BC GRASSLANDS

MAGAZINE OF THE GRASSLANDS CONSERVATION COUNCIL OF BRITISH COLUMBIA





The Grasslands Conservation Council of British Columbia (GCC) became a society in August 1999 and a registered charity on December 21, 2001. We are dedicated to promoting education, conservation and stewardship of B.C.'s grasslands in collaboration with our partners – a diverse group that includes government, range management specialists, ranchers, agrologists, ecologists, First Nations, land trusts, conservation groups, recreationists and grassland enthusiasts.

GCC MISSION:

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

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25th Conniversary Edition

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Message from the Chair

"Time flies when you are having FUN!"

Bob Haywood-Farmer



t has been pointed out to me that this next year will be my eighth year as a board member with the GCC. Our bylaws allow us eight years, so that makes it my last.

We had a period at the GCC where no one wanted to commit to the chair's

role, so with much apprehension I put my name up and was accepted as chair at that time. It has been a truly rewarding experience thanks to a board made up of a diverse range of members: hard working, dedicated and very supportive of the grassland cause. Protecting the grasslands of B.C. is a critically important endeavour.

I mentioned the diversity within our board. Being a rancher, I am able to represent the ranching community, an important group when it comes

to grasslands, since a large percentage of the grasslands are held by ranchers either privately or under Crown lease. Learning to manage grasslands responsibly is something that all ranchers should strive for and most work towards that end.

Working with the board members who have more of an environmental or ecological bent provides me with information that is crucial for improving the management that the ranchers work toward.

Finding management that provides a win/win for all of us should be our goal. The ranchers need to learn the ecological significance of well managed grasslands. The ecological crowd needs to learn how well managed grazing can enhance the values that they wish for. The grasslands have evolved in the presence of grazers. That said, full protection afforded by some enclosures gives us a benchmark to work toward—or perhaps surpass!

threats to grasslands is a benefit to all of us. My hope is that we continue to find the funds to progress that work. I am forever grateful to the members and sponsors who give us that enduring support. It gives the hardworking board a chance to achieve success in championing healthy grasslands.

I am ready now to pass the torch and offer my support to whomever wants to take on the chair's role. Perhaps it is time for someone with a biological background to take it on, for a time, to create a balance within the organization.

Big thanks to outgoing GCC Director Toni Boot who has put together the *BC Grasslands* magazine for the past few editions, creating a publication we can all be proud of.

We are all in this together. A working landscape that achieves the necessary ecological goals is my dream for the GCC.

Bob Haywood-Farmer at work on the range-PHOTO: Andrea Haywood-Farmer

Message from the Executive Director

Making grasslands connections

Mike Dedels



In planning for this, our 25th Anniversary edition of BC Grasslands, the idea was to look back at all that we have accomplished as a Council and how we move forward. The GCC has helped to put grasslands on the map, literally and figuratively, with a dedicated Board and staff. You will hear from some of them in this special edition, including our feature article, Past, present and future of the GCC. I have truly enjoyed connecting with many of the people who have helped make the GCC what it is today, and I hope

that it brings back some memories for you. It is also critical that we develop new relationships with Indigenous groups, industry, government and nongovernment organizations to keep pace in the ever changing world of conservation.

Looking back on my first report in last year's issue, I noted that a major goal was to connect with as many like-minded organizations across the province as possible in order to further our efforts on the grasslands. You can see some of the results in this year's Annual Report. As a small not-for-profit organization, it is critical to make connections with other local and provincial groups to create synergies. This includes building relationships with First Nations to further many of our common goals on the grasslands. I have had the pleasure of attending conferences in Vancouver, New Westminster, Vernon, Victoria and Kamloops, including doing presentations at some of those. We also had our AGM in Williams Lake and I finally made it to Churn Creek, one of many amazing field days I enjoyed this year. In addition we attended many fall fairs and farmers' markets and spoke to community groups across the province. Kristi Gordon also played a key role in our outreach efforts, especially with youth. And, of course, our Directors' participation was key to our success. It is especially rewarding to speak to

folks who have had little exposure to the grasslands. I can't count how many times over the year I said that grasslands cover less than 1% of the province!

The history of the GCC includes a history of fluctuations in support. In the 2023-24 fiscal we were fortunate to receive support from a few key organizations—in addition to gaming funds—that allowed us to accomplish additional goals. Significant contributions from the BC Interior Community Foundation, the Canadian Forage and Grasslands Association and an anonymous donor kept us busy implementing programs. Our "Loving the Grasslands" fundraiser also took a big step forward this year and now funds much of what you see in the Annual Report, with thanks to sponsors and supporters. We still have much to do to build capacity in the organization and we truly appreciate your support through membership, donations and encouragement.

My travels around the province this year have only served to increase my desire to keep the grasslands we have, keep them healthy and restore those that are not. The GCC was much more active in advocating for grasslands in 2023-24, writing numerous letters to governments at various levels to speak for the grasslands. Everyone in the province has heard of old-growth forests, but raising the profile of grasslands that have evolved for millennia is truly a challenge, especially with the push for housing expansion. This advocacy is not new for the GCC. The article "Who will speak for the grasslands?" gives a summary of some of the Council's efforts to maintain grasslands in the face of threats from development.

In our efforts to advocate for grasslands we appreciate your input. Contact me anytime at mike@bcgrasslands.org. I look forward to meeting you over the next year as we face the challenges ahead. As I write this we are coming out of a drought year and the spring has started out dry. The Balsamroot in the south has put on an amazing display so far and I hope it portends a productive year ahead.

Grassland conservation in British Columbia: Past, present and future

Dr. Tom Dickinson



The Importance of and Threats to Grasslands

rassland ecosystems occur on every continent besides Antarctica. Wherever they are found, grasslands are products of historical events that have given rise to types of soils, persistent climatic conditions, and natural and human disturbances. Because of this, each type of grassland possesses its own characteristic community of grasses and other plants that are adapted to the environmental conditions of the region.

In British Columbia, grasslands are typically found in valley bottoms, but sometimes extend to higher elevation plateaus and even into the alpine. However, grasslands are most extensive along river floodplains and glacial lake bottoms and overall represent only about 1% of the province's total land base. Despite their limited geographic extent, grasslands have been important for humans that have lived here for thousands of years.

Indigenous Peoples trace their longest roots to B.C.'s grasslands and the natural resources that grasslands provided were crucial to their long history of physical and spiritual health. Traditional foods and medicines were critical to human survival in B.C.'s interior and First Peoples actively managed grasslands by burning and other activities to maintain their health. British Columbia's grasslands proved similarly critical for colonial settlement, becoming the favoured locations for ranching, agriculture, transportation, and housing.

Because grasslands have been so intensively used for residential development, the amount of unaltered grasslands is a much smaller fraction of what was present historically. Today, these ecosystems, in a more natural state, support the vast majority of the province's endangered and threatened species. Nonetheless, these minimally altered ecosystems are increasingly being threatened by exotic invasive species, increased recreation and industrial expansion.

