Several conservation organizations, including Nature Canada, Federation of Alberta Naturalists, Grassland

Naturalists, World Wildlife Fund Canada, and Alberta Wilderness Association, are working together to bring information before the panel about the need for the project, alternatives, environmental effects, and legislative and policy implications for all National Wildlife Areas. At the time of writing, the schedule for hearings is pending.

The Base Commander has final authority for the decision regarding EnCana's proposal. If the CEAA panel recommends against the development because it will harm wildlife, then the Base Commander's decision is clearly also to deny consent. If the panel recommends that the project proceed because it is in the public interest, then the Base Commander decision will likely be subject to political pressure.

The question of how much drilling the land and communities can sustain is one that is being asked in kitchens, community halls, and the offices of land managers throughout Alberta. The situation on CFB Suffield provides a microcosm of the challenges that those who want to conserve significant natural ecosystems are faced with when industry is given free rein. If the armed forces of Canada cannot deal with it effectively, then it begs another question: who can?

Cheryl Bradley of the Alberta Native Plant Council provided assistance in researching this article.

Help Protect the Suffield National Wildlife Area

Every voice counts in helping to protect this nationally significant native prairie landscape.

Write to:

The Right Hon. Stephen Harper, Prime Minister of Canada, Prime Minister's Office, 80 Wellington St., Ottawa, Canada K1A 0A2

Subjects

CEAR 05-03-15620 Shallow Gas Proposal in Suffield National Wildlife Area

Please donate:

Although AWA has been awarded participant funding from the Canadian Environmental Assessment Agency (CEAA), the award is more than \$25,000 short of our request. We still need funds to increase our communication efforts and secure legal advisors for the hearings. We want to be as well-positioned as possible to fight EnCana's proposal. If you are able to support Suffield Wildlife National Area with a financial contribution, please send your donation as soon as possible.

You can give directly through our secure on-line Shop at http://shop.albertawilderness. ca, by phone at 1 (866) 313-0713 or (403) 283-2025, or by mail to Box 6398, Station D, Calgary, T2P 2E1. Please make your cheque out to AWA and let us know this gift is for the Suffield NWA.

Your donation will make a difference!



McClelland Lake Watershed: "Make hay while the sun shines!" says Petro-Canada

By Joyce Hildebrand, AWA Conservation Specialist

"We talk about natural resources as if everything had a price tag. You can't buy spiritual values at a shopping mall. The things that uplift the spirit – an old-growth forest, a clear river, the flight of a golden eagle, the howl of a wolf, space and quiet without motors – are intangibles."

- George Schaller, National Geographic, October 2006

It's one of the rare places in Alberta's boreal that has felt few human footprints. For millennia, the inaccessibility of the spectacular fen draining into McClelland Lake has allowed this rich ecosystem to flourish. That is about to change. Four years ago, the fen, located 90 km north of Fort McMurray, was approved for open-pit tar sands mining. Petro-Canada plans to begin construction of the Fort Hills project tailings pond in the McClelland watershed in 2008/09.

The precariousness of the entire 330-km² watershed – less than half the size of Edmonton or Calgary – became starkly clear to four AWA staff and volunteers as we flew over it last July. The forests and wetlands surrounding McClelland Lake are already marred with clearcuts, wellpads, roads, seismic lines, and a pipeline corridor.

But as we returned to Fort McMurray, we realized that this damage is minimal compared to what is to come. Flying over the vast open-pit mines, toxic tailings ponds, and noxious billowing emissions of operating tar sands projects, we saw the grey wasteland that will replace the upper portion of the McClelland watershed, including half the fen, if the Fort Hills project is allowed to proceed as planned. Without a massive public clamour, this unique watershed will almost certainly be destroyed.

Petro-Canada: "We have lots of lawyers"

According to their website, "Petro-Canada is committed to environmental sustainability and continuously improving our operational practices and stewardship in the oil sands and elsewhere. We take pride in being a highly principled company." In September I met with a representative of Petro-Canada, the major owner (55%) of the Fort Hills project along with UTS Energy (30%)

and Teck Cominco (15%). When I mentioned Petro-Canada's reputation for environmental responsibility, he responded with "Let's be real. All oil companies rape and pillage the land."

He assured me, however, that Petro-Canada has complete confidence that the unmined half of the fen will remain unaffected and that the mined portion will be restored to its original condition in two or three hundred years. Apparently what took nature eight thousand years to accomplish, Petro-Canada can do in one-fortieth the time, starting with a flayed, poisonous landscape and having no evidence that a patterned fen can be "reclaimed."

When we discussed the planned tailings pond, which will straddle the McClelland watershed boundary, he agreed that naphthenic acids are probably the most serious toxins in tailings. I pointed out that naphthenic acids are not included in the government's Surface Water Quality regulations: industry is allowed to return "used" water to the Athabasca River when it meets those standards. He assured me that nobody would ever return water containing high densities of naphthenic acids to the river because "it would kill things," and people just wouldn't do that. Right.

Furthermore, he argued, naphthenic acids exist naturally in the water system. I cited Pembina Institute's statistics: the average density of naphthenic acids occurring naturally in the area's water bodies is 1 ml/L; in tailings ponds, it is 110 ml/L. Tailings ponds are so toxic – in perpetuity, according to some experts – that as I stood beside them last August, I heard the constant boom of airguns to keep birds and other wildlife away. Who will ensure that these airguns are still



The interconnected marshes, swamps, bogs, and fens feeding into McClelland Lake are nourished by a complex hydrological regime that will likely be severely impacted by oil sands mining in the watershed.

operating a few lifetimes from now, when the tar sands are history?

When we discussed options for saving the fen, such as lease swapping, he said Petro-Canada's board and shareholders would not accept any agreement that did not have a financial incentive. Protection of the fen in exchange for royalty credits or extended low royalty rates, assuming a cooperative government, is also not an option because Petro-Canada would be "ostracized" by other companies.

The depth of Petro-Canada's commitment to the environment might best be summed up in their representative's veiled threat as we ended our meeting: "And don't forget," he said. "We have lots of lawyers." It seems that the company's façade of listening to concerned Albertans is more about appearances than about working together to protect the rare boreal treasures we have left.

