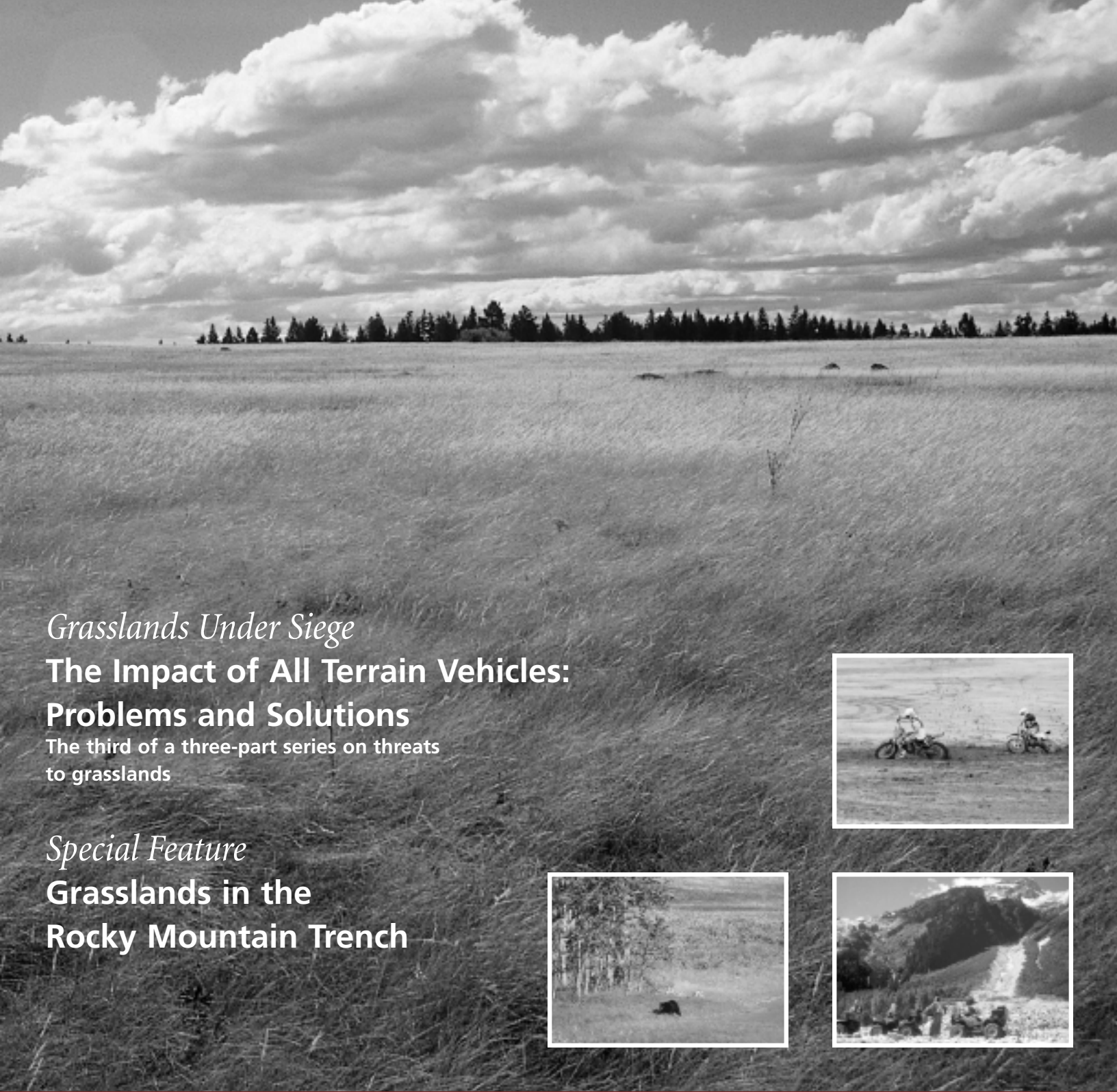




BC Grasslands

"The voice for grasslands in British Columbia"

AUGUST 2002



Grasslands Under Siege

The Impact of All Terrain Vehicles: Problems and Solutions

The third of a three-part series on threats to grasslands



Special Feature

Grasslands in the Rocky Mountain Trench



The GCC

Established as a society in August 1999, the GCC is a strategic alliance of organizations and individuals, including government, range management specialists, ranchers, agrologists, grassland ecologists, First Nations, environmental groups, recreationists and grassland enthusiasts. This diverse group shares a common commitment to education, conservation and stewardship of British Columbia's grasslands.

The GCC Mission is to:

- foster greater understanding and appreciation for the ecological, social, economic and cultural importance of grasslands throughout BC;
- promote stewardship and sustainable management practices that will ensure the long-term health of BC's grasslands;
- promote the conservation of representative grassland ecosystems, and species at risk and their habitats.

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Message from the New Chair

Kristi Iverson



I first fell in love with the grasslands when I journeyed into them at the junction of the Fraser and Chilcotin Rivers as part of my work with the Ministry of Forests. The subdued hues of yellows and beiges, and the complex, exposed landforms were enchanting and I've tried to spend as much time in the grasslands as possible since then. As my exposure to the grasslands increased, the multitude of threats became more and more apparent: ATVs, weeds, urban encroachment, forest encroachment—the list goes on.

A few years later I met Bob Peart in the Vancouver Airport—I was wearing a Cariboo Grasslands T-shirt and it must have inspired Bob to chat with me about the Grasslands Conservation Council. Shortly thereafter I was representing the Council at planning meetings for the Churn Creek Protected Area and I've been hooked ever since.

For those of you who don't know me, I grew up north of Fort St. John and in Victoria. I have a BSc in Biology and worked for several years as an ecologist with the Ministry of Forests research section in Williams Lake.

Farewell! Not Good-bye

Bob Peart



I will be stepping down as Chair of the GCC as of the June Annual General Meeting. It has been an honour to serve you and most gratifying to see how increasingly vital input from the GCC has become in conversations about the future care and management of BC's grasslands.

I have done this work because I love grasslands and value their importance to science, the web-of-life, the economy and their effect on our souls. I will continue to help the GCC as best I can. Thank you to the wonderful work of Bruno and to Kristi Iverson who has so generously agreed to Chair the GCC for the next while. Bruno is an excellent Executive Director and I am certain that Kristi's guidance and knowledge will serve the GCC well.

We should all be proud of the progress we have made since we gathered at Big Bar a few years ago to decide if conserving grasslands was a worthy use of our time and effort. As we all concluded at Big Bar, the main reason we

I have been a consulting vegetation ecologist for the past five years and work out of home with my husband Ken MacKenzie (a wildlife biologist).

I am greatly honoured to take the position of Chair for the upcoming year and look forward to working with all of you. I want to thank Bob for the enormous effort and energy he has contributed to take us through huge leaps and bounds of progress. I hope to help facilitate our progress further along that path and continue the fantastic spirit of working together that the Council has brought to the grasslands of BC.

There is a continuing need for your support: your membership, encouraging new memberships, donations and volunteer time—please help spread the word.

This issue on ATVs is the third in a three part series on threats to grasslands. There is a great need to foster understanding and respect for a very fragile ecosystem—grasslands—that can be very easily damaged by irresponsible use of ATVs. It is my feeling that awakening an awareness of this often-overlooked ecosystem in others may be the best way to bring about stewardship and responsible use of our grasslands.

needed to get together was to put grasslands and range management back on the conservation and land-use agenda—and this has been achieved!

Whether it is our communication with ranchers, our current mapping inventory work, our input to weed management, our working with government officials, or scores of other contributions, the work of the GCC on the future of grasslands management and conservation is now seen as central and important to land-use planning.

Unfortunately, grasslands are going to continue to be destroyed, invaded by non-native species and mis-managed. As well, with a growing human population the fresh water and soil vital to grasslands is also going to be contaminated, weakened, and replaced by houses and ranchettes. To this end, we must all continue our vital work to protect the future of BC's grassland environments.

As I read in a book the other day—in the end our society will be defined not only by what we create, but also by what we refuse to destroy.

Message from the Executive Director

Bruno Delesalle



Endangered Grasslands Need Better Management of ATVs

From a conservation and resource management perspective, ATVs, ORVs, dirt bikes and dune buggies are all designed to travel “off road” and consequently are referred to as All Terrain Vehicles (ATVs). Although snowmobiles are off-road vehicles, a process is

currently underway to develop new legislation and regulations for snowmobiles, and therefore they are not directly addressed in this issue of *BC Grasslands*.

The inappropriate use of ATVs and the mismanagement of ATV use around the province, both on private and crown land, is a very serious threat to grasslands and other associated ecosystems, such as wetlands and riparian areas. The GCC has heard a clear message from government resource managers, the Federation of BC Naturalists, the Union of BC Municipalities, the Outdoor Recreational Council, BC Cattlemen’s Association, the Canadian Parks and Wilderness Society and the Federation of BC Woodlot Associations (to name only a few) that British Columbia needs some form of registration and licensing system, as well as improved management of ATV use.

Needless destruction of habitat by ATVs is not a new problem. Although ATV groups are making progress in organizing and educating ATV users, there are many dirt bikers and quad users who are not part of any association. And there lies the problem. Younger generations are being fed powerful TV images: “You have the ability and the freedom to travel where no other vehicles have gone before... through streams, over open grasslands, over rocky outcrops, up steep hill sides and through alpine meadows.” It is an appealing image. In the meantime, degradation of one of BC’s most endangered landscapes, our grasslands, continues unabated, leading to erosion, the spread of invasive weeds and the loss of wildlife habitat.

The fundamental problem is that resource managers, the ranching industry, conservationists, ATV groups and the concerned public have no effective means to address inappropriate use of ATVs on Crown or private grasslands. ATVs do not require registration or a license for operation. Because of this, land and resource managers and conservationists have limited success in stopping reckless use of off-road vehicles.

Lets face it, without organization, a solid collaborative plan and a means for registration of vehicles, how can we begin to talk about management, education, self policing and partnerships? For over 25 years, various groups have discussed this issue and lobbied government, but the problem remains.

In 2001, the GCC collaborated with various government and non-government organizations to produce an ATV background document: *The Need for a Provincial Licensing System and Improved Management of ATV Use*. The purpose of this backgrounder is to inform government and other interest groups about the ATV problem and the urgent need to put in place a system of licensing ATVs, particularly motorbikes and quads, so people can be held accountable when using vehicles in closed areas or in a manner damaging to the environment. The need for improved planning and management of ATV use and the need for an effective educational

process is stressed as a means to achieve environmentally responsible use of these off-road vehicles.

It was agreed that a system of annual licensing that requires the prominent display of a visible license plate on all ATVs provides a solution to a number of issues. Licensing will:

- Provide enforcement officers, ATV associations and other organizations the means to identify vehicles and take action.
- Ensure that responsible riders are not targeted for the infractions of those who wilfully ignore regulations.
- Provide an opportunity, at the time of licensing, to educate all users about the need to ride responsibly and to protect the environment.
- Provide the financial resources for the planning and effective management of ATV use, construction and maintenance of trails, restoration of degraded sites, and education of ATV users.
- Assist in the recovery of lost or stolen ATVs.

In addition, it was agreed upon that government, non-government organizations and dealers need to collaborate to distribute information and educational material when ATVs are sold and licensed. This will inform users of the responsibilities that go with ownership and use. An effective communication and education process will assist to inform ATV users of their responsibilities when they use their vehicles off-road, educate ATV users about the ecological value of the areas they use and their obligation to stay on designated trails and “play areas,” and promote stewardship, conservation and cooperation.