Origin of the Grasslands Conservation Council of British Columbia

In 1999, a group of individuals and organizations that were concerned with the rapid disappearance of B.C.'s grasslands formed the Grasslands Conservation Council (GCC). Its formation was in direct response to an increasing suite of pressures on native grasslands: urban

sprawl, utility projects, unmanaged recreation, invasive species and inappropriate grazing practices. In a province known for grand and plentiful forests, grasslands were being overlooked.

The unique mix of environmentalists, ranchers, First Nations, scientists and recreationists that founded the GCC found a common purpose in working together to ensure healthy, lifesustaining grassland ecosystems throughout British Columbia, by fostering greater understanding and appreciation of B.C.'s grasslands, and recognizing their ecological, social, economic and cultural importance to current and future generations.

Since its beginning, the organization has carried out a wide range of projects to ensure that native grasslands are given the attention and care they need to survive in a quickly changing world. Despite varying levels of financial support over time, the GCC has continued to study, inventory and advocate for the grasslands of B.C. Many of the GCC products continue to be used today, and some can be found on the website at bcgrasslands.org. In this time of increasing concern with a changing climate, wildfire risk, the security of our food supply, declining numbers



of species at risk, and the need to involve First Nations in land management, the GCC is more relevant than ever.

The GCC is extremely proud of the projects we have championed over our history. As we approach our 25th anniversary as an organization, we look back on what we have accomplished, but know that we need to do more because grasslands are under continuous threats and action is urgent. Once native grasslands are lost, they cannot be quickly replaced. It is thus imperative the GCC continue to seek support to be able to foster the collaborations needed to conserve B.C.'s grasslands for future generations.

GCC's Major Accomplishments

The GCC would never have come into existence without the incredible leadership of talented and dedicated board members over the years. Bob Peart with the Canadian Parks and Wilderness Society (CPAWS) led the early development of the organization, recognizing the unique values of our grasslands. Early chairs, including Kristi Iverson, Maurice Hanson, Michael Pitt and David Zirnhelt led groups of diverse directors representing all

sectors with grassland interests from across the province. Over the first 10 years Bruno Delesalle led the organization as Executive Director through its initiation and growth phase with the help of many dedicated and passionate staff.

The GCC has led the province in developing strategies and products to conserve grasslands and enhance grassland stewardship. With support from the Province, foundations and donors, the organization hired staff to carry out key projects identified in the 1999 strategic plan. Over the next two decades these have included several projects that for the first time mapped the location and inventoried B.C.'s grasslands, developed a groundwork for ecological area assessments around Kamloops, and produced "Mitigating the fragmentation and development of B.C. grasslands analysis and strategic plan".

A second important project early in GCC's history was one aimed at addressing the impact of vehicular traffic on grassland soils and related ecosystems. The final product was a report for the BC government by GCC and a Coalition (alongside ATV BC) for the Licensing and Regulation of Off Road Vehicles (ORVs). It provided 47 recommendations for "Off road vehicle

registration and licensing" that then guided the development of B.C.'s ORV legislation.

Another project that highlighted the collaborative nature of GCC's relationship with the community is the Grassland Monitoring Initiative (also referred to as Grassland Monitoring Extension Initiative). Over a six-year period, GCC staff collected field data, developed a methodology, and produced the *Grasslands monitoring manual for B.C. – A tool for ranchers*.

Thus, through its first decade the GCC was enormously successful at raising awareness about the social, economic, cultural, and conservation significance of grasslands. There had been excellent support and funding for projects, but the lack of any secure base funding created a challenge to maintain staffing. Over its second decade, finding any source of funding became a critical problem for GCC (as it did for many not-for-profit organizations).

With greatly reduced funding, the GCC became more issue focused, concentrating on emerging concerns for grasslands, such as mine and pipeline proposals, invasive plants and ranch subdivisions. For some of these, the GCC obtained intervenor status which provided some day-to-day funding, but did not resolve ongoing issues



of base funding. Agnes Jackson, Mark Hornell and our first Indigenous Chair, TJ Walkem, very capably led the organization through leaner times from 2012 to 2019.

With even further reduced funding in 2019, the very survival of the GCC was threatened. The board became much more active as a working group with members taking on very active roles in delivering products and raising the profile of grasslands. While this had benefits for keeping the board engaged in GCC activities, it is not an infinitely sustainable situation.

GCC Today

With a renewed commitment to its founding principles and purpose, in 2022 the GCC developed a new five-year strategic plan. The 2022-2026 strategic plan has built on the strength of the partnerships that GCC has developed over its history to maintain and improve B.C.'s grassland environment. It identifies five strategic areas on which to focus its activities. These are:

- Community engagement, education, outreach and communications;
- conservation, restoration and stewardship;
- supporting scientific, Indigenous and local research activities;
- policy support, input, recommendations, and guidance; and
- building capacity in the GCC.

GCC's Ongoing Projects

Education and Outreach have been a hallmark of GCC's success and will continue to be so. Each year the *BC Grasslands* magazine profiles aspects of grassland ecology and highlights emerging threats to them. Today, in addition to a printversion of *BC Grasslands*, GCC produces podcasts and webinars which, in addition to social media posts, are reaching a new and growing generation of individuals interested in grassland conservation.

The **Restoration** of altered grasslands through hands-on activities such as pulling invasive weeds and field trips have also been hallmarks of GCC's story. These activities reinforce messages about the importance of **Stewardship and Conservation** and are aimed at the public and school-age children.

GCC's recent efforts in support of grassland restoration have been supported by Environment and Climate Change Canada, BC Parks, The Habitat Conservation Trust Fund, and an anonymous donor. Much of our work occurs in partnership with groups such as the Kamloops Naturalist Club. Two Areas that have been the focus of our activities have been the Laurie Guichon Memorial site near Merritt and the Lac du Bois Grasslands Protected area.

Emerging issues associated with the changing climate have highlighted the importance of **Research** into how grasslands sequester carbon. In collaboration with researchers from UBC Okanagan and Thompson Rivers University,

GCC has improved understanding of the scientific basis of carbon sequestration by grassland species and mapped the importance of grassland wildlife corridors in a changing landscape.

Drawing on the experiences of established ranchers, GCC is providing opportunities for the next generation to learn from past experiences. Similarly, understanding the many **Indigenous** traditions of managing grasslands with fire and other tools to support harvests of food and medicines and ecosystem health are providing important lessons. GCC is pursuing opportunities to work with different Nations and their traditional knowledge of grassland stewardship.

Grasslands are often viewed as surplus land where developments of various kinds can be shuttled. GCC works with all interest groups to educate government decision makers and work collaboratively to develop sustainable **Policy** on issues affecting grasslands.

GCC has made great strides in **building capacity** through reaching out to charitable foundations, active fundraising, and renewed appeals to government.