A Petro-Canada presentation to the Oil Sands Consultation Panel in Fort McMurray this fall confirmed this attitude: "Make hay while the sun shines," was the company representative's comment, reported in the *Globe and Mail* the next day. "A highly principled company"? Pretty words, but we are waiting for actions that support them.

How Did We Get Here?

As documented in Wild Lands Advocate over the last five years, the betrayal of both the Alberta public and the McClelland Lake ecosystem itself has been as toxic as the tailings and emissions that we smelled from 1,000 feet up. In 2002, after TrueNorth Energy (the original operator of Fort Hills project) discovered oil under the fen, the government broke its own amendment guidelines to give in to the company's request to change the 1996 IRP, which protected the fen from mining. In October 2002, the Energy and Utilities Board (EUB) approved TrueNorth's application despite a lengthy hearing with strong opposition to the project.

Both the IRP amendment and the EUB approval were based in large part on a TrueNorth-commissioned scientific study that declared the patterned fen to be "representative" rather than "unique"; the study's authors contradicted their own previous research, as well as TrueNorth's EIA, and were subsequently given a \$1 million research grant by TrueNorth. According to peer scientists, the study used seriously flawed methodology.



Endangered whooping cranes have been sighted several times on the large patterned fen southwest of McClelland Lake. They appear to use the fen as a way station on the way to their nesting grounds further north.

Government: "It's too late, baby, now it's too late"

Four years after signing all of the necessary approvals, where does the government of Alberta stand on the McClelland Lake watershed? A few weeks ago, I met with three Alberta Environment Northern Region employees to see what could be done to revisit the process and approvals.

The answer, apparently, is nothing, unless it can be shown that "a major error or something fraudulent happened during the approval process." The mechanism for challenging an approval is through an appeal to the Environmental Appeals Board. The time frame for appealing the Fort Hills approvals ended years ago, and there was no fraud or major error to appeal — only government's flawed decision-making and industry-biased interpretation of public interest.

Of course, the Minister of Environment could decide to revoke the approvals, but that would appear "capricious" and potentially reduce motivation for investment: anathema to this government.

TrueNorth's EIA: "Let's hide the bad news"

The justification for one particular decision that the EUB made during the hearing continues to elude me. According to Alberta Environment's website, "an EIA report plays an important role in Alberta Environment's review of applications related to the project... The completed environmental assessment assists decision-makers to decide if a project is in the public interest."

True North had a comprehensive Environmental Impact Assessment (EIA) done on the area that would be directly affected by their operation, including the McClelland Lake Wetland Complex (MLWC). The portion of the EIA that concerned the MLWC predicted major, possibly irreversible project effects on the Complex. Not surprisingly, True North "withdrew the portion of its EIA describing the project's impacts to the MLWC," asking the Board to accept in its place the promise to convene a committee "to develop a management strategy to sustain the unmined eastern portion of the wetland" (EUB Decision 2002-089). What is surprising, or should be, is the EUB's acceptance of this substitution: the replacement of a mandated, extensive, scientific EIA with a non-existent (at that time) committee.

When I wrote the EUB requesting an explanation of its justification for this decision, the response was this: "The EUB's practice is that it does not attempt to expand on the reasons set forth in a Decision report." I was directed to section 10.3 of the Decision for the "entirety of the Board's reasons." I once again scrutinized this section, but found no reasons at all: only an assurance that "TrueNorth's MLWC Sustainability Plan does propose a process that should establish the feasibility of... mitigation."

In addition, section 10.3 states: "The Board supports Alberta's intention to condition its approval to require TrueNorth to provide an acceptable mitigation plan [for the unmined portion of the fen] prior to mining in

the MLWC." As outlined in Petro-Canada's amended development plan, not yet approved by government, the Committee's mitigation plan is not due until 2024 – six years before mining is scheduled to begin in the watershed in 2030. However, tailings pond construction will begin in 2008 or 2009. This will cause major disruption to the fen without the mitigation plan being either approved or implemented. Given the skewed process of the last five years, it's difficult not to be skeptical about the possibility of Alberta Environment deciding in 2024 to refuse to let the project go ahead because of an inadequate mitigation plan.

Where Are We Now?

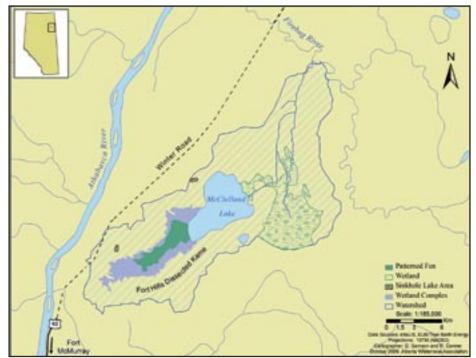
All of Petro-Canada's approvals are in place, including a water license for withdrawing 39.27 million m³ per year from the Athabasca River. The Sustainability Committee has now met four times and has contracted the same scientists who produced the infamous study that supposedly justified destroying the fen.

AWA's request for information from Petro-Canada, including information on the Sustainability Committee, was formally repeated three times between mid-September and mid-October. I finally received an email telling me that our request will be taken up at the next meeting of the Committee in January 2007.

Petro-Canada is already removing rare plants from the fen for pilot projects. They plan to eventually remove rare plants and replant them when the fen is "reclaimed": a Noah's Ark approach to reclamation. But will there be room on the ark for the endangered whooping cranes who stop to rest here on their way to their nesting grounds? Will resident lynx, moose, and river otters find refuge from the massive disturbance that will send shock waves through their habitat? Will declining species such as the short-eared owl and American bittern abandon their nesting grounds?

What is the dollar value of an irreplaceable gift of nature like the McClelland Lake watershed? Of the Red-listed Canadian toad or the rare pitcher plant? Is an ancient breathtaking fen worth a billion barrels of oil, enough to supply Canada's (or rather, the U.S.'s) needs for 15 months? I wonder if our children and grandchildren will thank us for destroying this unique ecosystem in exchange for *one-third of one percent* of Alberta's recoverable bitumen.

Unless the public is mobilized, the watershed's fragile rare plants and mosses will be crushed under the expressed great concern about the impacts of the headlong rush to develop the tar sands. If all Albertans had been given an aerial tour of the tar sands mines instead of our Ralph-bucks, I suspect that we would all be in an uproar. No one could remain unaffected by the sights and smells of rapacious greed next to the quiet beauty of the boreal.