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Addressing the Issue

An excerpt from Making Tracks: Motorized Use in the

There has been a dramatic transformation in BC's wilderness over the last 10 years. Traditionally unreachable wilderness areas have become increasingly threatened by the encroachment of modern, motorized recreational vehicles. This has created conflict between various users of the backcountry environment, who are now all vying for access to try and capture the best wilderness experience.

What is the problem?

Apart from air and noise pollution, irresponsible All Terrain Vehicle (ATV) use has a more direct impact on the environment. The allure of these vehicles is that they provide access to parts of the backcountry that were previously only accessible by non-motorized means. ATVs can be used to ride through marshes, riverbeds, alpine areas and grasslands that are extremely fragile and susceptible to damage by recreation vehicles. However, travelling over fragile and previously untouched habitats has significant effects such as crushed vegetation and increased wildlife mortality due to vehicle impact. When ATVs travel over grassland landscapes, they create deep, bare tire marks, destroying the thin living crust of lichens and mosses (cryptogamic crust) that protect the soil from increased moisture loss and erosion. ATV trails allow for the spread of seeds from plants that stick to the wheels of the vehicle. Because weedy plants flourish in disturbed habitats, it provides the perfect circumstances for an invasion of foreign plants that out-compete the native vegetation and change the ecosystem. Hillsides become especially vulnerable to increased erosion when the soil and vegetation are disturbed by ATVs.

There are many subtle, indirect impacts that are significant in the long term. ATVs tear up soil and vegetation and leave lasting trails criss-crossing the land. These trails provide hard-packed corridors that are used by wildlife and humans. Not only does this increase the chance of encounters with wildlife, but it also results in unnatural movement corridors that give an upper hand to predators in search of prey, and increases access to the backcountry for hunters. The delicate balance between predator and prey in nature and the territorial boundaries of wildlife populations are disrupted.

Fragile ecosystems in the province already bear the scars of irresponsible ATV use. Damage includes deep tire tread marks, increased spread of invasive and weedy plants, and increased erosion. These scars are especially visible in grasslands that have experienced heavy use by ATVs, motorbikes and trucks. These ecosystems are home to over one-third of the endangered and threatened wildlife in BC including the endangered burrowing owl. A significant amount of restoration is required to return these scarred landscapes back to a healthy state.

Making tracks in Lac du Bois Park, Kamloops, BC.

PHOTO BY SABINE JESSEN



What is being done?

There is currently no legislation to regulate the use of ATVs and off road motorbikes in British Columbia. Over the past 30 years, concerned citizens have urged the government to address the issue, but to date, very little progress has been made. Together with a number of other groups, CPAWS-BC has been urging the government over the past two years to establish regulations. In July 2001, CPAWS co-published a comprehensive report: *Alternatives for Regulation of All-Terrain Vehicles in BC* (Rutherford 2001). The report examines options for regulation and makes a series of legal and policy recommendations. The groundwork has been laid; now the government must take up the work to establish regulations. Until then, wildlife and ecosystems will continue to be affected.

Parks and protected areas in BC serve as a refuge for many species. We must consider that sometimes the lack of motorized human activities allows for greater ecological integrity and beautiful scenic getaways. By accepting the limits to motorized use that are set in parks and protected areas, we ensure that these wilderness treasures remain healthy and continue to inspire us into the future.

What can you do to help?

If you ride:

- Stay on designated roads and trails
- Do not use ATVs during spring thaw or after rain
- Check for weeds and remove them from your vehicle before entering or leaving an area
- Keep your vehicle maintained to reduce pollution and excess noise
- Be respectful of other trail users
- Respect management decisions and road closures
- Do not harass wildlife
- Be an ambassador of your sport
- Stay away from wildlife reserves and private lands
- Accelerate slowly
- Stay off hillsides

For everyone:

- Restrict ATV access on your private land
- Help restore damaged areas
- Report sightings of irresponsible ATV use
- Write a letter to the Minister of Sustainable Resource Management urging him to explore and implement an ATV licensing program, and work to keep parks and protected areas ATV free
- Join CPAWS-BC (www.cpawsbc.org) or other organizations working to prevent irresponsible use of ATVs

Janine is a conservation biologist who currently works with the BC Chapter of the Canadian Parks and Wilderness Society in Vancouver. Her interest in grassland ecosystems stems from her prairie roots that have always been firmly planted in Saskatchewan soil. For more information, please contact Janine at CPAWS-BC, 604-685-7445 or jbeckett@cpawsbc.org

Reversing the Damage?

Janine Beckett, CPAWS-BC

BC Parks has undertaken significant restoration efforts in Lac du Bois Provincial Park near Kamloops, BC. This area has been affected by many factors including fire suppression, weeds, over grazing, urbanization and All Terrain Vehicle (ATV) use. The effort to restore land damaged by irresponsible ATV use includes restricting access of ATVs to reduce future damage in the park. Signs and maps are placed throughout the area to ensure that the public is well informed about where ATV access is allowed, but with a lack of sufficient funds for enforcement, there is no guarantee that ATV users will comply. One tool that BC Parks can use to offset the costs of restoration is to collect money directly from insurance companies when vehicles have received tickets for violations. Unfortunately, ATVs and dirt bikes do not require licenses and as a result, users are nearly impossible to catch.

In areas of the park where damage has already taken place, BC Parks and a team of volunteers are in the process of restoring the landscape. Established trails with bare soil have been replanted with plugs of native grasses and seeded with other native vegetation. The plants stabilize the soil, reduce erosion, and allow the cryptogamic crust to reform. Weirs made of rocks are piled across the trails to further reduce soil erosion from water runoff, and deter ATV users from using the trail. In some cases, nest boxes have been placed in areas to provide nesting opportunities for birds that would normally have nested in the natural vegetation.

ATV Damage on Grasslands: The Tip of

Don Gayton, MSc, PAg, Forest Research and Extension Partnership (FORREX)

Recently I was doing some monitoring work in a southern BC grassland. It was mid-June, and the ground was still wet from a couple days of rain. Brilliant lupines and brown-eyed susans dotted the grass sward, and the mockingbirds were in full voice. Suddenly this pleasant scene was ripped open by the angry revving of dirt bikes, and two young men appeared, dressed in full battle gear. They didn't see me, as they were intent on finding a steep pitch to challenge. I was instantly furious, but controlled myself and watched them for a few minutes. The two soon found a suitable steep and virgin slope, gunned their tightly-wound engines, and raced up as far as they could, slicing through the scattered clumps of bluebunch wheatgrass. When the bikes could go no higher, they turned and bounced back down the slope, to try again. I took some pictures of the deep tire ruts they were making in the soft, loose soil of the hillside, and then went over to them.

What followed was not pleasant and I won't dwell on it, but the encounter taught me a lesson about the ordinary citizen's perception of environmental damage. These boys, perfectly normal young men in their late teens, had absolutely no idea they were doing anything wrong. The needs and sensitivities of that hillside of native grass were not considered, in fact the boys never even conceived of a hillside having needs and sensitivities. To them, that fragile slope of wheatgrass and stipa was no different than a gravel pit.

This incident points out a fundamental issue in the

growing phenomenon of ATV damage to BC grasslands: many ATVers have no concept of an ecosystem, and no sense that a biotic system could have structure, complexity and value.

There is no question that ATV use is growing by leaps and bounds in the Southern Interior. Every year there are fresh trails on the hillsides of the Okanagan, the Kamloops area, the Rocky Mountain Trench and elsewhere. "Mudbogging," part of the ATV phenomenon, is doing incalculable damage to small sloughs and wetlands. Even mountain bikers, who normally like to think of themselves as more ecologically conscious than your average dirt biker, are now a definite part of the ATV problem.

A major validator of ATV damage to grasslands are the television ads for 4-wheel drive vehicles. The makers of trucks and sport utility vehicles love to display their products zipping through unroaded grasslands, deserts and riparian zones. These ads tell the average consumer, who isn't quite sure what an ecosystem is, that destroying grasslands with ATVs is an acceptable, even honourable activity. After all, who is going to argue with a major car manufacturer?

Three years ago, after seeing one too many of these TV ads, I started a petition against them, urging TV networks, advertising agencies, and automobile manufacturers and dealers to end these destructive displays. I was able to collect over seventy signatures of land managers, biologists and agrologists, and sent the

ABOVE: Yellow bell

ILLUSTRATION BY N.M. BRAND

RIGHT: Dirt bikers on Rampart Prairie south of Cranbrook, BC.

PHOTO BY LEANNE COLOMBO



the Iceberg

petition to a Canadian television industry lobby organization. After six weeks with no response, I finally telephoned the CEO of the organization. His comment on my petition was, in so many words, “go tell somebody who cares.”

ATV damage on grasslands is the tip of a very ugly iceberg. Sure we can run press releases on the problems of ATV damage, we can post signs, we can try to use our notoriously weak regulations, but until those two boys and that television CEO learn about ecosystems, and learn to have a shred of empathy and respect for them, we are only treating symptoms, not the root cause.

Don Gayton is an ecosystem management specialist based in Nelson. He has wide experience in grassland and dry forest ecology, and writes non-fiction in his spare time.



ATVers on the Pettipiece side of the Lake Revelstoke Reservoir north of Revelstoke, BC. PHOTO BY RON LAROY

Registration and Licensing of ATVs

Ron LaRoy, ATV/BC

The topic of annual licensing and registration of ATVs has come up many times among ATV users throughout the province. The pros and cons of such a suggestion have been heavily discussed with many opinions given. Such things as making it easier to trace a stolen ATV, and a more accurate count of users throughout the province go along with an annual registration. Dealers are generally in favor, especially those dealers near the Alberta–BC border because of the sales tax situation. ATV/BC would go so far as to suggest that the Association handle this task, that it not be turned over to a government ministry.

Licensing for easier identification of offenders would rely on enforcement and having enforcement people in the field. Mandatory third party liability insurance is already required by the Forest Service when using Forest Service roads. Rules and regulations must be enforced, but at the same time opportunity should be given to educate the user.

Some of the voices against registration and licensing cite “another tax grab,” “money going to government for nothing” and “more regulations.”

ATV/BC is in favour of registration and licensing, but there are conditions. Another tax grab is something we will not endorse. Money collected through licensing and registration has to be returned to the sport. This money can be used for such things as safety training, developing ATV trails, printing “Ride Responsible” literature, designating ATV areas, and educating the public that motorized recreation is acceptable. This form of recreation, like many others, has to be understood. Communication between non-users and users needs to be established for better understanding by everyone. ATV users must realize there are those who like a quiet hike in the backcountry, while those wanting the backcountry solely for themselves have to also realize there are other users. Too many self-appointed ‘experts’ try, and usually succeed in, establishing policy without a full understanding of our sport.

There are many uses of the wilderness that contribute to environmental impact: hiking, mountain bike riding, four wheeling, horseback riding, camping and the free ranging of cattle. To single out the ATV as the ‘culprit’ is unfair.

ATVing is an excellent form of family recreation. In this day and age of little family interaction, this sport has proven itself over and over again. Handicapped and elderly riders have found an excellent form of transportation that allows them to access the backcountry and enjoy the outdoors, and the fellowship of this form of recreation. Responsible users will look after the backcountry and will work towards educating those who don’t.

ATV/BC’s suggestion? Work with us, allow us to monitor ourselves, educate ourselves and others. Registration? Yes! Licensing? Yes! But with a financial return to the recreation. Without this return, NO!

Ron is vice-president of ATV/BC. He’s been snowmobiling since 1969 and quading since the mid ’80s, staying actively involved with motorized recreation during this time. He’s 57 years old and lives in Revelstoke, BC.