Grasslands conservation and the threat of development and urban sprawl

Tristan Semeniuk and Heidi Wismath



Lurban sprawl into British Columbia's rare grasslands becomes an even more important topic for conservation. Many important species of plants and animals, including some red-listed endangered species such as the sharp-tailed grouse and American badger, rely on grassland habitats for shelter and food.

The Grasslands Conservation Council of BC (GCC) recognizes the urgency of addressing the housing crisis and advocates for solutions that ensure our grassland ecosystems are safeguarded/conserved in the process. Heather Richardson, GCC Board Director, emphasizes, "We encourage the use of brownfield lands (abandoned industrial areas) and increasing density of housing in urban areas."

In a spring 2024 letter to Premier David Eby, GCC Chair Bob Haywood-Farmer underscored the critical situation: "Less than 1% of BC is in grasslands, and in the Southern Interior, many of these grasslands are adjacent to urban centers. Most valley bottom grasslands in the Southern Interior have been lost over the last 150 years of transportation, residential, industrial, and agricultural development, and once they are gone, they are lost forever."

In this article, we explore the pressing issue

of urban encroachment into these vital habitats through the insights of three dedicated conservation representatives. Each representative—Brad Foster of The Commonage Preservation Alliance, Gjoa Taylor from the Society for the Preservation of the Naramata Bench, and Paul Chapman of Nanaimo & Area Land Trust—provides unique perspectives on the threats posed by development and how their organizations are mobilizing to protect these ecosystems. From the threatened wildlife corridors of the Vernon Commonage to the delicate grasslands of the Naramata Bench and Harewood Plains, their stories illustrate the ongoing battle to conserve biodiversity amidst growing urbanization pressures.

Q: What specific threats does urban encroachment pose to grasslands in your region? A: Brad Foster, The Commonage Preservation

Alliance: "The Commonage Preservation Alliance works to protect this area from getting developed. It was created to bring together support for the preservation, protection, and restoration of the unique and extremely at-risk wildlife and their habitat that is the Commonage. The area extends from Lake Country to Vernon and is an important wildlife corridor linking movements from the south

"Most valley bottom grasslands in the Southern Interior have been lost over the last 150 years to transportation, residential, industrial, and agricultural development, and once they are gone, they are lost forever."

of Ellison (Duck) Lake to the Bella Vista/Goose Lake range and beyond. The Commonage sustains many species, including rare birds, reptiles, and mammals like the gopher snake, western painted turtle, American badger, and more."

Q: How important are these grasslands for biodiversity conservation?

A: Paul Chapman, Nanaimo & Area Land Trust (NALT): "The Nanaimo & Area Land Trust (NALT) is dedicated to protecting and preserving Harewood Plains. This area contains rare and endangered species like Carex tumulicola, Epilobium densiflorum, and Hosackia pinnata, which is the City of Nanaimo's official floral emblem. NALT works with government and community partners to acquire land, hold conservation covenants,



run native plant nurseries, conduct restoration activities, and educate through programs like School Water Stewards."

Q: Gjoa, can you tell us about the threats facing the Naramata Bench and what your organization is doing to protect it?

A: Gjoa Taylor, Society for the Preservation of the Naramata Bench: "We are a grassroots group that got together to bring community awareness about a developer planning a subdivision of 350+ homes in the middle of the Naramata Bench. We are from rural and urban areas of Penticton and Naramata, consisting of teachers, accountants, farmers, winery owners, tourism company owners, engineers, and geologists. Our group has joined forces with the Naramata Society for Responsible Infrastructure to protect the Naramata Bench from urban sprawl in both city limits and the Regional District of Okanagan Similkameen. We engage in lobbying efforts, community outreach, and collaborate with stakeholders to prevent large development projects, clearcutting, zoning changes and developers' applications."

Q: How is NALT working to protect Harewood Plains from development and urban sprawl?

A: Paul Chapman, Nanaimo & Area Land Trust (NALT): "NALT is actively involved in several efforts: Sharing information with the City of Nanaimo about the rarity of plants and habitat on the Harewood Plains and the threats posed by proposed subdivisions; raising community awareness about these threats and opportunities for conservation; and identifying partners for potential acquisition of Harewood Plains for conservation purposes. In 2023, GCC supported our efforts in a letter to Nanaimo Council and other levels of government, that was well-received."

Q: How is your organization addressing these threats?

A: Brad Foster, The Commonage Preservation Alliance: "To preserve this land, we propose to acquire these properties and have their ecosystems and habitats protected for all time. With the help of generous individuals, groups, and corporations, we can achieve this goal and protect other lands as well."

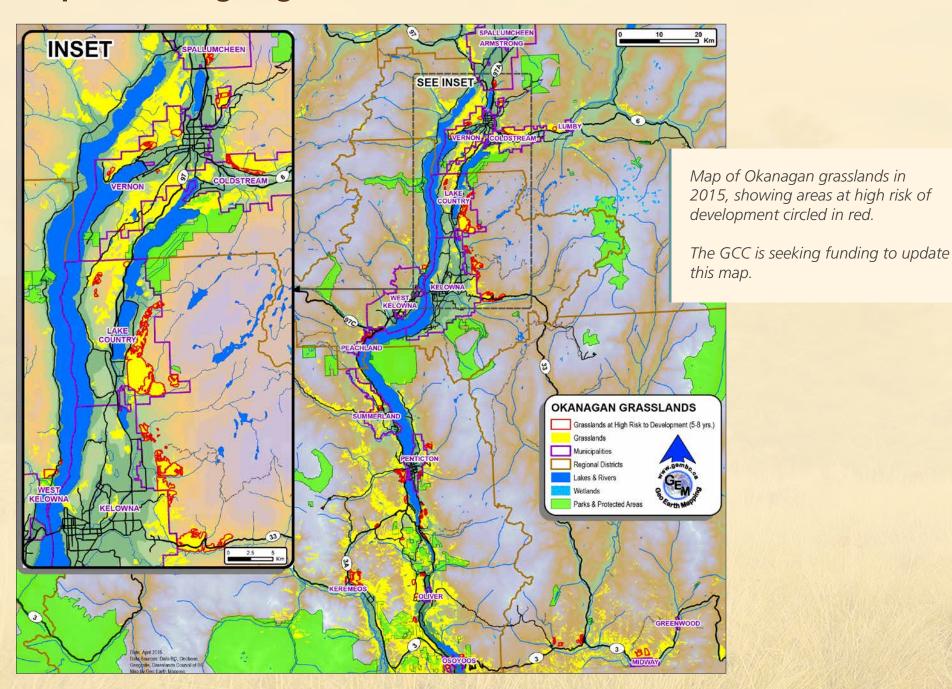
The Commonage, Naramata Bench, and Harewood Plains are among the unique grassland habitats in British Columbia that require protection. Through the efforts of the GCC and other dedicated groups of people in stewardship, conservation, and education on the importance of grasslands, we are making a significant difference in safeguarding these fragile ecosystems from urban sprawl by championing biodiversity and drawing attention to the cultural value of the species who call these special places home.