Petro-Canada's Fort Hills oil sands project includes strip mining 49% of the McClelland Lake Wetland Complex (purple) and 45% of the Complex's world-class patterned fen (green).

4-metre-high tires of 400-ton mining trucks, the proud new symbol of our province that seems to have replaced the wild rose. The fen's intricate patterning – delicate strings of black spruce separating peat-filled pools – will no doubt disappear because of disturbance of the water regime that feeds it. And since the mining will occur in the upper part of the watershed, nobody knows what the impact on the entire area will be, including the Firebag River, the Athabasca, and the Beaufort Sea. What's more, five other companies own tar sands leases in the McClelland watershed: Synenco, Scott, Windfall, UTS, and Shell.

Urgent Action Needed

Judging by the provincewide presentations to the Oil Sands Consultation Panel, Albertans care deeply. Of 170 submissions, 150 The only thing that might save the McClelland Lake fen and watershed is thousands of letters to Petro-Canada and government ministers, a public boycott of Petro-Canada, and letters to the editor of every newspaper and magazine in the province.

Would Calgarians allow the destruction and poisoning of the Eastern Slopes, trusting that phantom mitigation would keep our water clean? The boreal forest is in few Albertans' back yards, but it belongs to all of us. The boreal is our back yard: whether we recognize it or not, we are dependent on its services and its diversity.

"There are certain natural treasures in each country that should be treated as treasures," says world-renowned biologist George Schaller. We must recognize before it is too late that the McClelland Lake watershed is just such a treasure.



WAR ON PINE BEETLE MAY SACRIFICE CARIBOU, PROTECTED AREAS

By David Samson, AWA Conservation Specialist

The mountain pine beetle (MPB) is far from being an endangered species, but in its single-minded war on the beetle, the Alberta government is poised to sacrifice one – the woodland caribou. The government's recent decision to direct forestry companies to clear-cut in critical woodland caribou habitat in West Central Alberta may in the long run do more economic and ecological harm than good, including damaging our parks system, Alberta's ecological "Heritage Trust Fund" and foundation for significant tourism revenue. The province's oft-declared "war on MPB" may be more of a political than scientific strategy: it gives the appearance of taking effective action.

The Stakes are High

The Alberta government recently told the government-commissioned Alberta Caribou Committee (ACC), mandated to develop a recovery plan for endangered woodland caribou, that Sustainable Resource Development (SRD) has directed forestry companies such as Weyerhaeuser to clear-cut in critical woodland caribou habitat in the Eastern Slopes Narraway River region of West Central Alberta. This relatively pristine region is already inundated with oil and gas activity.

"If we don't stop this insane approach to forest management now, Alberta will have sealed the fate of these caribou – they will simply vanish from this area over the next 10 years," says Cliff Wallis, an ACC member and Director and Past-President of Alberta Wilderness Association (AWA).

Also at risk may be our provincial parks. Ken Zurfluh, Northwest Area Manager of Parks and Protected Areas, Alberta Community Development (ACD), oversees Kakwa Wildland Provincial Park (WPP) adjacent to the Narraway River region. "Forestry had identified 460 infected trees, but the

numbers have increased way beyond that," he says.

ACD has agreed in a Memorandum of Understanding (MOU) to work with SRD in addressing MPB in Kakwa. MPB control methods employed to date have involved moving personnel in with may be a more favourable one. He points to the Willmore Wilderness Park (WWP) Fire Management Plan as a good strategy, and Parks and Protected Areas hopes to broaden that plan to include Kakwa WPP. The Willmore plan, an exception to Alberta's forest management policy on fire suppression,



A fire simulation cutblock by Weyerhaeuser in the Kakwa-Narraway region.

helicopters and cutting and burning selected individual infected trees – an extremely costly method of trying to control MPB.

SRD and ACD are now "considering other strategies in Kakwa," but Zurfluh does not yet know what those might be. Even though he says no plans are in place for clear-cut logging in Kakwa WPP, given SRD's bellicose MPB strategy, that possibility cannot be ruled out. Zurfluh says the MOU between ACD and SRD "doesn't rule out mechanical sanitation cuts," but he also stipulates that he "wouldn't like to see it." By extension, Willmore Wilderness Park (WWP) may be equally at risk to clear-cut logging.

Zurfluh also emphasizes that a "one-size fits all" strategy for managing MPB may not be the best option and that a "tailored approach" for each area

focuses on setting the conditions in Willmore, where natural processes and ecological diversity are the best defences for forests against fire and insects (*WLA*, April 2006).

Parks Canada's Approach to MPB

There is a fundamental difference between the Alberta government's valuation and protection of provincial parks and that of Parks Canada, where the focus on ecological integrity is paramount. Parks Canada's "Guiding Principles and Operational Policies" states that provided that park ecosystems will not be impaired, the manipulation of naturally occurring processes such as fire, insects, and disease may take place when no reasonable alternative exists.

By placing ecological integrity and science-based adaptive

management at the forefront of management directives, Parks Canada is committed to managing problems like MPB in an ecologically responsible manner. The Alberta government is prepared and legislatively able to place economic values first, which allows it to use our parks as a battle zone to protect commercial forest interests. Zurfluh says evaluating economic versus ecological impacts is a key part of determining which MPB strategy is employed.

Dave Dalman of Parks Canada has been involved with a joint provincialfederal Eastern Slopes Strategic Forest Management Plan. He describes the first, but very critical, step in Parks Canada's approach to MPB: defining the problem. This may be the most significant difference between the approaches of Parks Canada and SRD. The former have identified the problem as "old trees," not MPB, and are tailoring a long-term strategy based on this identification. SRD has identified the problem as MPB and has declared war, sweeping the forests and wildlife onto the battlefield.

Intentionally or not, in his recent article "Keeping the Bugs at Bay" (Alberta Venture, June 2006), environmental journalist Jeff Gailus may have revealed another key problem with Alberta's strategy: the inability to commit to innovative ways to approach this problem. In highlighting Alberta's zero-tolerance approach to MPB, he quotes SRD Minister David Coutts: "We're treating this like a slow forest fire and any time we have a forest fire, we have to fight it." Ironically, scientists generally agree that Alberta's aggressive fire-suppression policy has been one of the most significant factors in creating the conditions for this massive and sustained MPB epidemic.