Protect BC's Grasslands by Supporting the Adoption

Susan Rutherford, Barrister & Solicitor, Vancouver, BC

For the sake of the protection of the environment, BC is in dire need of a comprehensive all terrain vehicle (ATV) law and management strategy.

Currently, few restrictions govern recreational ATV use within the province and enforcement of the existing rules is difficult. While many ATV riders enjoy their freedom to ride with few regulations, the reality is that a host of problems accompany that freedom. One of the largest problems with the lack of regulation is that ATVs are causing serious impacts and damage to all of BC's wilderness environments, particularly to BC's fragile grasslands. Hence, the ATV issue is an urgent environmental issue.

BC has never succeeded in finalizing a law for comprehensively regulating ATV use, despite the fact that BC has known since the 1970s that there was a need for legislation. On this issue,

authorization is required from a manager before a motor vehicle or bicycle can be used in a wilderness area; and recreation sites/trails and interpretive sites are subject to prohibitions against motor vehicles or bicycles causing damage to structures or natural resources; endangering, injuring or damaging people or property; and harassing, injuring or killing wildlife or any other animal

- Commercial operators of ATVs must obtain a permit from the province's land tenure system, in order to operate commercially on Crown land
 - Operation on Forest Service roads must comply with Motor Vehicle Act and ICBC insurance and driver's licensing requirements
- These piecemeal regulations represent isolated attempts to curtail some of the worst

Aside from the issue of physical damage, there are significant social impacts associated with ATVs: conflicts with self-propelled recreational users of wilderness spaces over ATV noise, speed, and exhaust fumes; increased impact upon trails and conflicting uses on trails; and safety risks—accidental injuries and deaths, especially to young, inexperienced child riders, from collisions, excessive speed and roll-overs.

There are a number of obvious regulatory “holes” related to environmental, safety and other issues:

- Universal provincial rules and standards regarding ATV land use, trail use and proper conduct or etiquette have not been established
- Universal provincial rules and standards for ATVs regarding environmental protection are non-existent
- There is no requirement to register ownership of recreational all terrain vehicles
- The lack of a registration plate makes it difficult to identify, and to take enforcement measures against, problem vehicles and drivers; and it also makes it harder to recover stolen vehicles
- There is no requirement for liability insurance in the case of accidents causing personal injury or damage to property
- There are no universal rules or standards governing who can operate an ATV, such as a minimum age, or a training requirement
- There is no requirement to wear a helmet or other safety gear

Other jurisdictions in North America have developed laws and policies for tackling these issues. In a review which I conducted for CPAWS-BC and West Coast Environmental Law on behalf of the ad hoc ATV Committee in 2001,¹ I came across a number of innovative regulatory devices for managing ATV issues, including:

- Restrictions based on land type (e.g. such as prohibitions against riding on wetlands, sandy beaches and grasslands)
- Requirements for mandatory equipment, such as spark and flame arrestors, and muffler and sound intensity (decibel) specifica-

The regulations do little to provide leadership or guidance for addressing the regular physical threats to the environment, which can ensue from careless (or uneducated) use of ATVs

BC lags behind other Canadian provinces: virtually every other province has such legislation. BC did start the process by enacting the Motor Vehicle (All Terrain) Act in the 1970s; however, due to insufficient political will and/or departmental confusion over jurisdictional issues since then, the Act to this day applies only to snowmobiles.

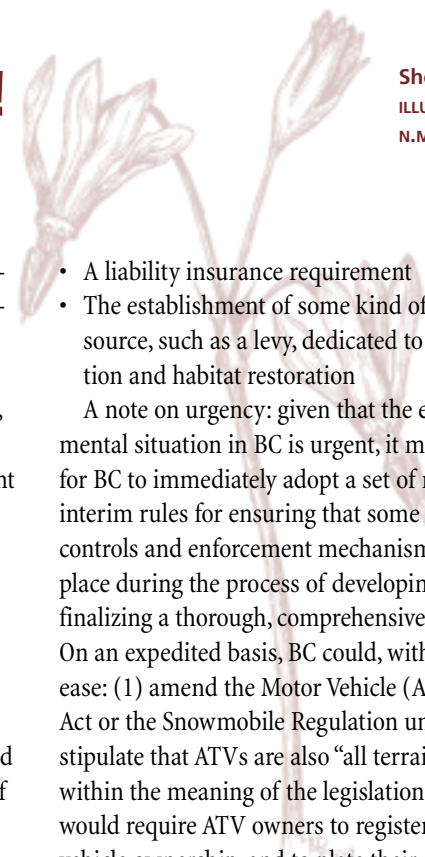
At present, the only restrictions on ATV use in BC are a patchwork of piecemeal regulations:

- A few regulations under the Land Act and the Wildlife Act limit or restrict motorized recreation in a few listed sensitive areas at certain times of the year
- Regulations under the Park Act regulate the use of motorized vehicles within provincial park boundaries
- Forest recreation regulations specify that

instances of damage; however, the regulations do little to provide leadership or guidance for addressing the regular physical threats to the environment, which can ensue from careless (or uneducated) use of ATVs. Such regular risks of damage to ecosystems located on public or private property specifically include: degradation, rutting and channeling of sand and soil; the spread of noxious weeds; trampling of delicate species and ecosystems, especially delicate grasslands; compaction of soil, sand or snow habitats; disturbance, muddying and pollution of stream ecosystems; noise pollution and associated disturbances of habitats and wildlife migration patterns; increased air pollution; and increased access into remote wilderness areas with an associated increase there in litter, oil spillage and forest fires.

of an ATV Law and Strategy Now!

Shooting star.
ILLUSTRATION BY
N.M.BRAND



- tions, and exhaust emissions thresholds
- Programs requiring environmental assessment prior to trail-building
- Staff and programs dedicated to the management of issues surrounding motorized vehicle recreation
- Educational outreach programs dealing with environmental issues
- Club stewardship and self-regulation initiatives

These are just a small sampling of the many tools which might be used within the context of an overall regulatory plan. A larger plan is, however, the key to success. The most admirable plans incorporate the following features:

- Environmentally sensitive policy direction—the inclusion of an environmentally grounded mission statement or theme which guides everything else
- Solid, clear, directing legislation—well organized, all-embracing specific legislation designed to address the variety of issues associated with ATV use
- Detailed regulations—to clarify with specific standards, what is expected and how it should be implemented
- Strategies and tools for management—the introduction of plans and strategies to decide: what vehicles are to be regulated; which department will bear responsibility and authority; what ownership registration requirement and system of record-keeping there will be; what driver licensing and safety requirements there will be; what environmental protection measures will be put in place (e.g., land use restrictions, environmental impact assessment and planning measures, equipment standards, behavioural constraints, age laws and funding sources); whether a trail system and program will be adopted; what safety measures will be adopted
- Strategies and tools for compliance—the introduction of plans and strategies to encourage understanding and compliance, such as educational courses and materials, signage, and stakeholder consultations
- Strategies and tools for enforcement—the introduction of plans and strategies for

assisting enforcement efforts, such as adoption of easily readable license plates, a computerized system of registration, signage, ticketing systems, use of conservation and wildlife officers and self-regulation models, etc.

- A funding plan or model—a key component to the system's well-being, funding can be sourced from registration fees, trail permit fees, gas tax revenues, environmental surcharges or levies, sales taxes, or advertising revenues
- Clear interaction and communication with stakeholders both at the outset and on an ongoing basis—this reduces frustration and encourages loyalty to the system by users of the system

A range of creative possibilities exist for responsible management of ATV/environmental issues. It is my hope that BC will choose to develop such a comprehensive ATV law and strategy, through a consultative process. All stakeholders stand to benefit from communicating with one another on these shared issues and from working out strategies for managing issues and conflicts.

In my view, any system which BC adopts ought to include at least the following component parts, at a minimum:

- The passing of basic comprehensive legislation to:
 - establish ground rules for access or non-access to public and private land and trails
 - establish basic rules and equipment standards regarding pollution and treatment of the environment
 - address such issues as safety rules and equipment
 - establish basic rules of conduct
 - provide mechanisms for effective enforcement of rules
- The establishment of detailed standards, most likely by regulation
- The establishment of a computerized system of vehicle ownership registration partnered with a requirement to display a registration plate on the ATV
- An operator training and licensing requirement

- A liability insurance requirement
- The establishment of some kind of funding source, such as a levy, dedicated to conservation and habitat restoration

A note on urgency: given that the environmental situation in BC is urgent, it makes sense for BC to immediately adopt a set of modest interim rules for ensuring that some minimal controls and enforcement mechanisms are in place during the process of developing and finalizing a thorough, comprehensive system. On an expedited basis, BC could, with relative ease: (1) amend the Motor Vehicle (All Terrain) Act or the Snowmobile Regulation under it, to stipulate that ATVs are also “all terrain vehicles” within the meaning of the legislation—this would require ATV owners to register their vehicle ownership, and to plate their ATVs before driving them; and (2) direct ICBC to computerize its snowmobile (and ATV) registration database—making it easier for enforcement officers to access “in the field.”

To summarize: BC's sensitive grassland and other ecosystems are being seriously harmed by the continued unregulated use of recreational ATVs. One of the key steps toward finding a solution to the problem is for BC to develop a comprehensive ATV law and strategy to address the many issues associated with recreational ATV use. Regulatory and management examples from other jurisdictions around North America are resources which may inform BC in making wise choices as it catches up on this issue. All affected stakeholders are encouraged to urge the government to act now to launch a process of consultation and law-making on the ATV issue.

Susan Rutherford is a Vancouver lawyer practising in the area of environmental law. A wilderness enthusiast, Susan is interested in researching and communicating legal means for protecting BC's diverse ecosystems and habitats. She may be contacted at 604-263-7696 or sruther@axionet.com

¹ S. Rutherford, *Alternatives for Regulation of All-Terrain Vehicles in BC*. (Vancouver, Canada, 2001. Canadian Parks and Wilderness Society-BC Chapter and West Coast Environmental Law)

Cattle, Wildlife, Grass, Trees, People— Resource Management is Complicated in the Rocky Mountain Trench

Maurice Hansen, Rocky Mountain Trench Natural Resources Society

In about 1975, the assistant ranger in the Cranbrook forest district, Art Crane (now retired), made a statement, the wisdom of which is still current: “Without timber management you can’t have range management.” That sums up the challenge of resource management, and thus grassland management, on the floor of the Rocky Mountain Trench. When nature and the Kootenay Natives had a free hand, timber management was not a problem. If the trees got lucky for a few years, the problem would eventually be looked after with fire, natural or otherwise.

In 1890 Mrs. Algernon St. Maur said this about the Canal Flats area: “The country over which we rode was terraced, undulating ground. [These terraces] are quite uniform, of even surface, and covered with bunch grass and sage brush, being quite free from boulders, while here and there a few scattered pines relieve the yellow bareness so characteristic of this District.”

Today there are a lot more than a few scattered pines in the floor of the Trench around Canal Flats, or elsewhere in the Trench for that matter. Boom and bust describes the last hundred years of grassland history here. As best we can tell, the landscape of the Trench was relatively stable for hundreds or perhaps thousands of years before the coming of the white man, a landscape that burned frequently producing the view described by St. Maur. Beginning in 1898 with the coming of the railway, Trench grasslands increased enormously as the accessible timber in the Trench and side valleys was systematically logged off. And then the drought and fires of the '30s made life even more difficult for trees. Talk about disturbance.

By the 1930s much of the Trench looked like prairie. The first aerial photos of the Trench are from 1948. Compared to the present, the absence of trees in '48 is remarkable. How large was this increase in grassland compared to the pre-logged landscape? I've never heard a guess, learned or otherwise, but I'm going to venture it was at least double.