As this issue of *BC Grasslands* goes to press, we are witnessing new developments on the edge of Merritt and Kamloops, as shown above. Not only are we losing grassland values, but these developments are pushing closer to the wildland-urban interface, increasing the risk of catastrophic wildfire loss.

The GCC has a long history of advocating for our grasslands. Tom Dickinson, current GCC Chair, emphasizes that "as development pressures increase, it is incumbent on the Council to continue to advocate for our rare grasslands through collaboration with governments at all levels, and ensuring that they, along with the public, understand the invaluable nature of these ecosystems."

Tristan Semeniuk is a Thompson River University Journalism Student with a passion for nature and photography. Heidi Wismath is a TRU Environmental Sciences Grad and recent winner of the Thompson Rivers University Environmental Sustainability Award

Map of Okanagan grasslands



Chair alumni: Bob Peart

Bob Peart Founding Chair (1996 - 2001)



As I wrote twenty-five years ago in one of my first messages as Chair: The care and concern for grasslands must not get lost in the forest-dominated culture of British Columbia – remember it is these grasslands that harbour most of our rare and endangered species as well as a culture and history that we can't afford to lose.

As I reflect on those thoughts, it seems the need for protecting and restoring B.C.'s grasslands is even more important now as the pressures of urbanization, agriculture conversion, natural encroachment, fire management, inappropriate recreation and overgrazing continue to be ever-increasing threats.

It was quite exciting when 'all those who loved grasslands' gathered in 1996 at the Big Bar Guest Ranch to discuss how can we give these rich grasslands the profile and attention they justly deserve. At Big Bar, we all agreed that it was paramount to keep the working ranches working and that an advocacy voice was needed to represent 'the grassland' interests. As we know now, the Big Bar gathering led a few years later to the formation of the Grasslands Conservation Council of BC. The GCC was established as a voice for fostering public understanding of grasslands, supporting sustainable ranching and conserving representative ecosystems.

Twenty-five years later we should be proud of all that the GCC has accomplished.

I've many fond memories of those early days – the comradery, the commitment, the love for the landscape, the discussions and the field trips.

I learned so much on those field trips about grazing, conservation and the business side of ranching. One of my fondest memories was sitting on a grassland slope near Merritt sharing a coffee and chatting away about all things grasslands with Dr. Bert Brink, who devoted much of his life to saving B.C.'s grasslands. Suddenly he said: "Bob, do you know that when I was last here 30 years ago this slope was a sea of mud. And now look at it – beautiful lush grasslands." His comment led to a far-reaching conversation about the robustness of nature, the role of conservation and the importance of restoration. "You know it can be done!" he concluded.

And this 'it can be done' attitude was what the GCC took into all our interactions. Not to say the conversations were easy, but that positive spirit helped us to explore those more difficult topics about cows, grazing, ecological health, the relationship with government and the economics of it all. Many of these conversations have led to positive resolution, for example: the formation of the Invasive Plant Council (now the Invasive Species Council), ATV legislation, influencing important land use decisions and the purchase of key properties.

B.C.'s grasslands now face the threats of climate change, along with the myriad of other challenges. It is clear they need a strong voice, an organization that facilitates and continues to advocate for keeping range lands functioning and to conserve the wildlife, birds and plants that make this landscape so special.

Keep up the good work!



Within the East Kootenay region of B.C., a diverse range of grasslands exist across varied terrain, representing a unique element in the landscape. These ecosystems range from short grass prairies found on outwash plains and drumlins of the Rocky Mountain Trench to high elevation grasslands near the continental divide, primarily growing on coal geology-derived soils.

Historically, ecological conditions in the East Kootenay Region supported extensive grasslands. However, the region is now predominantly forested because of climatic changes and fire suppression efforts. Despite this, numerous small outcrops still harbour valuable remnant grasslands, awaiting the drought and fire that will reduce tree cover and allow the grassland plants to flourish once again. It appears we are approaching such a period now, highlighting the importance of conserving and enhancing grasslands. The focus for this article is on the high elevation grasslands found above the upper Elk Valley.

Geology profoundly influences the ecosystems found in this area. In the Elk Valley, the dominant rock type is limestone, contrasting with the coalbearing Mist Mountain formation. This geological composition significantly impacts productivity and the presence of extensive grasslands. Limestone undergoes chemical weathering, resulting in frequently shallow, high pH

soils, while coal, shale, and mudstones erode to form deep, relatively fine textured, nutrient poor soils. The contrast between these formations is spectacular: rugged limestone peaks, often densely forested, contrast with the more rounded mountains featuring extensive grasslands on their ridges and warmer aspects, and cooler sites characterized by forests. The geological disparities also have significant economic implications. The Mist Mountain formation contains some of the finest quality bituminous coal globally, prized for its use as coke in the steel-making process. These coal mines, often open-pit, occupy over 16,000 hectares in the valley, forming a crucial part of the region's economy and providing a plethora of high-paying jobs supporting a range of industries.

The coal geology in the area produces deep, nutrient-poor soils, which provide ideal habitat for grassland species. Among them are rough fescue (Festuca campestris), bluebunch wheatgrass (Pseudoroegneria spicata), fern-leaved desert parsley (Lomatium dissectum), and a diverse array of other typical grassland species. A unique feature of these high elevation grasslands is frequent clumps of the now-threatened whitebark pine (Pinus albicaulis), which are often dying out due to the exotic fungus called white pine blister rust (Cronartium ribicola). The fauna in the area is equally remarkable. It includes a unique population of Rocky Mountain







Bighorn Sheep that winter on the wind-strewn parts of the grasslands, whereas most populations of sheep typically winter near valley bottoms on sunny, steep terrain. Additionally, the American badger finds the soils easy to dig, and the populations of Columbian ground squirrels and other rodents are sufficient to sustain a healthy population of badgers. High elevation grasslands are also found near Tumbler Ridge within coal geology areas, where mountain caribou occupy a niche comparable to that of sheep in the Elk Valley.

Re-establishing many plant species on previously mined terrain is relatively simple for companies willing to invest in proper mine reclamation, despite the higher short-term costs involved. Recreating the composition of plant communities and summer ungulate habitat on these sites is relatively straightforward. However, the original landscape shape and critical habitat for Bighorn sheep have not been replicated to date. The likely expansion of mining in the region raises challenging questions about balancing economic interests with biodiversity conservation.

Because of the intersecting challenges posed by mining, forestry, transportation, urban expansion, and other intensive human activities, concerns about cumulative environmental effects have been heightened in the valley. Due largely to leadership from the Ktunaxa Nation, the Elk Valley

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Cumulative Effects Framework (CEMF) project was initiated to enhance understanding of ecosystem health. Bighorn Sheep were selected as the flagship species, or valued component, representing the grasslands during the assessment. The model's prediction of habitat loss underscores the pressing need to strike a delicate balance between biodiversity conservation and economic interests—a task that remains challenging to achieve.