SRD's decision to clear-cut susceptible lodgepole pine, which covers large areas due to decades of fire suppression policy and includes critical woodland caribou habitat, may very well be an unfounded, costly, high-risk (ecologically), and ultimately unsuccessful strategy. Woodland caribou prefer mature, coniferous forests containing lichen as a food source. Research in B.C. suggests caribou do poorly after clear-cutting but are positively affected where fire



The mountain pine beetle
(Dendroctonus ponderosae) has been
a natural component of pine forest
ecosystems for thousands of years, but
occasionally, when in epidemic numbers,
it has the ability to reconfigure the forest
ecosystem on a colossal scale.

has opened up the forest. "We have an unproven method of killing pine beetle competing with a proven method for killing off caribou, so our choice is quite clear," says Wallis.

Limited Brands, owner of Victoria's Secret, also has expressed "serious concerns" with the plight of woodland caribou. The company signed a new forest policy that ensures it will no longer work with suppliers who source from the Rocky Mountain Foothills near Hinton, Alberta, or who source paper from any caribou habitat range in Canada. The company has stated a preference for product certified by the Forest Stewardship Council. These standards and concerns would in effect exceed those of the Alberta government, which is forcing forestry companies to clear-cut in woodland caribou habitat.

SRD is taking a radical, simplistic approach to a complex ecological problem and applying it widely over the landscape. The short-term, unproven clear-cutting strategy is now taking centre stage in SRD's decisions, including a potential focus on Alberta's parks as a battleground. MPB is well-equipped to overwhelm virtually any amount of resources the government is prepared to throw at it. Many others,

including the B.C. government, have already learned that expensive lesson the hard way.

SRD rarely highlights a long-term strategy to address the root causes of the MPB epidemic. Scientists have identified factors such as prolonged drought, which weakens trees' defences; decades of fire suppression; and global warming as setting the conditions for this massive outbreak, which may very well have been inevitable as a result. The key to minimizing the impact of such outbreaks in the future appears to be re-establishing balanced forest structure, vegetation, and fire regimes in all of our forests, not just in our protected areas.

Although some have laid the blame for the MPB epidemic on B.C.'s reluctance, due to pressure from the public and environmentalists, to aggressively attack the incipient MPB attack in Tweedsmuir Park, B.C. Environment's website states that the MPB "epidemic in Tweedsmuir was only one of the many places that this epidemic started." Many other epicentres (MPB hot spots) were in oldgrowth forests outside of B.C. parks.

Other Options

Rather than declaring an all-out war on MPB wherever it occurs which it does naturally in pine forests - other jurisdictions in North America have taken different approaches. In discussing the federal government's basic strategy, Dave Dalman of Parks Canada refers to the "operating guidelines" mentioned earlier. Parks Canada proceeded under the direction that they "cannot irreparably harm the ecosystem," a direction that forms the baseline for their regional forest management strategy. Having defined the problem as "old trees," they approached it by considering broad landscape objectives, and importantly, cumulative effects.

Since fire as a natural process has been missing due to decades of fire suppression, Parks Canda used historic fire cycles to arrive at their overall goal in parks: to "restore 50% to natural fire cycle." They assessed the condition of the forests as "not being normal now" and decided that the forests need a more diverse composition and

age. Interestingly, Dalman takes a positive approach, saying that "MPB has spurred this objective" of habitat restoration to more normal conditions and that Parks Canada has chosen prescribed fire as the key tool.

Although it is too early to draw any conclusions, Parks Canada has seen some positive results. Their initial research shows that their approach appears to be "having a modest effect," says Dalman. But he is quick to point out that not only is it not conclusive that their strategy is working, but the south (Banff/Jasper) has different conditions than areas in the north.

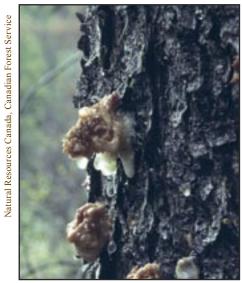
Parks Canada staff are seeing substantial reductions in MPB populations in Banff and Jasper, where they have burned trees. They are also observing higher predation and higher winter mortality of MPB. Key to their adaptive management strategy is continuing intensive monitoring and prescribed burning. Dalman also stresses that they have been "very public" in communicating the MPB problem and their long-term strategies.

Underlying Parks Canada's approach seems to be the assumption that 1) MPB exists naturally and can never be eradicated; 2) a measured, adaptive, long-term approach to the problem is necessary; and 3) restoring and maintaining ecological integrity in the process is fundamental to future success.

Dalman is concerned about any type of "scorched earth" approach, especially as conditions over the landscape can vary widely. He notes that Banff and Jasper have different conditions and that Parks Canada's current work has managed, so far, to see MPB spread in a more normal, controllable pattern. The areas further north around Grande Prairie, however, have seen much more random, widespread distribution of MPB, possibly due to different atmospheric conditions that have allowed MPB to travel great distances because of strong winds: MPB flights have actually been picked up on radar.

Lastly, Dalman acknowledges

Lastly, Dalman acknowledges the challenges that Alberta faces. The B.C. experience has been interpreted by some as indicating that the MPB strategy needs to be one of acting early and getting the logs out earlier. The



A "pitch tube" is evidence of a pine beetle attack and a tree's natural defences at work. The tree oozes resin, and hopefully the beetle too, back out through the beetle's bore hole.

problem, however, can be in addressing the epidemic with a single purpose – saving the timber resources. This can produce a whole host of negative collateral effects on the economy and the landscape, including increased road density and access. The challenge may be balancing that purpose with many other values.

The Voices of Experience

Jack Kendley, a silviculturist with the Helena National Forest (Montana), described in the *Independent Record* (2003) the important role that MPB has in healthy forest ecology, even though MPBs kill trees. "Traditionally, a lodgepole pine gets old, the mountain pine beetle kills it, lightning strikes the dead tree and the forest would burn," Kendley says. "The fire releases the seeds from the lodgepole pine cones and the species is renewed."