So after all this disturbance, along came the Provincial Forest Act, the licensing of timber tenures, industrial forestry, tree adoration and a bear named Smokey who was scared of fire. The result was that grasslands plummeted. Sharp-tailed grouse vanished and badger and bighorn sheep fell into peril. In the Trench, the chief beneficiaries of the resulting management are squirrels. I'm only partly joking. In the “dog hair” thickets that now clog the trench, squirrels have found paradise. If squirrel production was the intent of resource management, this is a major success story. Joking aside, of course squirrels were not intended, timber production was. The tragedy for the Trench is that it was rolled into the one-size-fits-all timber management policy of the day. I think policy is like quick-setting epoxy, once set, you need a big hammer to break it up.

The first recorded rumblings of local discontent aimed at trees are from the 1950s. Since then there are few breaks in the historical record of angst over the grass-tree issue. Like the evolution of a biological system, the story has moved from a “rancher only” problem along a trajectory with stimulating additions always moving toward greater complexity. So now we have a mix of rancher/hunter/naturalist/environmental/municipal/soft-hard recreational/timber licensee and government agency stakeholder participants (whew!) all feeling entitled to play in the resource management sandbox, some feeling more entitled than others, I might add.

Where has all this led us? As someone said, “after all is said and done, there's a lot more said than done” and that was the case for years. Beginning in 1996 a “restoration” program commenced in the Trench which to date has treated, under the aegis of the Trench Ecosystem Restoration Steering Committee, about 10,000 hectares. The thing that seems to impress people from outside is the fact that fire is now being used in a substantial way. I like to think that locally, prescribed fire is now considered normal business.

One of the key social issues that ecosystem restoration needed to address in the Trench was the rancher/wildlife problem. Sadly, this opportunity has been missed to a large degree. A private land game fencing program is now underway on farms and ranches in the Trench. How quickly grassland restoration can be fast tracked, as an alternative to fencing, and how much rancher/wildlife conflict will be generated, remains to be seen. It appears that forest policy is the blockage that has effective action hobbled. We're looking for a hammer.

Maurice is a semi-retired rancher whose love of savannah grasslands developed at an early age. As coordinator for the Rocky Mountain Trench Natural Resources Society, he works for seven local organizations to influence restoration of ecosystems in the Columbia Valley. Maurice lives just south of Ta Ta Creek near Kimberley, BC. He can be reached at (250) 427-5200 or Highfieldranch@cyberlink.bc.ca

**A black bear forages in an aspen copse—
grassland interface. PHOTO BY LEANNE COLOMBO**



Garden Takes Root in the Columbia Valley

Hillary Page, University of Alberta/Ministry of Forests

There is a new garden in the Columbia Valley! The garden belongs to the Valley communities and is designed to reflect the history and diversity of the area.

Inspired by a keen interest in botanical gardens and gardening, environmental concerns and several energetic individuals, the concept of the Columbia Valley Botanical Gardens (CVBG) was formed. The goal of the CVBG is to create a series of gardens, plantings and outreach programs throughout the Columbia Valley that will link residents and visitors to the local environment and history. The first step in this process was to create a garden in Invermere with several different plantings (e.g., native planting, historical herbs, vegetables) that will serve to reflect this goal in an aesthetic and accessible setting.

An integral component of the CVBG is the native plant garden and grassland protection

program. A native plant garden was established last year containing plants native to the Columbia Valley grasslands. The native plant garden is intended as an educational tool for the public and also as a tool to garner support for outreach activities such as the plant rescue program and grassland restoration research.

The plant rescue program aims to protect individual plants or groups of plants that are threatened by development. The plants will be held in a nursery until a suitable site is found for transplantation.

Additionally, the CVBG aims to initiate and contribute to research related to restoration and protection of the surrounding grasslands. The CVBG is currently supporting research examining the use of bunchgrass plugs to restore degraded grasslands. We hope to expand our research program to include large-scale restora-



Invermere Botanical Garden.

PHOTO BY DAVE ZEHNDER

tion projects. Together these programs aim to celebrate and protect our unique grasslands while providing educational and recreational opportunities. For more information contact David Zehnder (250) 342-6781.

Hillary is a graduate student at the University of Alberta working on her Master's thesis in partnership with the Ministry of Forests. Prior to graduate school, she worked in the East and West Kootenay Valleys as a student biologist and contractor.

Sustaining Healthy Grasslands Symposium: Species and Spaces at Risk

Taylor Zeeg, Grasslands Conservation Council of British Columbia

On June 14th and 15th, 140 grassland enthusiasts gathered in Cranbrook, BC to partake in a wonderful two-day event dedicated to healthy grasslands. The focus of this year's Sustaining Healthy Grasslands Symposium was "Species and Spaces at Risk," hosted by the Grasslands Conservation Council of British Columbia. The enthusiasm was overwhelming as participants from all over BC listened attentively to over 25 speakers address one of the province's most pressing issues: the many threats facing BC's most endangered ecosystem: grasslands.

Talks ranged from a fascinating historical perspective on the East Kootenay grasslands by paleobotanist, Wayne Choquette, to an overview on the passing of federal legislation on species at risk by Michael Dunn of the Canadian Wildlife Service, and a key presentation from Dave Fraser of the Ministry of Water, Land and Air Protection on the status of BC's species at risk policy and programs. Speakers from private business; non-government organizations; provincial, federal and municipal government agencies; and First Nations groups all offered

valuable perspectives on how to conserve grassland habitats for species at risk in BC.

But it wasn't all talk, talk, talk. Participants were treated to several amazing field tours in the East Kootenay grasslands. The first of three tours, organized and hosted by Gary Tipper and Kathleen Sheppard, included a walk through the Wycliffe Wildlife Corridor. Guests experienced the grandeur of these unique grasslands knowing that this area would be protected for a long time as it is now in the care of The Land Conservancy of BC. On Saturday afternoon, Don Gayton led a three-stop tour on the outskirts of Cranbrook to show participants the threats, the demise, and the hope for grasslands in this area. On Sunday, Don once again led grasslanders along the east side of Columbia Lake for an all-day excursion and immersion in the Trench grasslands.

As Bob Peart, Past Chair of the GCC, often says in regard to grasslands, "this is an important conversation, and one we must continue to have." After such an energetic event as this one, rest assured, this conversation will continue to

take place in every corner as the Grasslands Conservation Council tackles difficult policy issues, promotes conservation on the ground, and continues to inventory BC's grasslands.



Grassland guide, Don Gayton, talks with Ian Parfitt and Don Thompson on Saturday's field tour at Wycliffe Wildlife Corridor.

PHOTO BY JUDY HARRIS



Despite its enticing colours, Dalmatian toadflax is a grave threat to the grasslands.

PHOTO BY BOB NEEDHAM

Weeds 'Catch a Lift' with ATVs

Edi Torrans, Southern Interior Weed Management Committee

There's no doubt about it: recreational use of off-road vehicles is increasing.

The rise in popularity of off-road vehicles creates increased pressure on the land base and causes concern for many agricultural producers and resource managers. One of the primary concerns relating to this issue is the invasion of noxious weeds. The spread of noxious and invasive weeds is one of the most serious threats to native plant communities in British Columbia. Once established, weeds can have devastating impacts on the diversity of natural resources, wildlife habitat, recreational opportunities, and agricultural production. Significant amounts of money and resources go to managing weed infestations; therefore, it is vitally important that our efforts protect areas that are not already infested.

Many causes of the spread of noxious and invasive weeds are directly related to human activity, and off-road vehicle use is no exception. Of particular concern is the ability for ATVs to travel off road, damaging areas that are not accessible by other vehicles. As mineral soil is exposed and native plants are destroyed by off-roaders, there is increased potential for weed invasion. When they depart from established trails, trucks, snowmobiles and ATVs pick up seeds and whole plants and carry them into exposed areas, acting as vectors for the spread of noxious weeds. Furthermore, ATVs and other off-road vehicles have the potential to spread noxious weeds and invasive plants over a wide area in only a few hours. Once established, these weeds can displace native plants and alter entire ecosystems. Some of the observed results can be reduced forage for wildlife and livestock, decreased biodiversity, soil erosion, diminished aesthetics, refused access to recreation areas, as well as

increased costs for maintaining resources.

It is important that all those recreating on the landscape understand the impact of their activities on the environment. The Southern Interior Weed Management Committee is dedicated to educating resource users and the general public about the threat of noxious weed invasion and what they can do to help. A more knowledgeable public can reduce the movement and spread of non-native plant species, thereby reducing the time and dollars required to locate and control new or increasing weed infestations. Furthermore, those recreating on the landscape can take an active part in locating and identifying new weed infestations. In this way, they would be assisting land managers so that together we can protect our valuable resources from the spread of noxious weeds.

The Southern Interior Weed Management Committee is a local charity comprised of volunteer members representing private and public agencies, clubs and organizations. Members are dedicated to increasing awareness of the threat of noxious and invasive weeds to the resources of British Columbia. Please Contact the Committee member in your area for more information:

Edi Torrans, Southern Interior Weed Management Committee, (250) 851-1699, etorrans@uniserve.com

Lisa Scott, South Okanagan Weed Committee, (250) 404-0115, lscott@vip.net

Barb Stewart, Boundary Weed Committee, (250) 446-2232, bstewart@look.ca

Kevin Patterson, East Kootenay Weed Committee, (250) 417-6796, patterson@rockies.net



Jeep stuck in unauthorized mudbogging area, Cranbrook Community Forest.

PHOTO BY NEIL SHUTTLEWORTH, MOF

Off-Road Mud Bogging is Fun...But!

Brad Arner, Manager, Conservation Programs of Canadian Intermountain, Ducks Unlimited Canada

Off-road travel, whether by ATV, dirt bike, 4x4 or dune buggy, is a popular and exhilarating pastime for many people. It's a quick way to get to remote, scenic places that you wouldn't normally be able to access. Unfortunately, travel by off-road vehicle can also impact the very natural beauty that many go off-road to see. Their small size and ability to get too close to, and into, water is both a benefit and a bane.

Wetlands are one of the most critical and diverse habitat types, especially in the semi-arid climate of the Southern Interior. Wildlife in this region is attracted to

the water, lush vegetation and food that the sparse wetlands provide. The impact of vehicles on wetlands and the wildlife that depend on them can be direct by rutting the streams that flow in and out of them and changing the flow and water level, silting the water and killing the vegetation. The loud noise and close proximity of vehicles can disturb wildlife that depend on remote places for nesting, feeding and resting. If disturbed too often, a bird will abandon its nest or leave it more frequently, making it easier for predators to take advan-

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If the Grass was Hurtin', He was Hurtin'

Profile of Mike Ferguson, Cowboss of Douglas Lake Ranch (1918–1987)

Kathy McCauley, BA, BED, Freelance Journalist



Mike Ferguson, Douglas Lake Ranch cowboss for almost 40 years.

PHOTO COURTESY OF THE
BC COWBOY HALL OF FAME

“Legend in his own time,” and “first class cowman,” are just two of the phrases used to describe Mike Ferguson, Douglas Lake Ranch cowboss for thirty-eight years. Famous for his horsemanship, marksmanship, and infallible ability to sort cattle, he was also a superb rangeland manager. While Mike was cowboss at Douglas Lake, although the land base never changed, the size of the herd more than doubled during his reign, proof of his ability to grow grass.