Currently, two major coal mining proposals are being advanced in the Valley: Teck Coals' Castle Mountain Project and Jamieson Resources' Crown Mountain Coking Coal Project. The former encompasses extensive high elevation grasslands critical to the region's unique population of bighorn sheep, while the latter features minimal grasslands but includes high-value habitat for other species such as grizzly bears, elk, and moose.

Invasive plants also pose a serious threat to high elevation grasslands, which, until recently, were largely known for the lack of invasives. Species such as spotted knapweed, alfalfa, orange hawkweed, Timothy grass, bladder campion, and common toadflax encroaching on these ecosystems are proving to be highly effective competitors posing a considerable risk to biodiversity.

Raising public awareness of the values of B.C.'s grasslands forms a considerable part of grassland conservation efforts.

GCC outreach and education 2023 - 2024

Kristi Gordon





utreach is at the heart of all projects undertaken by the GCC and education is a critical component in understanding and protecting B.C.'s grasslands. We can help promote behaviors that support the overall health and functioning of these sensitive ecosystems and inform the public with ways which they can help enhance and protect grasslands - now and into the future. In the past two years, the GCC has greatly broadened the scope of our public outreach thanks to the provincial Community Gaming Grants and very dedicated work by our passionate GCC Directors.

The GCC has been involved with the following projects throughout the years:

- Interpretive signage at Lac du Bois Grasslands and Laurie Guichon Memorial Grasslands.
- Field tours as part of the GCC's Annual General Meeting

- Development and production of the "Best Management Practices (BMP's) for Off-Road Vehicle (ORV) field guide in B.C.'s Grasslands" ORV brochure and workshops
- BC Grasslands magazine 24 diverse issues highlighting B.C.'s amazing grasslands and the issues they face
- Collaborations with Chris Harris Photography
- Lunch and Learn webinar series in collaboration with Thompson Rivers University and the Thompson Nicola Conservation Collaborative (TNCC)
- Development of and upgrades to the GCC website
- Presentations at the BC Land Summit and the Canadian Land Trust Alliance Conference in Ottawa
- Series of eight e-books that cover conservation topics which are publicly available on the GCC website
- Grasslands public service announcements

- featuring animated characters
- Development and delivery of an elementary school grassland curriculum
- Annual "A Day in the Grasslands" field trip at the Laurie Guichon Memorial Grasslands with SD58
- Partnership with Tkemlúps te Secwépemc Museum and Heritage Park, the Kamloops Naturalist Club and BC Parks to update interpretive signs in Lac du Bois Grasslands
- Creation of GCC social media accounts (Facebook, Instagram and LinkedIn)
- Quarterly, now monthly e-Newsletters featuring GCC updates, events, and articles
- Healthy Grassland Symposiums and field tours located throughout the province
- Planning for Change Symposium and workshops in Kelowna
- Walking on Two Legs video completed with Indigenous and western perspectives.







In our current strategic plan (2022-26), key outcomes under Community Engagement, Education, Outreach and Communications are to:

- Increase British Columbians' knowledge about the role of healthy grasslands in provincial biodiversity and wildlife habitat, and the importance of stewardship across sectors in supporting the resilience of grasslands to land use impacts and climate change.
- Increase British Columbians' awareness of the importance of collaborative grassland conservation efforts, research and land use decisions in supporting the conservation, restoration, and stewardship of B.C. grasslands.

We were very successful in this area over the last fiscal year. With support from the B.C.

Community Gaming Grant, B.C. Interior Community Foundation, Cenovus and donors at our "Loving the Grasslands" fundraiser, we had direct contact with over 1600 people at 46 events including:

- fairs and farmer's markets in Williams Lake. Kamloops, Kelowna, Penticton, Vernon, Vancouver, Knutsford, Monte Creek and Grand Forks:
- events with associations including: BC Institute of Agrologists (BCIA), Friends of Churn Creek, BC Conservation Foundation (BCCF), BC Cattlemen's Association (BCCA), Forests Practices Board (FPB), the Wetlands Institute, Regional Invasive Species Organization (RISO), Invasive Species Council of BC (ISCBC), Kamloops Back Country Horsemen, and the Canadian Forage and Grassland Association (CFGA);
- service clubs and naturalists clubs in Vernon, Merritt and Kamloops;

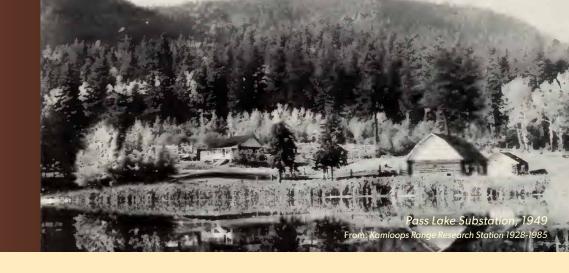
- numerous field events and weed pulls in Kamloops and Merritt;
- adult learning groups in Kelowna and Kamloops: and
- major conferences in Vancouver, New Westminster, Victoria and Kamloops, and at the En'owkin Centre in Penticton.

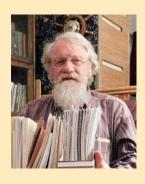
In addition, the GCC has continued to increase its reach on social media networks, produced monthly newsletters, appeared on CBC Daybreak and CFJC TV in Kamloops and even had a spot on French TV1 talking about wildfire and grasslands. Of course, we also produced BC Grasslands - Diversity in the Grasslands edition. It was truly a great year for getting the word out about grasslands, building on our efforts since 1999. V

Do you have ideas for outreach events for the GCC? Contact us at info@bcgrasslands.org.

Looking forward, looking back: The 1982 Grassland Symposium

Don Gayton





n a Province dominated by forests, our grasslands have always been a distant second fiddle for the research community. Still, there have been moments and milestones. The Irish-born botanist John Macoun might be considered our first grassland researcher, as he catalogued plants in the Thompson River valley in the 1880s. His description of the countryside around Spences Bridge: "Below the line of trees, beautiful grassy slopes are covered on the lower parts with bunchgrass." Macoun found similarities between the

flora of Spences Bridge and what fellow botanists were finding way down south in Nevada. This was perhaps the first botanical inkling of what we now know as the Great Basin Biome.

One of the plants Macoun also found was our grassland nemesis, the invasive annual cheatgrass.

The next milestone would be the creation of the Dominion Range Experiment Station, west of Kamloops, in 1935. Edwin Tisdale was the primary researcher there, and a pioneer of modern range research in B.C. Looking into E-Flora BC, I found Tisdale's identification of sweetgrass at Quilchena, in May 1936. Tisdale's first range publication, together with rancher Lawrence Guichon and fellow researcher L.B. Thompson, was in 1938. Tisdale went on to publish several more papers on B.C. rangelands through the 1940s and 1950s. The last paper was dated 1972!

The Kamloops Range Station closed in 1941 and reopened again in 1947, but then closed permanently in 2013. At that juncture the BC Ministry of Forests assumed responsibility for range research. Alastair McLean, who had worked at the Station alongside Tisdale, moved over to the

Ministry and became a tireless researcher, publishing 16 research papers between 1958 and 1979. Alastair was also the co-founder of the Nature Trust of B.C.