"They are native insects

– they weren't introduced – and in



Eggs are laid in vertical (following the grain) tunnels, or "galleries" created when a beetle bores into the tree.

an ecological sense they can have a positive effect," entomologist Ken Gibson says. "But when the population gets too high, they get into something that we want to preserve in the forest, whether it's a hiking trail or a tree in your yard. Then it's a problem."

In discussing possible solutions, Kendley and entomologists Gibson and Nancy Sturdevant note that it's not feasible, nor desirable, to wipe out all of the MPBs; instead, they believe that better forest management is warranted.

Thinning the forests is one of the best tools, Kendley says. But Kendley, Gibson, and Sturdevant are quick to note that clear-cutting is part of what led to the problem. Removing all the trees from an area, then replanting it, means all the trees are the same age and are vying for the same limited amount of nutrients. That stresses the trees, which can make them vulnerable to infestation. Instead, the trio of forest service workers savs the forests could be thinned, not necessarily by commercial logging but possibly through smaller cuts using hand tools or through prescribed burns.

The United States Forest Service (USFS) has also been dealing with MPB problems for many years. Although SRD believes that clearcutting is an effective tool for managing the MPB outbreak, a non-profit group based in Portland, Oregon reviewed more than 300 scientific papers and documents from the USFS and came to a different conclusion. Jeff Gailus notes that the Xerces Society for Invertebrate Conservation "contends there is no evidence that logging can control bark beetles or forest defoliators once an outbreak has started."

Gailus quotes Scott Hoffman Black, executive director of Xerces, as stating, "The findings are very clear. Logging is not the solution to forest insect outbreaks, and in the long run could increase the likelihood of epidemics."

At What Cost?

Is clear-cutting in critical wildlife habitat what the public would like to see? According to social science researcher Bonnie McFarlane, who is with the Canadian Forest Service in Edmonton, the public is not comfortable with these extreme MPB strategies. In 2004 she surveyed 2,000 visitors and residents in Banff and Kootenay National Parks and in Calgary.

"The survey showed the public embraces less aggressive methods of treatment of the mountain pine beetle," McFarlane says. "They prefer taking out or burning smaller pockets of infected trees, rather than large-scale harvesting treatments. Respondents are in favor of controlling the outbreak of the mountain pine beetle, but not at any cost."

The MPB epidemic is developing on a continental scale and the government is trying the same things that have not worked elsewhere. The lengthy time period over which this problem developed make it nearly impossible to address this problem with short-term strategies like clear-cutting in large areas of susceptible pine.

It has taken us 100 years of fire suppression to create the conditions ideal for the MPB epidemic, and a successful response may take 50 to 100 years of objective, science-based adaptive management to ensure that the forests are well-equipped with their natural defences to combat MPB on their own. The window of opportunity to start that long-term process, however, has opened now.



Burning a single tree infected with mountain pine beetle can be an effective tactic early on in an attack.

"We all hope that Mother Nature kicks in and that there is a population collapse," says Wallis, referring to the best beetle control method: sustained temperatures near -40 degrees Celsius. "Having 'hope that Alberta can forestall a disaster' is quite different than actually being able to do it. We can all have faith and pray that something will happen, but that doesn't mean it will. The science tells us what is happening and likely to happen. As you know, the defence lines in Alberta have NOT stopped the outbreak or some major leapfrog events."

If there is no short-term solution to this problem, it will not help matters to pretend that there is by spending millions of dollars unnecessarily and destroying endangered species and habitat, only to have future generations encounter the same problems with our forests that we are experiencing today.

In his recent book *Collapse*, which examines the reasons for past societies' failures or successes when faced with environmental changes, whether human-induced or not, Jared Diamond observes, "Two types of choices seem to me to have been crucial in tipping their outcomes towards success or failure: long-term planning, and willingness to reconsider core values."

Diamond describes the type of choices we must make if we are to succeed. Those choices that have been successful "depended on the courage to practice long-term thinking, and to make bold, courageous, anticipatory decisions... This type of decisionmaking is the opposite of the short-term reactive decision that too often characterizes our elected politicians."

The MPB epidemic may provide us with the opportunity and incentive to look seriously at long-term solutions, make courageous choices, and reevaluate our values of wilderness and wildlife so they do not get shoved aside by economic decisions.



The landscapes of Kakwa.

Are Parks Valuable for Local Communities?

By Nigel Douglas, AWA Conservation Specialist

Protected land obviously plays an essential role in maintaining wildlife habitat, a healthy supply of clean water and the recreation opportunities that come with them. At the same time, it can also make an important financial contribution to local economies: the economic argument for protected areas is becoming increasingly clear.

This is one of the conclusions from two recent forums on the Value of Parks for Communities, held in southwestern Alberta in October. Both meetings were well attended and certainly stimulated discussion in the area. The implications for the proposed Andy Russell Wildland and the possible benefits to adjacent communities in the Crowsnest Pass and to Pincher Creek were in people's thoughts.

There is little doubt that Albertans value their parks. Scott Jones, with Alberta Community Development's Parks and Protected Areas, referred to two polls: a 2005 study that found that 99 percent of Albertans think protected areas are important and a recent survey that came up with the rather surprising suggestion that Canadians rank parks as a more important part of Canadian identity than hockey!

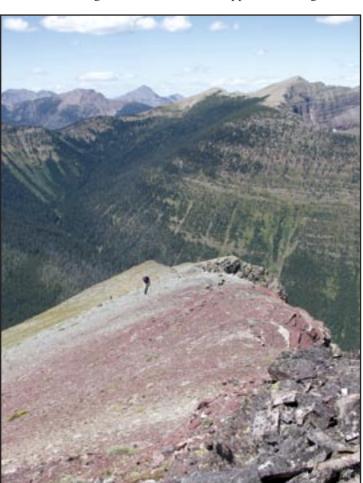
The economic value of protected areas to the provincial treasury has been known for some time: Jones points out that protected areas contribute a minimum \$1.3 billion to the provincial economy. But how important these protected areas are to adjacent communities is only starting to become clear.

Alberta's booming economy is allowing some Albertans to make choices that would not have been available to them a generation ago. Jim Johnson of Pacific Analytics said that historically, rural communities depended on natural resources, including farming, mining, and oil and gas. Communities based on resource extraction are far more susceptible to the economic vagaries and boom-bust cycles of resource markets.