Like any good cowman, Mike knew that the quality of the range determined the weight of his calves at market time, and he knew exactly how to get the most efficient return from his effort. His prodigious memory, decades of experience, meticulous attention to detail, and intuitive understanding of the principles of land stewardship gave him all the tools he needed to get the best from the verdant hillsides of the Nicola Valley ranch. All of the effort was motivated by a fierce passion for grass.

Notorious for his brazen ways, and known as the toughest man on the ranch, if not in the entire region, there is no end to the stories still told about Mike Ferguson around the campfires. None of these pertain to grass, though, since growing it is, more than anything else, a matter of consistent stewardship performed over the long haul. Cowboss from 1951 to 1989, Mike was part of a solid tradition of sustainable rangeland management on Douglas Lake Ranch. He and men like Brian Chance, general manager from 1940 to '67, and Neil Wooliams, manager from 1967 to '84, believed in the same fundamental principles of effective management: keep the cows moving so no more than forty percent of the grass was eaten, the right amount of grazing at the right time according to species and conditions, and vigilant control of noxious weeds.

Yet, within this system, flexibility was also essential. As cowboss, Mike responded to changing daily conditions of weather and practiced constant range assessment and monitoring; hence, the day's plan was never determined ahead of time, but was calculated on the spot. “Every morning when the cowhands were having breakfast” says his son Pat, who worked as a cowhand on the ranch when he was a youth, “my father would sit at the end of the table in silence. He was in deep thought, but when he spoke, his words were loaded. He'd ask the crew questions about the range or cattle, then he'd give us the plan for the day. We never knew 'til that moment the work

that each day would bring. At the end of a day, the cowboys would be all played out, but my father would ride off again alone to check more of the range.”

The sheer immensity of the grazing area of Douglas Lake Ranch, nearly a half million acres ranging in elevation from 2000 to 7000 feet, was both an advantage and a disadvantage in range management. Moving the cowherd of up to eleven thousand head over the range at exactly the right times to accommodate the grass required incredible planning and flexibility. Yet, ironically, it was precisely because the ranch was so huge and the grass so varied that there was always a place for the cattle to go.

“I keep the cows movin'. I don't want the range all chewed up,” the man of few words was quoted as saying. The strategies he used to accomplish that included 1,000 miles of fencing that divided the ranch into pastures based on vegetation type. Dry bunchgrass ranges were suitable for winter or early spring grazing, while higher elevation bunchgrass was reserved for late spring and fall. He forced the cows to move not only between different ranges but also around the perimeter of designated areas by strategically planning the location of salt blocks and water access.

Mike protected the range from the invasion of noxious weeds by insisting that gates were kept locked and people, vehicles and stray horses were kept out so they couldn't compact the soil and spread weed seeds. “He carried on a constant war with knapweed and burdock,” remembers Pat Ferguson. “He'd ride the range continually, not only checking its condition, but also searching for noxious weeds. He'd mark them and send out crews to get rid of them.” Furthermore, Mike made sure that every cowboy who rode for him knew the value of the grass; he'd fire a man on the spot if he found out he passed a weed and left it standing.

“He was proud of his cows and his horses, but most of all, he was proud of his grass. It was his biggest worry because he knew it was the key to the operation,” remembers his son. “If spring rains were late, and the grass was hurtin', he was hurtin'. But once they came, and the grass was fine, he was fine.”

Kathy McCauley, BA, BED, is a writer and teacher who lives in the East Kootenay grasslands. You can reach her at mccpress@cintek.com

The Long-billed Curlew

Penny Ohanjanian, MSc, RPBio

A long-billed curlew strides across the grassland, her long beak moving quickly from left to right in search of her favourite prey—grasshoppers, beetles and spiders. This species, the largest member of the sandpiper family, is found in the southern Interior of British Columbia, in open grasslands from 280 to 1220 metres in elevation. Its distinguishing feature is its very long bill (up to 19.5 cm for females and 14.0 cm for males). This, coupled with long legs, a brown, mottled plumage and cinnamon feathers under the wings make the long-billed curlew a very conspicuous and striking bird.

Historically, numbers of long-billed curlew have decreased in the United States and Canada during the last century. In Canada, the long-billed curlew no longer breeds in southern Manitoba, and areas of its historic range in southeastern Saskatchewan are no longer occupied. In British Columbia, breeding areas are scattered from Lillooet north to 40 km south of Quesnel, in the Chilcotin west to Alexis Creek, in the North and South Okanagan, the lower Similkameen Valley, the Thompson-Nicola, at McBride and in the East Kootenay Trench. It is on the BC government's "Blue List" of vulnerable species.

Long-billed curlews are only in British Columbia during the breeding season, from late March until late July and early August. They then return to wintering grounds in central and coastal California, along the Gulf Coast, in Mexico and in Venezuela.

Long-billed curlews first breed at 2 to 3 years (females) and 3 to 4 years (males). They mate for life and return to the same nesting territory each year. Territories vary in size from 12 to 167 hectares in size and the birds defend them from other long-billed curlews that may try to occupy them. Males, especially those without mates, perform undulating flight displays (UFDs) flying steeply up and then gliding down in a zig-zag pattern. Nests are a simple, shallow scrape on the ground that may be lined with grass, twigs, small stones and dry manure. Four olive-buff coloured eggs with brown blotches are laid, and both parents take turns incubating. Chicks hatch in about 28 days and follow their parents about the grasslands, feeding primarily on grasshoppers. Predators of nests or chicks include coyotes, long-tailed weasels, badgers, magpies, ravens, dogs, and cats. If nests are lost, adults do not usually re-nest.

Long-billed curlews have evolved a system of group defense against predators. When an intruder comes near a brood, the parents give off a sharp series of alarm calls. When the chicks hear these calls they freeze—standing motionless and depending on their camouflage to keep them from being seen. Meanwhile, neighbouring adults hear the calls and fly in to help the besieged pair. Together they co-operatively mob the predator, chasing after the intruder. Long-billed curlews may mob humans as well. At this time they are very vulnerable as they approach people and vehicles quite closely.



Long-billed curlews breed in grassland areas with maximum visibility. They need large contiguous openings, and avoid forest and shrub communities. During egg-laying and incubation, they prefer areas with low vegetation (<10 cm tall). During brood-rearing, higher vegetation (up to 30 cm) may be used, and tall grass clumps, spaced apart at irregular intervals provide hiding places and shade for chicks. Stands of grass, alfalfa or other plants that are too thick and dense, hinder chick movements and are not suitable for long-billed curlews.

Long-billed curlews occupy grasslands—Canada's most endangered ecosystem. Agricultural conversion, urban expansion, subdivision and forest encroachment all have a negative effect on grasslands, and therefore on curlews. Urban development in and around grasslands not only reduces the amount of habitat available for long-billed curlews, but also introduces predators, such as cats and dogs. Fire suppression has, in many areas of the province, allowed trees to encroach on grasslands, changing these fire-dependent ecosystems into forests.

Because long-billed curlews prefer low vegetation, they are compatible with cattle grazing. In fact, cattle can be used in the fall to lower grass height on nesting areas, thus making them attractive for the birds when they return the following spring. Trampling of nests by cattle can pose a threat, however, if they are concentrated too heavily in a nesting area during the incubation period.

Human disturbance is a major threat to long-billed curlews in some locations. Incubating adults may be flushed off nests, leaving their eggs vulnerable to predators. Developing chick embryos will die if they become overheated by the sun while adults are off the nest. Adult alarm calls directed at humans, may attract ravens or other predators to undefended chicks. Off-road vehicles can physically degrade the range quality and introduce noxious weeds to the grasslands. They can also cause direct mortality by running over nests or chicks.

Join in the conservation and stewardship of our grasslands and learn more about the long-billed curlew and its requirements to aid in the development of appropriate land management practices in long-billed curlew nesting areas.

Penny completed her MSc (SFU) on red-necked grebes (in wetlands not grasslands) and has run a biological consulting business in the Kootenays since 1985. She specializes in red- and blue-listed birds and amphibians, and lives on a farm near Kimberley, BC. You can contact Penny at pohan@cyberlink.bc.ca

ABOVE: Long-billed curlew. ILLUSTRATION BY DONNA FALAT

The Chocolate Lily

Peggy Broad, The University College of the Cariboo



Chocolate lily.
PHOTO BY RON LONG

If you've ever smelled the flowers of the chocolate lily you'd probably wonder how anyone ever discovered the edibility of their roots!

The summer season is a time when walks in our grasslands allow us to enjoy some of the most spectacular blooms imaginable. It would be almost impossible to choose a favorite grassland flower at this time of year since there are so many with both beauty and a unique nature. The chocolate lily, or *Fritillaria lanceolata*, is certainly no exception.

Chocolate lilies can generally be found blooming in June or July depending on the weather and the elevation. These plants enjoy rich grassland soils and Native Canadians traditionally harvested the bulbs for food in the early spring through late summer. If you examine the bulbs you will see where the alternate name “rice-root” originated. Numerous bulblets are commonly found around the mother bulb that appear somewhat like rice grains. This method of vegetative reproduction helps to ensure propagation even if the bulbs are harvested before the plant has a chance to set seed.

If you've ever smelled the flowers of the chocolate lily you'd probably wonder how anyone ever discovered the edibility of their roots! The flowers themselves smell quite foul, like rotting meat, in order to attract flies: chocolate lily flowers depend on flies rather than honeybees and other insects for pollination. The lilies are generally grouped in twos or threes per stem and hang like a bell, a position ideal for drawing the flies inside and allowing them to be coated with pollen. The flies are then fooled by the unattractive scent of the next flower, and voila!, fertilization occurs. Even though the flowers of the chocolate lily hang from the plant like a bell, once the seeds are fertilized the maturing capsules of this remarkable plant orient themselves in an upright position.

The colour of this flower is also quite unique. You may hear the name chocolate lily and think a brown flower sounds rather drab. This flower is anything but drab upon close inspection! Each darkly colored sepal and petal of the flower is flecked with green and yellow spots and in the sunlight this flower takes on an incredible deep burgundy reflection. The center of the chocolate lily is filled with brightly coloured golden yellow stamens that only add to its character. If you do discover what you believe to be a “spotless chocolate lily” with a slightly more compact flower you have probably come across one of the northern rice-root lilies known as *Fritillaria camschatcensis*. Northern rice-root has been known to live in conjunction with the chocolate lily throughout BC's grasslands.

One of the problems facing many grassland flowers today is the ever-growing popularity of using these remarkable plants horticulturally. Taking plants from nature can result in a number of unintended side effects, especially in grassland environments. Grassland soils are covered with a very thin layer known as a cryptogamic crust and when disturbed it leaves an area open to invasion by the seeds of non-native species. Creating native gardens in the home environment is, however, a great way to develop a lasting appreciation for grassland species and awareness for species some people might otherwise never see. Chocolate lilies offer a great compromise. This particular species (sometimes labelled as *Fritillaria affinis*) is often found growing in specialty nurseries and garden centers as a unique specimen plant for homeowners to purchase and treasure as a part of their own native grassland garden creations.

Many of the non-native species invading our grasslands today were at one time popular home garden flower specimens that escaped into adjacent grassland areas. For example, most of us have heard of spotted knapweed, or *Centaurea maculosa*, which was often grown in the flower beds of homes adjacent to grassland areas and is now a very common noxious weed. Well, here is an interesting concept: perhaps managing our native plant home gardens with purchased species like the chocolate lily could result in fewer non-native plants escaping into adjacent grassland areas from our home gardens. Maybe keeping up with fashionable modern trends towards creating low-maintenance, native xeriscape gardens could possibly even benefit our grassland areas someday.