A major milestone occurred in June of 1982, when the Ministry of Forests sponsored a "A major emphasis was grassland classification: how BC's relatively small but very diverse grassland regions fit into the broader North American grassland framework. How our grasslands related to soil types, parent materials and surficial geology."

three-day Symposium on Grassland Ecology and Classification,¹ in Kamloops. The list of speakers will resonate for anyone familiar with B.C. range work: Brink, Daubenmire, Fenger, Hebda, Looman, McLean, Nicholson, Pojar, Tisdale, Van Ryswyk, among others. I moved to B.C. in 1990, so I still rue the fact that I missed the Symposium. But as I look through the list of 18 speakers and 110 attendees, I do see many familiar names.

I never met Rexford Daubenmire, but we shared a familiarity with the grasslands of Eastern Washington. And I have spent many, many pleasant hours gazing through the 20x50 centimeter frame that bears his name. Naturalist and lichenologist Trevor Goward, who attended the Symposium, still remembers the thrill of chatting with Daubenmire after his talk.

A major emphasis of the Symposium was grassland classification: how B.C.'s relatively small but very diverse grassland regions fit into the broader North American grassland framework. How our grasslands related to soil types, parent materials and surficial geology. Author and ecologist Andy MacKinnon, who was then a newly-fledged Forest Service employee, said



that up until then B.C. ecological classification had been strictly about forested ecosystems, and very oriented towards forest management. But the Symposium changed that, he said. Some of the research presented there became the basis for the grassland portions of the Biogeoclimatic Classification system, developed in the mid-1990s.

Another 1982 milestone was the publication of Mack and Thompson's article showing how the native bunchgrasses of the intermountain valleys west of the Rocky Mountains did not coevolve with grazing pressure from bison and as a result, are maladapted to intensive livestock grazing.²

2004 marked a subsequent milestone: the publication of *The Grasslands* of *British Columbia*, by Wikeem and Wikeem.³ This was a massive region-by-region compilation of grassland knowledge, covering landforms, climate, soils, fire, grazing and invasives.

Classification has now dropped off the contemporary grassland research radar screen. Looking back, we can say that the Symposium and the work that followed it put that issue to bed, or we can say that classifying grasslands is not a particularly important topic, or a little of both. But it does speak to how looking back is useful to understand research trajectories and ecological trajectories as well.

The final day of the 1982 Symposium featured group discussions on new grassland research topics. One topic was, "Should fire be considered a natural component of true grassland ecosystems in B.C.?" One answer, tongue-in-cheek, was: fire, no; wire, yes. But the consensus was that, prior to fire suppression, "Fire was a natural component of many grassland ecosystems in southern B.C." That issue has certainly emerged as a central grassland concern today, given the rate of forest ingrowth and encroachment, and the overdominance of sagebrush.

The Grasslands of British Columbia publication devotes a whole section to fire in grasslands, and introduces the term "forest encroachment," (forest trees colonizing open grasslands as a result of fire suppression), a process first identified by Edwin Tisdale.

Dendropyrochronology research around B.C.'s southern Interior has shown conclusively that prior to European settlement our dry, low elevation forests were burned quite regularly by Indigenous Peoples. This Indigenous cultural burning was done for a host of different reasons. Dendropyro studies give us evidence of pre-contact fire return intervals in forest ecosystems, but unfortunately in the grasslands directly below those dry forests, we don't have the same tangible evidence that fire-scarred trees provide. But listening to Elders, thinking about cultural burning techniques and factoring in fire physics, it is plainly obvious that the pre-contact frequent, low-intensity fire regime that our dry forests were accustomed to also applied to the adjacent grasslands. Perhaps it is time for another major symposium, Fire in the Grasslands. I won't miss that one.

¹Symposium proceedings: https://a100.gov.bc.ca/pub/eirs/viewDocumentDetail. do?fromStatic=true&repository=BDP&documentId=13612

²Mack, R. and Thompson, J. (1982) Evolution in Steppe with Few Large, Hooved Mammals. The American Naturalist, Vol. 119, No. 6 pp. 757-773

³Wikeem, B. and Wikeem, S. (2004) British Columbia Grasslands. https://bcgrasslands.org/wp-content/uploads/2017/06/bcgrasslandsfinal2004ver3.pdf

Don Gayton is an ecologist and frequent contributor to Grasslands. His latest book is The Sky and the Patio: An Ecology of Home (New Star Books).

Photo of Don: Judy Harris

Speaking for the grasslands

Mike Dedels





rasslands are often forgotten in land use planning and development processes. As pressures on the land base increase, the GCC's role in grassland advocacy will become even more important.

The following list shows some areas where the GCC has given valuable input into decision making over the past 25 years:

- 2002 Input to Stump Lake Ranch Subdivision Application.
- 2003 Conservation Covenant work considering ALC restrictions
- 2004 Submitted GCC perspective to the Filmon Wildfire Commission
- 2005 Input to Provincial Strategy for Mountain Biking in BC
- 2006 Mitigating Fragmentation and Development of BC's Grasslands Problem Analysis and Strategic Plan
- 2008 Input to Special Investigation on effects of Range Practices on Grasslands
- 2006 Final report from the ORV coalition and strategy led by GCC
- 2009 Participation on the Forest and Range **Practices Advisory Council**
- 2009 Green Bylaws Toolkit created
- 2009 GCC had advisory role with BC Trusts for **Public Lands**

- Input to Ashcroft Ranch Landfill proposal
- 2010 Review of Forest Practices Branch Carbon Offset Proposal
- 2011 Grasslands Natural Capital Initiative launched
- 2012 Ajax Mine Proposal Review on behalf of Kamloops Naturalists and Kamloops Fish and Game Association
- 2014 Co-organized the Grassland Summit at Douglas Lake Ranch to discuss invasive plants and other issues
- 2015 Intervenor status for Trans Mountain **Pipeline**
- 2021 Provided input into Provincial Species at Risk Legislation
- 2021 Recommendations to South Okanagan National Park Committee

The GCC has become the "go to" organization for information and opinion on grassland protection and management. The following actions to maintain our shrinking grasslands have been undertaken over the last year:

- Harewood Plains Development—The GCC supported the Nanaimo and Area Land Trust (NALT.bc.ca) in their efforts to prevent development on these rare open meadows.
- Record Ridge Development—Support for Save

- Record Ridge (saverecordridge.ca) to protect rare West Kootenay grasslands near Rossland from mine development.
- Southeast Coal Development—The high elevation grasslands in the southeast corner of BC are unique and irreplaceable. The GCC has provided input to mine development review process.
- Naramata Bench Development—Residential expansion into the small grassland remnant and adjacent open forests continues throughout the Okanagan. The GCC has supported PreserveNaramataBench.com in their efforts to limit housing expansion.
- **BC Housing Supply Act**—The GCC supports densification, infilling and the use of brownfield sites rather than continued urban expansion into grasslands. We wrote to the Premier in September 2023 expressing concerns with the permanent loss of grasslands.