This assertion is supported by U.S. economist Tom Power in his

2001 book *Post-Cowboy Economics*. Looking at the U.S. Mountain West, Power considers the concerns that rural communities have about the declining

"economic base" of resource extraction. He contrasts these concerns with the reality that this region was the fastest growing region of the U.S. during the second half of the twentieth century. "Despite these fears," he writes, "changing industrial infrastructure has not triggered a decline in the region or an overall loss of jobs, income or residents. On the contrary: as industrial transformation has proceeded, in-migration, employment and aggregate real income ... have boomed."



told forum participants of the value

of the nearby Grand Teton National Park to his community. People who

worked hard to oppose the designation

Hiking up Jutland Mountain in the Castle.

With an increasingly affluent and mobile population, people are demanding more from their local communities: high-paid jobs are not enough. And affluence brings with it more choice: people are selecting where they want to live based on what amenities local communities have to offer, which includes schools, health care and, just as significant, a healthy environment. People want to be able to drink clean water and breathe clean air. As leisure time becomes more significant, people also want healthy, natural places in which to recreate.

Steve Duerr, former executive director with the Jackson Hole Chamber of Commerce in Wyoming,

of the park in 1945 now recognize, in hindsight, that the local economy has benefited beyond anybody's wildest dreams.

As Johnson and Duerr both point out, communities in the Crowsnest Pass and other parts of Alberta are changing: keeping things the same is not an option. So it is important for people to ask, what are the values that they want to maintain? What is important to them about their local community? As Duerr said, "You can't rely on politicians to save your community character."



YELLOWSTONE'S GRIZZLY RECOVERY A GOOD LESSON FOR ALBERTA

By Nigel Douglas, AWA Conservation Specialist

With the second anniversary of the submission of Alberta's draft Grizzly Bear Recovery Plan this December, pressure is mounting on the Alberta government to quit stalling and start introducing the real on-the-ground changes to prevent the extirpation of the province's grizzlies. Alberta would do well to learn from the Yellowstone experience. The Yellowstone Grizzly Bear Recovery Plan is arguably the most successful template for a species recovery program in North America. One of the key lessons from Yellowstone, the importance of habitat protection, has still not been practically addressed in Alberta.

Since the government's Endangered Species Conservation Committee first recommended in 2002 that the grizzly be designated a "threatened" species, there has been some progress, including the 2006 suspension of the spring hunt and greatly improved population surveys. But hunting was never the cause of Alberta's grizzly troubles and suspending the hunt was never going to be the magic wand to solve the problem.

Learning from Yellowstone

The Yellowstone Grizzly Bear Recovery Plan was implemented in 1982 and has been so successful that work is now underway to "de-list" the grizzly from the U.S. Endangered Species Act. From an estimated population of 136 individuals when the grizzly was listed in 1975, the population is now believed to be more than 600 animals (Chris Servheen, pers. comm.). The population is estimated to be increasing at a rate of 4 to 7 percent per year.

So how does Alberta's draft recovery plan bear up in comparison to the Yellowstone recovery plan? The Alberta government asked Dr. Chris Servheen, U.S. Fish and Wildlife



Undisturbed feeding habitat is a crucial element of any future grizzly bear recovery.

Service Grizzly Bear Recovery Coordinator, to provide feedback on an earlier draft of its recovery plan. At a recent Columbia Mountains Institute conference on bear conservation, he pointed to four essential elements for successful bear management:

- Biological data
- Organizational capacity to implement conservation
- Political support
- Public support

"In Alberta you have got the biological data and the organization to implement conservation," says Servheen. Then he pauses. "The weak point is the political will, and the public support is related to that."

Habitat Security is Key

Servheen stresses habitat security as the most important factor in grizzly recovery. The Yellowstone plan protected key habitats and now the U.S. Forest Service is amending its forest plans to ensure appropriate management of the bear's habitat after delisting, both measures that Alberta has not been so keen to adopt.

"Motorized access compromises habitat security," he says, "but it is also a metric that you can measure." Unrestricted access affects grizzly in two ways, he points out: displacement, where grizzlies leave areas where there is too much human activity; and direct mortality. The plan saw more than 1,000 km of roads closed and this proved to be a major element in improving habitat security.

Alberta's draft plan does address the road density issue, calling for "[o]pen route densities ... at or below 0.6 km/km² in high quality grizzly bear habitat designated as Grizzly Bear Conservation Area ... and open route densities at or below 1.2 km/km² in all remaining grizzly bear range."

Ron Millson, head of the Alberta government's Wildlife Allocation and Use, says that some measures in the plan are already being adopted, such as surveying and Bear Smart programs. But the notable exception is habitat security. On the ground nothing has changed: industrial roads continue to become public roads by default; pipelines and seismic lines are still used routinely by motorized recreationists.

Other habitat security measures in Yellowstone such as bear-resistant garbage containers in all forest campgrounds and intensive outreach to forest visitors also played their part. These measures have also been adopted successfully in Alberta.



The Littlehorn Valley in the Bighorn Wildland in west-central Alberta is prime grizzly habitat.

Science is Fundamental

Servheen emphasizes that another key factor in the success of the Yellowstone recovery plan was that "science became a fundamental part of the recovery process." Science was "applied intensively." More than 150 scientific papers have been published about Yellowstone's grizzlies, but even this is not enough. "The key thing was that science was not performed in a vacuum: science and monitoring information was directly translated into management action."

In Alberta, the science behind grizzly bear conservation has been improving. Although the Alberta government has still refused to accept the recommendations of its own **Endangered Species Conservation** Committee to designate the grizzly as a "threatened" species, it did finally listen to its scientists and suspend the spring grizzly bear hunt. In 2004 the government also initiated a five-year program to study Alberta's grizzly population in detail. The 2004 survey of grizzlies between Highways 11 and 16 estimated a local population of 53 bears, just 36 percent of the 2003 estimate of 147.

But when it comes to translating the science into "management action," Alberta has fallen woefully short. Although Alberta's 2004 draft recovery plan stresses that "human use of access (specifically, motorized vehicle routes) is one of the primary threats to grizzly bear persistence," nothing has been

done to address this issue.