Enjoy the chocolate lily in its natural environment this year whether it is for the very first time or a yearly event that you partake in, and remember what a wonderful and unique plant this really is. If you are an avid gardener and are trying to keep up with the popular trend towards creating your own native xeriscape garden, get out to your local nursery centres and look for the chocolate lily, you never know what might come of having this beautiful plant in your own home garden.

Peggy graduated from UBC in Forest Sciences, becoming interested in grasslands through her overall infatuation with plants and ecology. She now teaches range and forestry classes at the University College of the Cariboo in Kamloops. You can reach Peggy at pbroad@cariboo.bc.ca

ATVs: At Home on the Range?

David Borth and Elaine Russell, BC Cattlemen's Association

Used everyday on a ranch to check cows, change irrigation and simply get the mail, all terrain vehicles seem like a handy tool. But like any tool, if used without caution, they are dangerous. In this spirit, the British Columbia Cattlemen's Association (BCCA) supports measures to reduce the impact of ATVs on rangeland in this province.

Many cattlemen in BC make use of grasslands for early summer pasture and knowing the right time to turn cattle out onto these early ranges can be an art.

Producers take time to consider the amount of moisture and grass available before putting their livestock onto range, and working to maintain the healthy condition of these rangelands is a priority. Their livelihoods rely on access to these ranges and they spend countless

hours making sure that the animals are making the best use of it without over-using the resource.

That is why when ranchers find areas that have been damaged through careless use of ATVs, they are equally as upset as any grassland conservationist would be. The impact of motorized recreation is immediately visible on the grasslands, but the after-effects have far greater impact. The threat of noxious and invasive weeds is real and contributes to the loss of biodiversity on the grasslands resulting in loss of habitat for threatened species.

The BCCA supports a three-pronged approach to the problem of damage to sensitive rangelands.

First, the BCCA agrees with the Grasslands Conservation Council's call for mandatory ATV licensing. ATVs are another piece of necessary ranch equipment and licensing may be a hassle for our members but if it assists in protecting the resource and provides a means to deal with offensive ATV use, then we feel licensing is worthwhile and encourage ranchers to support it.

Second, the BC Cattlemen's Association believes that regulations prohibiting damage to grasslands are also necessary in order to really deter potential offenders. Landowners are disheartened to find rangeland degraded by careless off-road activity, yet when the damage is reported it is even more frustrating to find that no ministry has the authority to deal with the problem. Authorities need to have more explicit regulations than the public mischief or damage to public property provision currently in the law.

Third, continued education about grasslands and the use of ATVs is essential. Education campaigns should be targeted not only to the general public and purchasers of ATVs but also to the manufacturers, advertisers and dealerships that currently highlight reckless use. We believe these people also have a role in promoting responsible motorized recreation.

Cattlemen are ATV users and rely on healthy grasslands for their livelihood. Our industry sees a role for us to advocate for licensing, work with groups like the GCC, and lead by good example. Ranchers recognize their responsibility to protect grasslands through practicing good stewardship. In addition to working to establish a provincial ingrowth and encroachment strategy and providing support to regional weed management committees, it is our expectation that combining efforts with the Grasslands Conservation Council will lead to the protection of grasslands, rare species and the beef cattle industry's access to valuable resources.



Moving cattle at Alkali Lake Ranch. PHOTO BY LIZ TWAN

Message from the Executive Director from page 3

As a result of this process, the Canadian Parks and Wilderness Society in partnership with West Coast Environmental Law, commissioned an inter-jurisdictional analysis and developed *Alternatives for Regulation of All-Terrain Vehicles in BC* (Susan Rutherford, July 2001). The outcome of this paper is presented on page 8.

There is tremendous support provincially to resolve this issue. Potential solutions have been explored and

there is a willingness from government, industry and non-government organizations to establish partnerships. It is imperative that we establish a proactive and collaborative process between stakeholders and government to develop a system for registration and licensing, and develop a plan to improve the management of ATV use in BC. We need collaboration. We need innovative solutions. And we need to act NOW.

Lack of ATV Licensing Can No Longer Be Ignored

Taylor Zeeg, Grasslands Conservation Council of British Columbia



PHOTO BY LEANNE COLOMBO

“All in itself licensing will not solve the problem,” said Voth. “What you have to do is change people’s attitudes towards the protection of the grasslands. We have to educate people.”

To the ignorant ATVer, climbing a steep, grassland hillside is nothing more than a test of mettle, an object to conquer between rival egos, or just a friendly game between riding buddies.

Unfortunately, the challenge to conquer the land is a game with everlasting consequences in BC. Irresponsible off-road riders are damaging sensitive areas, especially wetlands and grasslands, and giving all ATVers a bad name.

But there is a remedy: licensing all off-road recreational vehicles so those who ride in closed areas and on private land can be reprimanded for their actions.

“The key issue for us and many groups is that ATVs and motorbikes do not require registration or a license for operation, so conservation officers, the general public and ATV groups have no effective means to address inappropriate use of ATVs on crown or private land,” said Bruno Delesalle, executive director of the Grasslands Conservation Council of B.C.

The GCC is one of 11 organizations trying to get ATVs legislated under the Motor Vehicle (All Terrain) Act.

The original act, passed in the 1970s, was intended mostly for snowmobiles. All terrain vehicles were just starting to come out on the market, so it was expected the legislation would be revisited later to include ATVs. But this never happened. The result, many years later, is a rising number of ATV users, but no legislation to cover them.

Bruce Voth is a senior conservation officer for the Ministry of Water, Land and Air protection. During his 30 years enforcing environmental regulations in BC he’s seen a marked increase in all terrain vehicle use.

“In 1974 there were virtually no ATVs. In the ’80s they started to come on the market. By the ’90s there was a big influx of ATVs of all shapes and descriptions,” said Voth.

As it stands now, there is usually very little conservation officers can do when they hear about someone riding in a closed area, “but if they had a sticker (licenses) . . . we could track them down,” Voth said.

Unfortunately, a few irresponsible users are giving all users a bad name. Like Bev Felske, president of the BC ATV association, most ride with respect and care for nature.

“We are environmentalists,” said Felske. “And most of us are old-age pensioners and we can’t walk or hike, so the only way we can enjoy the outdoors is on a motorized recreational vehicle.”

Felske agrees that licensing would be a good thing as long as a portion of the fees is returned to the ATV association.

“The only way to get ATVers to go along with another tax is to have the provincial body educate them that this is a good thing because we’ll get a rebate and (that registration) is an effective means of tracking stolen ATVs,” said Felske.

There is unequivocal agreement that licensing ATVs would be a good thing, but currently there is a missing participant.

“This process has been going on for 23 years. BC is the only jurisdiction that hasn’t done anything about ATV licensing in dealing with the ATV issue. It all gets down to who’s going to administer the new legislation,” said Delesalle.

Presently, the Ministry of Sustainable Resource Management is handling the registration of snowmobiles, but snowmobiles already have legislation in place.

“It’s very specific to snowmobiles at this point. We know there are issues with ATVs that we’re hoping to get to, but at this point our focus is on snowmobiles,” said Brenda Hartley, planner at the Ministry of Sustainable Resource Management.

“At this point a lot of it is a jurisdictional issue. Whose ministry does this belong to? Who’s really on the hook to get this solved?” said Hartley.

With all the recent shuffling in the provincial government, it’s unlikely the problem will be dealt with soon. And even if there were legislation implemented, it may not be the end of the problem.

“All in itself licensing will not solve the problem,” said Voth. “What you have to do is change people’s attitudes towards the protection of the grasslands. We have to educate people,” said the veteran conservation officer.

Voth believes the education of all terrain vehicle users begins early: “You start with children at school. You go to kids who are just getting into their dirt bikes. If you make a hit with half those kids, you’ve done something.”

Between the 1300-member BC ATV association, conservation officers, and groups like the Grasslands Conservation Council, an education program could be implemented.

“The common ground is there. We want identification and we want to see education be a priority in anything that’s done,” Delesalle said.

You can reach Taylor at taylor.zeeg@bcgrasslands.org

Guichons Win Environmental Award

Elaine Russell, BC Cattlemen's Association



Judy Guichon and daughter, Allison, accept the Environmental Stewardship Award, presented by Bob Mitchell of the Bank of Montreal and Agnes Jackson, President of the BC Cattlemen's Association.

PHOTO BY KAREN MCKEAN

Gerard Guichon Ranch Ltd. of Merritt, BC was awarded the BC Cattlemen's Association Environmental Stewardship Award in Dawson Creek in early June as part of the 74th BCCA Annual General Meeting.

Nominated for their stewardship practices and involvement with the community to promote sound resource management, the Guichons' contributions were recognized in the nomination by Doug and Marie Mervyn. The Guichons' unique multi-purpose duck ponds, successful short duration grazing system, assistance with the Burrowing Owl Recovery program and their support in conserving BC's grasslands through sustainable ranching were all mentioned as significant stewardship efforts.

"My late husband, Laurie, and I had a vision of leaving the land in better shape than when we started," said Judy Guichon, ranch owner. The generous show of support from fellow cattlemen, conservation groups and wildlife biologists for the Guichons' nomination clearly shows that the family is achieving their goals.

Agnes Jackson, BC Cattlemen's newly elected President feels, "they are visionary. Before many ranchers, Judy and Laurie saw the advantage of stewardship. They brought people together to appreciate ranching and the environment."

Winners of each provincial award are nominated for the Canadian

Cattlemen's Association National Environmental Stewardship Award to be awarded later this year in Winnipeg. "We believe that the [Guichons'] long history of stewardship practices offers a good chance of winning the National Environment Stewardship Award," explains BC Cattlemen's Association General Manager, David Borth.

Congratulations to the Guichons.

Dear Members...

As the GCC continue to grow, so do the services it provides to its members. It was decided at the June 2002 AGM that the current membership fee of \$20 is too low, so as of January 1, 2003 the new GCC membership fee for an individual will be \$30. The corporate membership fee will remain at \$250. The GCC feels this is fair and hopes to continue to garner support from its members for the many grassland conservation initiatives we've undertaken. Thank you.

Tony Barrett: Conservationist and Friend of the GCC

July 4, 1946 – March 4, 2002

As a member of the GCC since 1999, Tony Barrett believed in, and donated generously toward, the Council and its goal to conserve BC's grasslands.

An environmental advocate since the early 1970s, Tony co-founded the Pollution Probe, the Canadian Environmental Law Association and the Non-Smoker's Rights Association, and received the White Owl Award as Canadian conservationist of the year in 1975.

While living in Toronto and doing business there for 20 years, Tony started two environmental services firms, worked for a merchant bank subsidiary of Richardson Greenshields, and served as the chief financial officer of World Wildlife Fund Canada.

In 1995 he moved to Vancouver, British Columbia to work as a consultant in conservation finance. While there, Tony served on the Board of Directors at BC Spaces for Nature as well as helped to co-ordinate the Vancouver Island Marmot Recovery Program. One of the program's greatest achievements was the completion of the Marmot Recovery Centre on Mt. Washington, Vancouver Island, a protected habitat for marmots. The centre was named after Tony in honour of his commitment and hard work.

Despite the demand of the many projects he participated in, Tony felt it important to be a part of the grassland community, and we're the better for it!

"Tony's view of nature included the fact that humans live in it and inevitably influence it. Like other great environmentalists, Tony was also a great humanist."

—Linda Coady, at the memorial service for Tony Barrett



Fresh Faces and Old Friends on the Board of Directors

As part of this year's Annual General Meeting in Cranbrook, the GCC underwent changes to the Board of Directors. We're sad to see Bob Peart leave us as Chair of the Board; however, the GCC is extremely fortunate to have Kristi Iverson replace Bob. As Kristi said to Bob at the AGM, "you're leaving me a hot seat." There is no doubt Kristi will continue the legacy of strong stewardship values constantly employed by Bob Peart.