Once grasslands are lost they are gone forever. They need your help! Visit https://bcgrasslands. org/advocacy/ to learn more about some of these projects and how you can add your voice to the fight to protect grassland ecosystems.



The critical habitat

Bob Haywood-Farmer



would like to take this opportunity to describe why our grasslands are so critically important. There's a large community of organisms that depend entirely on the grassland habitat for their existence. This includes a variety of species: microorganisms, reptiles, amphibians, insects, plants, mammals and birds. In British Columbia, 30% of the endangered species– red- and blue-listed–depend entirely on the grasslands. Because only 1% of the provincial land base is grassland we must strive to protect this limited resource.

There are also many species that depend on the grasslands for only a portion of the year, but usually this period is an important part of their lifecycle. Elk and bighorn sheep, for example, winter on grasslands. Mule deer graze on the grasslands in early spring when the first green shoots appear. Some migratory bird species, such as sandhill cranes, forage in the grasslands along their migratory path.

One fact that is important to consider is the dependence of grassland species on each other. If we lose even a small part of the grasslands it may result in the loss of a whole community of interdependent species. All grasslands are important, but some areas are more important than others. At GCC we have supported work to determine the most critically important areas and to map them according to their priority.

The sheer beauty of the grasslands cannot be ignored. The stunning landscapes are something to cherish. The intricacies and closeup images of grassland species, both flora and fauna, are also something to behold and-let's face it-irreplaceable.

In British Columbia's interior dry belt, the lower elevation river valleys are mostly grassland habitat. We call these the lower grasslands, dominated by blue bunch wheatgrass with some stipas and annual grass species. Shrubs such as big sagebrush or, in the south Okanagan, antelope brush, are a common component of the landscape and increase in the absence of fire or with overgrazing. Prickly pear cactus, arrowleaf balsamroot, pentstemon, and mariposa lilies are examples of the many beautiful plant species that coexist in

various niches in the landscape. In the lower grasslands, ponderosa pine and juniper species are the main tree species but usually are widely spaced or in occasional groves. Large tracts of grasses and shrubs are the norm.

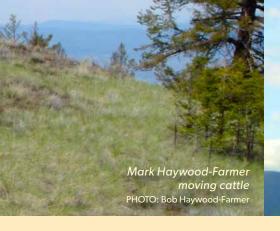
As one goes up in elevation bluebunch wheatgrass continues to be the prevalent species in the middle grasslands but on heavier soils we start to see more rough fescue, another bunchgrass species, especially on northfacing slopes. It is fair to say that more forbs and tree species such as aspen are more common the middle grasslands along with the pine and juniper. At the upper edge of the middle grasslands we often have the interface with the Douglas fir forest, with a surprisingly distinct boundary between the two habitats. In the absence of fire, Douglas fir tend to encroach out into grassland areas, especially on north-facing slopes.

In some areas, the grassland landscape is continuous right up into the higher elevations, while in others there is a zone of Douglas fir forest above the middle grassland where higher moisture allows the conifers to establish. In the dry Interior, the mountain tops frequently have high elevation grasslands above the Douglas fir zone, where high exposure and light soils create the dry situation that grasslands prefer.

Certain high elevation sites have soil types that favour grasslands due to the effects of glaciation and, some speculate, frost pockets that make tree establishment difficult. Lodgepole pine is a tree species that competes with grasses at higher elevations. The high elevation grasslands are characterized by rough fescue communities often in association with aspen and are extremely productive. In alpine settings many alpine species are also present and offer stunning landscapes.

It is common knowledge that forests are important for taking CO2 out of the atmosphere and storing the carbon in the wood and roots of the tree. A less known fact is the importance of grasslands when it comes to carbon sequestration.

Perennial grasses, especially the bunch grasses, are champions at storing



carbon. The grasses take in CO2 in the photosynthetic process. Using energy from the sun, the grasses convert CO2 into organic compounds (carbohydrates) that build plant tissues both above and below ground.

The roots of grasses die off and rot into the soil but are replaced with new root tissue in a continuous cycle. The rotting root tissue adds carbon to the soil. This process is enhanced by the association of grass roots with mycorrhizal fungi that transport carbon rich compounds deep into the soil. Above ground tissues also die back and contribute litter that covers the soil surface over time.

Grazing ungulates speed up the carbon cycle by trampling litter into the soil surface but also returning carbon to the soil as they defecate and urinate. Grazing keeps grasses in a vegetative state for a longer part of the growing season, enhancing the opportunity for carbon sequestration. The benefit of grazing on the carbon cycle is highly dependent on management that allows the grasses to recover adequately after being grazed. Bottomline, good condition grasslands, grazed responsibly, store the most carbon. Soil born carbon is much more stable than other forms when fires occur.

Historically, the grasslands of the world have been grazed by large herds of ungulates leading to the rich, black soils that we have. The great plains of North America were once largely grassland habitats, but intensive cereal production has displaced much of these productive landscapes. Heavy applications of nitrogen fertilizer intensify the loss of stored carbon from cultivated fields.

In British Columbia, our grasslands are small in proportion to the overall land base. Nonetheless, they are unsurpassed in diversity and stunning beauty. Their proximity to wetlands and open forest gives them added importance in the province. It is imperative that we look after this limited, special resource.



GCC alumni

Scott Benton, Tasha Gallagher, Graham MacGregor

Scott Benton



assumed the role of GCC Executive Director in November of 2012 stepping in for Amber Cowie who was off on maternity leave. I had recently retired from a lengthy career with the provincial government working for the Ministry

of Environment. While working in a variety of different roles the overarching theme was environmental stewardship and connecting people to the land sustainably.

People often ask: What does an executive director do in a non-profit charitable organization? A better question to ask is what *doesn't* an executive director do in a non-profit charitable organization?

I picked up where Amber left off-trying to rebuild the momentum that the GCC had prior to 2008. This included tying up loose business ends but, more importantly, reconnecting with the people that support grasslands and educating those who aren't aware of the importance and

value of grasslands ecologically, economically and culturally. To me, knowing that there are natural grasslands that support unique species in our province that can co-exist with ranching and growing communities if each is managed appropriately, is the epitome of environmental stewardship.

While I knew the basics about the importance of grasslands before joining the GCC, I would soon learn a lot more as the board of the GCC took me under their wing to guide me in some of the important work ahead. Several board members including Mike Dedels, Laila Salm, Agnes Jackson, Lauch Fraser, Phil Youwe and last—but certainly not least—Jim White, were very influential in guiding the work that I did for the Council. I was blessed to have such an engaged board that provided the direction I needed to start the work of rebuilding the GCC.

GCC accomplishments during my time included:

 The reintroduction of the GCC annual BC Grasslands magazine and newsletters.
 The magazine was always the highlight of the year and went out to many libraries and schools in B.C. It was a lot of fun (and work!) pulling it together.