Even in B.C., which faces the same conflicting viewpoints as Alberta, land managers largely use scientific studies to influence their decisions. Prime grizzly habitat is removed from provincial logging regimes, and the hunting numbers are based on conservative population estimates for each management area.

In Alberta, when the science does not support how the land is managed, the reaction seems to be either to ignore the science or to discredit the scientists (for example, last year's farcical saga over whether Gord Stenhouse had been sacked as provincial Grizzly Bear Specialist or had never actually had that role in the first place).

Alberta has also been extremely slow to release the scientific information that it does have. The 2003 Assessment of Allocation Report recalculated previous grizzly population figures to come up with an estimated provincial population of 700 bears. This report was updated in 2005 using more up-to-date census data but has still not been released to the Alberta public.

Cooperation is Vital

A U.S. Fish and Wildlife Service fact sheet stresses the importance of cooperation between different interest groups. "[Recovery] could only be accomplished through close cooperation between the federal government, state wildlife agencies,

local communities, private landowners, experts from universities, and other partners."

The recovery program was based around the Interagency Grizzly Bear Committee, created in 1984 with a Memorandum of Understanding signed by assistant secretaries of Agriculture and Interior and four state governors (Wyoming, Montana, Washington, and Idaho). "This agreement was crucial," says Servheen. "It committed different agencies to common objectives and provided an accountability link."

Alberta's draft grizzly recovery plan was written by a multi-stakeholder team, including government and industry representatives, scientists, hunters, and environmentalists.

Despite these differing backgrounds, the recovery team worked effectively and took two years to draw up its draft recovery plan. But a draft plan sitting on a dusty shelf somewhere will not recover grizzly bears.

Recovery is Possible

Servheen emphasizes the importance of political will and the need to recognize that there is a problem. He talks about the five stages of grieving: denial, anger, bargaining, depression, and acceptance. Charitably, he suggests that Alberta is "somewhere in the first three steps." He believes that environmental groups have an important role to play, but not necessarily by just pointing out government deficiencies ("If the wind wants you to take your coat off, it doesn't just blow hard"). More carrot and less stick perhaps.

Political will is tied inextricably to public attitudes. Gord Stenhouse, Provincial Grizzly Bear Biologist, summed it up at a recent conference. "Whether people can coexist with grizzly bears in Alberta over the long term will depend on society's willingness to accommodate the grizzly bear's need for secure habitat, while satisfying our own need for resources."

Though some might quibble over the question of satisfying our "need" for resources versus satisfying our "desire" for resources, the message is clear. The future of Alberta's grizzlies is our choice. It's up to Albertans to decide whether they want to pay the price to keep them. By Joyce Hildebrand

After repeated requests for ENGO representation on the Caribou Mountains Wildland Park Management Plan Advisory Committee (PAC), AWA received an invitation from Alberta Community Development (CD) on June 27 to have an AWA representative on the Committee; we accepted the invitation and I have agreed to be the AWA representative.

The subsequent meeting took place on October 19, but CD advised us that they are not able to provide funding for transportation to the meetings, which take place in Fort Vermilion. Since travel costs are prohibitive, AWA requested participation by telephone. CD was unable to arrange teleconferencing for the October meeting but forwarded the minutes to us. CD has found a venue that will facilitate AWA's telephone participation for the next meeting.

A partial Draft Management Plan has been prepared, but CD is revising it and several sections are still to come. CD plans to have the entire draft plan completed before the next meeting, planned for February 2007. We will examine the draft and submit comments to CD before February.

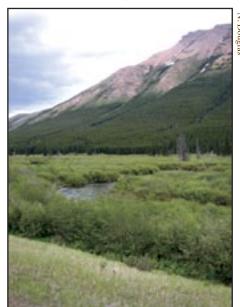
Last spring, the PAC requested that the park status for Caribou Mountains be revoked and CD Minister Ducharme denied the request. The PAC

is also pushing for increased OHV use, increased bison hunting, and wildlife baiting, among other demands, all of which conflict with AWA's vision for the Park.

Implications for Watersheds in the Castle

By Nigel Douglas

Two recent developments have implications for the health of watersheds and forests in the Castle. A proposal by Castle Mountain Resorts (CMR) to withdraw 30,000 m³ of water from the Westcastle aquifer for snowmaking was withdrawn in November. Following Statements of



Westcastle River Wetlands Ecological Reserve

Concern filed by the Castle Crown Wilderness Coalition (CCWC) and the Parks branch of Alberta Community Development, a meeting was held between these groups, as well as Fisheries and Oceans Canada and Alberta's Fish and Wildlife Division.

Of particular concern were the potential effects on water levels of the nearby Westcastle River Wetlands Ecological Reserve and the implications for plants and wildlife such as bull trout. Following this meeting, CMR withdrew its application, deciding to concentrate on other options. These other options are now somewhat limited following the Alberta government's recent decision to cease issuing new water extraction licences from the Oldman River basin.

The second development – or lack of development – is the continuing delay in ratifying the draft C5 Forest Management Plan. This plan, which covers the entire forested area of the Southern Eastern Slopes between Waterton National Park and Kananaskis Country, was submitted at the end of 2005, and raised considerable opposition. In its comments on the draft plan, AWA noted that "[t]his is a forestry management plan, not a forest management plan. This spectacular landscape has so much more to offer than just timber extraction." The current delay results from a failure to consult adequately with First Nations about the plan.

In Memoriam

Betty and Harry Horton

A generous memorial gift has been received by AWA in memory of Betty and Harry Horton. They were avid birdwatchers who also were intensely interested in plants, to the extent that they developed a private herbarium in the 1950s. They had a deep love of Alberta's natural habitats, over the years lamenting the loss of every little bit of forest, aspen parkland, slough, and muskeg. At the memorial service for Betty, one of their friends said that they were environmentalists before the term had been coined.



© Colleen

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CARDSTON ARTIST DOES MUCH MORE THAN "SCRATCH THE SURFACE"

By John Geary

Colleen Yuill cannot remember a time when she did not draw or paint. In fact, the Cardston artist cannot imagine a life that does not involve producing artwork in one form or another.