Jim White graciously agreed to remain on as Vice-chair in the interim until we find a new Vice-chair. The Vice-chair position requires a great deal of commitment and the GCC thanks Jim for hanging in there until the right person is found.

Judy Guichon, a long-standing Board member and rancher in the Nicola Valley, adopted the Treasurer's position. Judy's forte is financing, so the Council is thrilled that she offered her service. Stepping down from the Treasurer's position is Dennis Lloyd. Thankfully, Dennis agreed to remain on as Director of the Executive Committee.

Nichola Walkden will continue to volunteer countless hours as Secretary of both the Executive Committee and the Board of Directors. With all the great work Nichola does around the province with The Land Conservancy of BC, the GCC is grateful she finds time to sit on the Board.

Remaining on the Executive Committee is Cindy Haddow and Dr. Michael Pitt. Also, as a show of goodwill, Bob Peart has agreed to make himself available to the new Board



Bruno Delesalle and Kristi Iverson address the crowd in Cranbrook.

PHOTO BY BOB SCHEER

of Directors by offering his name to the title of Past Chair. This position is non-committal, but preserves the tie between Bob and the GCC—a very generous gesture by Bob Peart.

The GCC wishes to thank all of the new and long-standing Board members and is happy to present the 2002–2003 Board of Directors: Ian Barnett, Wendy Gardner, Katherine Gizikoff, Maurice Hansen, Bob Scheer, Darrel Smith, Ordell Steen, Bill Stewart, Greg Tegart, Gary Tipper, Bill Turner, Dave Zehnder.

With the arrival of new faces comes the departure of several long-standing Board members. The GCC wishes to offer thanks and sincere appreciation for all the hard work offered over the years by departing Board members Alf Bawtree, Phil Youwe, Michael Kennedy and Tom Dickinson.

A Tribute to Lloyd Hayward

1917–2002

Mr. Lloyd Hayward, a well-known Kamloops area sheep and cattle rancher and friend of the Grasslands Conservation Council, passed away peacefully at his Kamloops home on March 6, 2002. He was 84 years old.

Born in Vermillion, Alberta, Lloyd was only a small boy when his family loaded up their entire herd of sheep into railcars and migrated to Ashcroft, BC. For the next fifty years, the Haywards would own and lease several ranches in the Pavilion and Walhachin areas, finally settling on a ranch in Westsyde where they grew hay and grazed sheep in the Lac du Bois range north of Kamloops.

Over the years, Lloyd and his father expanded their holdings to become one of the largest sheep operations in Canada with an average count of about 4,000 ewes. In 1965 after the sheep market gave out, Lloyd made the transition into real estate and cattle ranching, always remaining active in the ranching community as president of the Tranquille Livestock Association for many years.

According to his wife, Ruth, Lloyd loved to get up each day and do "a good day's work, sometimes two days in one!"

Perhaps the best testament to his life was his own, gratuitous admission: "I'm going to die with my boots on!"

Lloyd will be missed by the entire grassland community.



Call for Members

As a member, you are the driving force behind much of the Council's success. And for this reason, we need your help in attracting new members to our small but growing team. Currently, the GCC has 115 members with more donors than we've ever had. We think this is great, but we've set our sights even higher: 250 members by the end of 2002! Join in the effort to conserve BC's precious grasslands by joining the GCC today or, if you've already joined, by passing on a membership coupon to a friend.

Membership Renewals

Am I still a member? Have I renewed my membership for this year? In response to these popular questions, we're posting past and current membership names on our website. You can find out if you've renewed or not by going to www.bcgrasslands.org and clicking "Partners in Conservation," then "Members."

Grasslands Mapping a Hot Commodity

Ryan Holmes, GIS Analyst, Grasslands Conservation Council of British Columbia



Historical mapping will allow the GCC to examine the threat of urbanization and analyze trends such as the growth of Kamloops into its neighboring grassland hills. PHOTO BY RYAN HOLMES

If grassland maps were on the market today, you'd be wise to invest. While the Canadian dollar slumps and the value of softwood depreciates, grasslands mapping soars in worth. Government agencies, non-government organizations, and individuals involved in grasslands education, research, monitoring, conservation and stewardship are all coming to realize the value of the GCC's mapping work.

The BC Grasslands Mapping Project enters its third year of the four-year project plan and there has been much progress to date. Base grassland ecosystems mapping at the 1:20000 map scale is now complete for over 95% of BC's grasslands. To verify accurate mapping, the Project team travelled from Kamloops to the Cariboo, up to Prince George, and finally

into the East Kootenay Trench for discussions with key grassland and range experts. This verification process has not only helped us to arrive at a consistent and accurate mapping product, but it has also served as a key part of the Project's communication and extension work. Furthermore, with the establishment of Regional Technical Committees, we are witnessing increased discussion on grassland issues among individuals in different branches of government. The word is out, and grasslands are gaining the popularity they merit.

There is much to be done as the Project team moves into the third year of grasslands mapping. With base mapping now complete, land status and range tenure data can be incorporated, providing detailed information for an accurate assessment of the land status of BC's grasslands. The Project team has already conducted preliminary analyses on the land status of grasslands in the Kamloops region, and there are some alarming figures. For example, 50% of the Kamloops region grasslands are privately owned, while only 5% of these endangered ecosystems are protected. In fact, in the Merritt District, a mere 0.2% of grasslands are protected!

Year Three work is also planned on another key layer of the Geographic Information System (GIS), namely the historical distribution of grasslands. Historical mapping will begin in the Natural Disturbance Type 4 (NDT4) valley bottoms, the traditional grasslands 'realm' as seen by most. With the native grasslands of these valley bottoms in the Okanagan, Thompson–Nicola, and East Kootenay Trench losing out to agricultural and urban development, a historical layer for comparison to look at trends and identify priority areas is vital.

With new funding partners and support from numerous groups and organizations, the Project team is feeling confident that this year will be a productive one. It's a good time to invest in grasslands mapping, the profits are sure to be huge.

For more information on the BC Grasslands Mapping Project, contact Ryan Holmes, GIS Co-ordinator at (250) 371-6209.

Lac du Bois Educational Kiosk Sign Unveiling Ceremony

On June 28, the Lac du Bois educational sign was unveiled with pomp and revelry. High profile figures, including Kamloops Mayor Mel Rothenburger, MLA Kevin Krueger, and MLA Claude Richmond all came out and said a few words to commemorate this special event.

After hearing from many prominent speakers, the crowd was treated to a fascinating walking tour of the Lac du Bois grasslands led by Frances Vyse. The tour provided an informal opportunity to discuss some of the key challenges facing grasslands as well as a chance to get out and enjoy this breathtaking area. Thank you Frances!

The sign was the product of two years of planning, research, design and fundraising on the part of the GCC and its project partners. It is our hope that the sign will educate and enlighten park visitors and grassland enthusiasts on the importance and diversity of grassland ecosystems. Judging by how well the sign was received at the ceremony, its success is inevitable.

You can view the sign at kilometre zero of Lac du Bois Road, Lac du Bois Protected Area, Kamloops, BC. See www.bcgrasslands.org for details and donors.



Frances Vyse addresses the Lac du Bois educational sign unveiling ceremony.

PHOTO BY TAYLOR ZEEG

For more information about these projects, please contact the GCC at (250)374-5787 or e-mail: gcc@bcgrasslands.org

An Update on the 2002 Fundraising Campaign

Mary Krupa, Fundraising Campaign Coordinator for the Grasslands Conservation Council

On behalf on the GCC Fundraising Committee, I would like to extend my foremost congratulations to the GCC for putting together another great edition of *BC Grasslands*. Projects such as the biannual newsletter are an important aspect of the GCC's objectives of promotion and education, and a critical voice for grasslands in this province.

I'm equally excited to announce that this year we've been able to put together a fundraising committee who will bring to the table some remarkable ideas and opinions about our current campaign. I'd like to recognize the following core members of our team; Brian Radford, Bob Haywood-Farmer, Bob Peart, Ian Barnett, Maurice Hansen, Dr. Bert Brink, Gary Runka, Dr. Geoff Scudder, Dick Cannings, Dave Chutter, Guy Rose, and Bruno Delesalle with numerous others volunteering their time and energy towards our campaign.

Currently, we are focusing on donations from corporations and individuals that have shown previous responsibility and involvement with grassland environments. In doing so, we hope to broaden the current base of reliable donors to facilitate both short and long-term growth of the Grasslands Conservation Council. Our goal this year is to raise \$100,000; this money will be put toward expanding a much-needed grasslands communication and education program, including educational public service announcements for TV and expanding the *BC Grasslands* website. Money raised will also assist the GCC to complete the mapping of the historical distribution of grasslands and initiate important work on grasslands monitoring.

GCC on WWW

The GCC has secured funding to expand www.bcgrasslands.org which will make it the most comprehensive one-stop source of grassland-related information in BC. Over the next

16 months, the GCC will be implementing Phase Two and Phase Three of its website development plan. The expansion entails additions like an "Understanding Grasslands" cross-section where visitors will be able to access a complete description and inventory of the species and types of grasslands found in BC.

Phase Three involves the development of an interactive map of the province. The map will contain statistics generated by the BC Grasslands Mapping Project, grasslands abundance and distribution, land status, and historical extent of grasslands in an informative and user-friendly style. This phase involves the development of a portal map from which users can access regional and district maps of relevant grassland areas throughout BC. Grassland enthusiasts will be able to locate grasslands and associated statistics for anywhere in BC!

Besides being the most comprehensive source of grasslands-related information in the province, the *BC Grasslands* website will provide key linkages to other grassland initiatives throughout Canada and the USA. It's amazing that in such a short time, the GCC is now able to provide information that is currently unavailable anywhere else!

The Pacific Northwest Weed Conference

The Pacific Northwest Weed Conference will bring together government agencies, land managers, scientists, politicians, environmental organizations and the interested public to review the social, ecological and economic impacts of weeds; and review management issues, operational control methods and new innovations in weed control.

As a prelude to the Pacific Northwest Weed Conference, the Fraser Basin Council took the lead in putting together a one-day regional workshop in Williams Lake on May 30, 2002, the focus of which was on the management of weeds. It was well organized and well attended by over 100 participants.

Building on the outcome of this workshop, the conference content and timing will be planned in accordance with a process that is being initiated in collaboration with the Fraser

Basin Council to facilitate discussion on a provincial weed management strategy for British Columbia. We anticipate the conference will be scheduled in 2003. For updates, see www.bcgrasslands.org

Hamilton Commonage Grassland Monitoring Project

The Hamilton Commonage Demonstration Project was initiated in 1998 to bring together environmental organizations, government agencies, ranchers and the Guichon Ranch in a joint effort to develop a range management strategy for the northwest quarter of the Hamilton Commonage that would maintain and enhance biological diversity and improve grassland and riparian condition. This process resulted in modifications to grazing management of the Hamilton grasslands. These alterations aim to improve grassland condition through changes in cattle distribution, and they have protected ecologically sensitive areas from grazing pressure altogether.

In order for the GCC to determine whether the changes in management are effectively moving us towards our goals, a long term monitoring program needs to be developed and implemented to provide baseline information and guidance for future changes in range management.

Consequently, since last fall the GCC has developed and submitted several funding proposals to initiate the second phase of this project: the Hamilton Commonage Monitoring Project.

The goals of this monitoring are to measure riparian and grassland recovery rates in new and old exclosures and to test and provide monitoring tools to ranchers and range managers. In this era of results-based management we want to be able to assess the results of existing range management practices or the results of changes in range management practices on the health of BC's grasslands.

The proposed project will establish a much needed long term monitoring strategy for the

Hamilton Commonage grasslands and complete baseline monitoring for the Hamilton Commonage Demonstration Project area. Utilizing the baseline monitoring at Hamilton Commonage, we propose to test less intensive monitoring methodologies to provide working monitoring methods to ranchers and range managers.

Grassland Research Centre at The University College of the Cariboo

The GCC has been involved in discussions with The University College of the Cariboo (UCC) about the development of a Grassland Research Centre to be based in Kamloops, BC. A proposal was prepared for the Canadian Foundation for Innovation for the building of the research centre, but unfortunately the proposal was not funded.

As a consolation, however, the UCC was successful in establishing a Research Chair in Landscape Ecology and Management. This is an interdisciplinary chair that will work with the Departments of Biology, Social and Environmental Studies and Natural Resource Sciences.

The partnerships formed for the original proposal (UCC, Agriculture Canada, the GCC and Ministry of Forests, among others) are all still intact. At a meeting held in February 2002, it was decided to take the original proposal, address the comments made by the Canadian Foundation for Innovation and pursue other funding opportunities. The establishment of the new Research Chair will help strengthen future proposals.

The Grassland Research Centre will be an on-campus institute dedicated to fostering research on BC grasslands. The Centre is a regional priority as the grassland ecosystem is both poorly understood and of great economic importance to BC. Research will incorporate the ecological and socio-economic values of BC's grasslands and the effect of multiple uses on the resources. For more information on this position contact Tom Dickinson at UCC (tdickinson@cariboo.bc.ca).

Preserving Working Ranches

Jim White, Acting Vice-chair, Grasslands Conservation Council of British Columbia

As approximately 60% of BC grasslands are privately owned, mostly by working ranches, the interests of all sectors of the GCC is closely linked with the future of ranching. Unfortunately, ranches in the best grasslands are under ever-increasing pressure to be sold for subdivision into recreational lots. For the last year, primarily due to the fact that there was a new government that was preoccupied with many other major issues, we have been unable to identify a clear path for the GCC to make constructive input towards a solution, other than helping to further raise the awareness of the problem. With the new government now settling in, the next year will likely be the time for major involvement of the GCC with government, ranchers, land trusts and other NGOs on this critical issue.

It seems that conservation covenants and purchases of development rights (PDRs) are the logical tools to offer to landowners, yet there seem to be significant obstacles that stand in the way. Recent changes to the functioning of the Land Reserve Commission (Bill 21) seem to help on one hand, yet to further hinder on the other.

The GCC will remain an active participant as this issue begins to unfold, focusing its energy on keeping working ranches working.



Cowboy moving cattle. PHOTO BY DON BLUMENAUER

Off-road Mud Bogging

from page 12

tage of the open nest. During feeding and resting, disturbed wildlife will expend valuable energy that they require for more critical times, such as winter and migration. Any one of these effects is reason enough to use off-road vehicles responsibly.

Off-road vehicles, like many of today's modern conveniences, can be beneficial if used wisely. ATVs such as quads are beneficial work vehicles and cause less ground disturbance than trucks or dirt bikes. Off-roading can be fun, if users stay to established trails, respect private land, and

when crossing water try to do so at bridges or culverts. If users have to cross in the water, it should be done slowly and where there is a firm rock bottom. Lastly, mufflers should be kept on. Remember: you're not the only "wild life" out there.

Brad Arner started with Ducks Unlimited as a habitat biologist in Central and Northern BC and is now Manager of Conservation Programs in the BC Interior. He lives with his family in Kamloops, British Columbia.

Recovery Strategy for Garry Oak Ecosystems—Vancouver Island

The Garry Oak Ecosystem Recovery Team (GOERT), has produced a draft *Recovery Strategy for Garry Oak and Associated Ecosystems and their Associated Species at Risk in Canada, 2001–2006*. The document can be viewed in PDF format by going to the GOERT website at www.goert.ca

Garry Oak Ecosystem Mapping—Vancouver Island

Ted Lea (BC Ministry of Sustainable Resource Management) has developed a new map that illustrates the historical and recent distribution of Garry oak ecosystems in the Greater Victoria area. Titled “Historic Garry Oak Ecosystems of Greater Victoria and Saanich Peninsula,” the map and background text can be viewed on the Garry Oak Ecosystem Recovery Team’s (GOERT) website at http://www.goert.ca/reference/oak_map.html

Monitoring Restoration of Fire-Maintained Ecosystems—Rocky Mountain Trench

The BC Ministry of Forests Research Branch and the University of Alberta in conjunction with the Invermere Forest District have initiated a long-term ecosystem restoration monitoring project.

The overall goal of this project is to establish a monitoring protocol that will accurately document the extent and rate of change in the understorey of ingrown fire-maintained plant communities following thinning and burning in the Rocky Mountain Trench. Achieving this goal will allow land managers to evaluate and adapt ongoing management practices to meet the specific objectives of ecosystem restoration

programs in the area. Ideally, this project will be the first in a series of efforts contributing to a long-term, on-going monitoring strategy complementing on-going restoration work in the Trench.

For more information contact Hillary Page at (250) 342 – 0539 or hpage@ualberta.ca

COSEWIC Update on Four Species—Southern Okanagan Similkameen

Four species that occur in the South Okanagan Similkameen area and other locations in the Okanagan Region were recently reviewed by COSEWIC (Committee on the Status of Endangered Wildlife in Canada) and recommended for federal conservation status. They include: Alligator Lizard—*not at risk*, Western Screech Owl—*endangered*, Great Basin Gopher Snake—*threatened*, and Western Skink—*special concern*. The list of species that depend on grassland ecosystems continues to grow!

BC Cattlemen’s Association AGM

The BC Cattlemen’s Association hosted their 74th Annual General Meeting and Convention in Dawson Creek, June 6 to 8.

The 33 member Board of Directors, each representing regional cattlemen’s associations, elected their seven-member executive: Agnes Jackson, rancher from Napier Lake, will serve as the President of the BC Cattlemen’s Association for the next two years; Ernie Willis of Princeton will continue to serve on the Executive as Past President; and Mark Nairn of Riske Creek was pleased to accept the position of Vice-president.

The cattlemen were hosted by the Peace River Regional Cattlemen’s Association who received tremendous support from the City of Dawson Creek and businesses in the

Peace River region. Cattlemen will gather next May in Kamloops for the 75th Annual General Meeting to be hosted by the Kamloops Stockmen’s Association.

Noxious Weed Symposium—Williams Lake

On May 30th, 2002 over 100 weed management specialists, ranchers and other participants gathered in Williams Lake to address the growing noxious weed management challenge in BC. The symposium participants unanimously endorsed the following actions:

1. Initiate the development of a province-wide strategy for effective noxious weed management as soon as possible to reduce further negative impacts of noxious weeds.
2. Ensure a province-wide noxious weed management strategy includes the following elements:
 - a stable funding base;
 - improved coordination;
 - regional cooperation;
 - public awareness;
 - local and long-term commitment;
 - leadership;
 - an integrated approach;
 - multi-stakeholder involvement;
 - linkages to existing plans, policies and programs;
 - an action-oriented approach;
 - more emphasis on preventative strategies;
 - better application of existing technology; and
 - immediate attention before the weed problem is out of control.
3. Engage relevant government and non-government interests in the development of a province-wide noxious weed management strategy.
4. Request the Fraser Basin Council to facilitate the establishment of a multi-interest steering committee or working group to develop a province-wide noxious weed management strategy.

BC Grasslands Magazine

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BC Grasslands is a bi-annual publication of the Grasslands Conservation Council of British Columbia (GCC). *BC Grasslands* is intended to serve as a platform for informing readers about GCC activities and other grassland programs across BC and Canada, as well as providing a forum on grassland ecology, range management, grassland conservation and stewardship.

BC Grasslands and the GCC welcome submissions of letters, articles, story ideas, artwork and photographs for each issue. Articles should be no longer than 600 words (300 words for letters to the editor) and submitted as electronic files (preferably MS Word 95 or newer).

BC Grasslands reserves the right to edit submissions for clarity and length. However, every effort will be made to work with contributors to ensure content remains unchanged. Deadline for submissions for the next issue of *BC Grasslands* is October 31, 2002.

Contributions, comments and inquiries can be made to: *BC Grasslands*, Grasslands Conservation Council of British Columbia 954A Laval Crescent Kamloops, BC V2C 5P5 Tel: (250) 374-5787 Fax: (250) 374-6287 Email: gcc@bcgrasslands.org

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Bruno Delesalle
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EDITOR/WRITER

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Southern Interior Weed Management Committee
Union of BC Municipalities
Rocky Mountain Trench Natural Resources Society
Federation of BC Naturalists

GCC Message Board

If you have an event or message you would like to add to BC Grasslands GCC Message Board, contact our office at (250) 374-5787. Submission deadline for the next issue is October 31, 2002.

Call for Artists

After a successful and inspiring art show at the Sustaining Healthy Grasslands Symposium in June, it's obvious that the grasslands community has its share of gifted artists! As the GCC continues to grow in leaps and bounds, there is an ever-present need for grassland artwork for our publications and other communications projects. Images can be drawings, photos or paintings of your favourite grassland landscapes or species. For all you ranchers out there, we'd love to see some of your artwork of working grassland landscapes. Please contact our Communications and Extension Co-ordinator, Taylor Zeeg at (250) 374-5787 or taylor.zeeg@bcgrasslands.org with your offerings, ideas and inspiration.

Letters to the Editor

At the GCC we highly value what our readers think and a lot of future decisions will be based on the feedback we receive on this issue. If there are things you particularly like about *BC Grasslands*, or would like to see, please don't hesitate to phone our Communications and Extension Co-ordinator, Taylor Zeeg at taylor.zeeg@bcgrasslands.org or (250) 374-5787.

We Need Volunteers

With such a wide range of interests in provincial issues, the GCC can use all the help you can offer on any one of our many committees. Whatever your talents or interests, please contact the GCC to see where you'd be of most help. Come out and actively participate in shaping grassland-related issues across BC!

In the next issue of BC Grasslands...

Endangered Species

The next issue of *BC Grasslands* will focus on the endangered species that inhabit or depend on grasslands for survival. We will explore the federal and provincial legislation on species-at-risk and how this legislation affects the health of grasslands and land management, both on public and private land. Like all previous issues of *BC Grasslands*, this issue will highlight the problems and challenges facing grasslands and land managers, as well as provide possible solutions from a number of different perspectives.

The GCC is seeking submissions for this issue.

Please send your submissions to:

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Working
together for the
conservation of
BC's grasslands

Thank You

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Gerard Guichon Ranch, Dr. Michael Pitt, William Stewart, Les Southwell, Jean Humphreys, Bob Peart, Paul Sanborn, Babs McLaren, John McQueen, Jim Turner, Vernon C. Brink, Robert and Birgit Bateman, Geneve Dagenais, Fred McMechan, Tracey Hooper, Brenda June Dixon, Kamloops Naturalists Club, BA Blacktop, Brentwood Enterprises, Windsor Plywood, John Nymeyer, City of Kamloops, St. George's Ranch

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- Canadian Parks and Wilderness Society for all its support and assistance with GCC programs and fundraising
- Our many dedicated and hardworking volunteers who have donated their time and energy to help the GCC grow and prosper. These volunteers include Janet Delesalle, Frances Vyse, Nicole Prichard, Nicole Brand, and the GCC Board of Directors.

Thanks to the sponsors of this issue.