Yuill has worked in most artistic media, including all the standards like water colour, acrylic, oils, pencil pastels, and so on; however, the medium she prefers over all others is the unique drawing method of scratchboard. Using this technique, she first sketches the image onto regular paper and then transposes it onto the scratchboard, an ink-coated heavy paper made specifically for this use. She then scratches the image from the ink using a small knife. This results in a series of white lines and broad white areas that produce a picture.

Yuill first discovered this form of art as a result of her interest in acrylic paints. "I didn't know anything about scratchboard until I took an art class to learn how to use acrylic paints," she says. "In one of the classes, the instructor brought out some pieces of scratchboard. I loved drawing, and once I saw that and tried it, I got addicted to it instantly. I knew I could do something with it, and it was different, a challenge, and I thoroughly enjoyed it."



Contemplation

That was 22 years ago, and although she still works in other media on occasion, scratchboard remains her favourite. The majority of her images are black in white, but she can also bring colour to her works by using a thin acrylic wash over a piece of work.



Colleen Yuill

Much of Yuill's subject matter involves animals, both wild and domesticated. She always loved animals, and one of the first subjects she tried to draw was the horse on which she rode to school. Horses and other ranch subjects still figure prominently in many of her drawings. Yuill grew up in an environment in which both domestic and wild animals were easily accessible, so it comes as no surprise that she loves drawing those subjects.

"I always lived on farms and ranches, growing up in the hills near the mountains, and I've always loved nature and the outdoors," she says. "If I couldn't go out and enjoy these beautiful things, I think I'd feel like I was in prison. I just love being out and enjoying experiences, like the one I had this morning for example, when three deer passed by my house, six feet from my window." Whenever she does go out, she always makes sure to take her camera along to capture images that can potentially be turned into scratchboard art.

Like the work produced by many other wildlife and nature artists, Yuill's finished work is not always exactly the same as how she saw it in the wild; many pieces result from a combination of different elements or aspects of several different images to produce the end result.

She says every piece of art she produces has an interesting story behind it. Take for example the picture *Contemplation*, an image of a cougar in the classic "thinking" position, with its paw propping up its chin. The cougar was not really sitting there, in imitation of Rodin's statue, pondering the world around it. The background for that picture came from a photo she'd taken many years before, and she was saving it until just the right subject matter became available for it.

"While living in B.C., I drew a picture of a man's dog for him," she says, "and he really loved it. He showed me a picture he'd taken of a cougar and as soon as I saw it, I thought, 'That's the perfect picture for my background.' The cougar was sitting there, licking its paw, but he happened to snap it just at the right moment when it was pulling its paw down from its mouth, so it looks like its sitting there, 'thinking.'"

That scratchboard picture won the people's choice award at the B.C. Festival of the Arts in 1992. Yuill's work has garnered a number of other awards, including a certificate of merit at the 1961 Latham Foundation International Poster Contest for an image she created using poster paint. Even an honourable mention is high praise indeed, when you're competing with 25,000 other artists from around the world.

Yuill does her part to help preserve the nature she loves so much. She has donated artwork to organizations like Ducks Unlimited, for sale at fundraising auctions.

She has been invited to teach art classes, and while she does dabble in teaching from time to time, she prefers not to get too involved with that facet of art. However, if she had just one piece of advice for aspiring artists, it would be to take some kind of formal art instruction. "Take a basic drawing class, to learn about shading, proportion and perspective," she says. "Those are the three things I would have them learn."

N. Douglas

Dr. Bill Donahue

ALBERTA WILDERNESS AND WILDLIFE TRUST ANNUAL LECTURE AND AWARDS

This event in support of AWA's endowment fund provides lectures on conservation and honours individuals who have inspired us with their love of Alberta's wild lands, wild rivers, and wildlife, and their efforts and achievements for conservation. AWA would like to thank our guest speaker, Dr. Bill Donahue for his informative talk on water in the western prairies. We would also like to thank our award winners, our guests, and volunteers for an enjoyable evening.







Herb Kariel, Vivian Pharis and Peter Sherrington received Alberta Wilderness Defenders Awards.

EVENTS

Open House Program

Calgary

Location: AWA, 455 – 12th St NW

Time: 7:00 p.m. Cost:\$5.00 per person \$1.00 for children Contact:(403) 283-2025

Pre-registration is advised for all talks

Tuesday, January 16, 2007 Golden Eagle Migration With Peter Sherrington

Tuesday, February 6, 2007 **Grassland and Grouse** *With* Roger Kelley and Lisa Flaman, Cross Conservation Area

Saturday, February 24, 2007 **Sheep River Valley Winter Hike** *With* Nigel Douglas

Cost: Mambars \$20 per person

Cost: Members \$20 per person Non-members \$25 per person

Contact: (403) 283-2025 http://shop.albertawilderness.ca/



March 22, 2006 Wilderness Celebration Spring 2007

Location: Royal Glenora Club,

Edmonton

Cost: Members \$85 Non-members \$100 Contact: 1 (866) 313-0713,

awa@shaw.ca

Correction:

Competition

The credit for the photo of Ram Ridge on page 9 of the August 2006 Wild Lands Advocate should be David Samson.

AWA's Annual Mural Painting

Details: www.climbforwilderness.ca Contact: 283-2025 or awa@shaw.ca

WILD ALBERTA - MAKE IT YOUR LEGACY!

ach one of us can make a difference. A gift to the Alberta Wilderness and Wildlife endowment fund supports wilderness programs and research that contribute to the protection, understanding and appreciation of wilderness and wildlife. The fund is growing with the help of everyone's gifts.

Whether you make a one time gift, give annually to the fund, or have planned a bequest, you will be recognized as part of our *Legacy Circle* and your name will be included on our plaques in the Hillhurst Room of our Calgary office.

The Wilderness and Wildlife endowment fund, managed with the Calgary Foundation is one way AWA is planning for the future and ensuring strength in our ability to *Defend Wild Alberta!*

YES! I WOULD LIKE	E TO LEAVE A LEGACY FOR WILD ALBERTA.	
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EVERY GIFT WILL MAKE A DIFFERENCE. THANK YOU! CHEQUES MADE OUT TO THE ALBERTA WILDERNESS AND WILDLIFE TRUST WILL BE FORWARDED TO THE CALGARY FOUNDATION AND YOU WILL RECEIVE A RECEIPT FROM THEM.		

Return Undeliverable Canadian Addresses to:



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