- participating in major project reviews and making a difference in the outcomes;
- rejection of the Ajax Mine proposal; and
- changes to the Trans Mountain Pipeline proposal affecting grasslands.

These were personal victories for me and the board members who worked with me on our submissions.

My term with the GCC was intended to be one year to cover Amber's maternity leave. When Amber decided not to return I stayed for another four years. In 2015 it became obvious to me that the best way for the GCC to get back to its roots was to have a local person in the executive director's chair. My departure in 2016 was intended to facilitate that–it took a few more years before it was realized.

Today I am still working as an executive director for a non profit, this time focused on sustainable tourism. Same functions, different label and only part time. Why, some ask?

Because it matters. I am still a member of the GCC because the work they do still matter.

I want to extend a big "thank you" to Jim White for the time he spent educating me and directing me to what matters most to B.C. grasslands.

Tasha Gallagher



was the Stewardship Planner with the GCC from 2005 until 2010. I worked on files such as the Off Road Vehicle Coalition coordination, Planning for Change local government outreach, development of planning tools such as the Green Bylaws Toolkit

with Ducks Unlimited, started the Natural Capital of Grasslands project, and, externally, co-chaired committees on the South Okanagan-Similkameen Conservation Plan SOSCP and helped create the Okanagan Collaborative Conservation Program.

Grasslands are such a unique and beautiful place. They are so rare and house so many species at risk, and have so much beauty that emerges the longer you look at them. From microscopic lichen to the amazing long-billed curlew, to big horned sheep, grasslands have so much to offer and are so varied. My first job out of university saw me spending a lot of time at Junction Sheep Range and Churn Creek. I had never spent time in a grassland before and fell in love. The peace, beauty, smells, sights, and incredible variety of flora and fauna blew my mind, and I knew I wanted to work to conserve these special places.

The visibility the GCC has brought for grasslands has been instrumental. The science the GCC supported in the 2000s, such as the grassland mapping layer, was used extensively by governments (local, regional, provincial and federal) to conserve grasslands, and provided the foundation for those governments to develop their own mapping when the GIS work of the GCC stopped. Filling the gaps left by government allowed for various governments to still work on grassland stewardship and conservation.

Also, bringing together the ranching and conservation communities was a real strength of the GCC at its start, and remains important. Grasslands wouldn't be what they are without ranchers stewarding them, as they are disproportionately privately owned, and many Crown grasslands are leased for ranching. Yet, they still support species at risk, because so many ranchers do the right thing. The tools that the GCC created, such as the monitoring manual, and giving both ranchers and the naturalist community a voice and bringing them together, has helped this message spread.

The GCC is a great collaborator. The best example was bringing together the very diverse Off Road Vehicle coalition: a mix of ATV, dirt bike and snowmobile enthusiasts with the conservation community, to lay the framework for the provincial legislation for off-road vehicle regulations. That could not have happened without the excellent collaborative skills of the GCC, in particular, Bruno Delesalle. Bruno was an excellent mentor and had a great influence on my career.

I am currently an acting manager with the Canadian Wildlife Service (CWS), having traded in my conservation and stewardship background

over the last five years to manage a diverse team of folks doing species at risk recovery, regulation, impact assessment, permitting, and Indigenous consultation. My experience with the GCC was foundational to my success with the federal government, with a strong board and an excellent mentor in Bruno Delesalle. After leaving CWS, I still worked with the GCC as a partner in the Canadian Intermountain Joint Venture, so my ties remained strong for a very long time! I will always be forever grateful for the GCC - for my time being part of the team, and for the work they did and continue to do to advocate for grasslands.

Graham MacGregor

was the GCC GIS Coordinator from 2004 - 2007. Grasslands are where I live, mountain bike and walk my dogs. Every day I enjoy viewing the grasslands from my window-the light and wildlife are so unique and beautiful.

The GCC has been a great voice for keeping grasslands in the conversation within the province. Mapping B.C.'s grasslands was, and continues to be, valuable in providing context and discussion on land use and conservation, and the challenges surrounding them.

I am now the Geospatial Team Lead, Integration Solutions for GeoBC within the Ministry of Water, Land and Resource Stewardship. As a grasslands advocate I am always willing to answer GIS questions, whether to help GCC or the provincial government.

THANK YOU TO OUR SPONSORS!

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Loving the Grasslands

Fundraiser Event 2024

our second annual Loving the Grasslands Fundraiser Event was a success! Across the province, we raised over \$35,000 to help our education and community outreach, conservation, restoration, and stewardship of British Columbia's grasslands.

Your support will contribute to:

- Friends of Lac Du Bois Stewardship projects;
- stewardship projects across the province;
- BC Grasslands magazine;
- Grassland Education video series;
- Laurie Guichon Interpretive Site invasive plant projects and school tours;
- development of "Grassland Primer for Land Use Planning";
- target objectives for grassland burning;
- outreach events across the province to improve awareness;
- development of priority areas for grassland protection to meet global 30 by 30 goals;
- updates to BC Grassland mapping to provide important information for planning;
- business case for a native seed bank
- grassland specific curriculum for schools with Thompson Rivers University.

Thank you to our sponsors, those who donated items for the live, silent and online auctions, volunteers who planned this event, and everyone who attended! We greatly appreciate your continued support and look forward to seeing you next year."

GCC Chair, Bob Haywood-Farmer



Dennis & Hallie



Dr. Tom Dickinson
PHOTO: Bob Needham



Bob Haywood-Farmer and Agnes Jackson PHOTO: Bob Needham



lan Barnett PHOTO: Bob Needham

In Memory of Maurice Frederick Hansen



aurice Hansen (1942-2023) was Chair in the early days of the GCC in 2003 and 2004. Maurice valued getting people together to solve issues, especially when that produced results. Maurice was very involved in local land-use politics in the East Kootenays—"Cowboy Politics"—as he called it. He was chair of the Kootenay Livestock Association, and chair of the Grasslands Conservation Council of BC. Maurice was also a member of the Society for Range Management and was agriculture co-rep on the CORE process, the agriculture rep on the East Kootenay Trench Agriculture/Wildlife Committee and co-author of its final report. All these initiatives ultimately led to the creation of the Rocky Mountain Trench Natural Resources Society, or The Trench as it came to be known. Maurice

was not only instrumental in starting the Trench Society, but he was also chair for many years.

For some thoughtful and still-relevant articles by Maurice, check out the four 2003 and 2004 BC Grasslands issues on the Resources tab at www.bcgrasslands.org. An example follows.

"How does a conservationist, and I include myself in that group, construct a life in today's world without losing heart? The one thing above all else that appeals to me about British Columbia, and the west in general, is space: wide-open landscapes. I want space for myself, and I want it for future generations. Find me large, intact pieces of open country and I'm in heaven. Is this something that speaks to our inherited memory, our instincts; or is it simply something I picked up from reading Away in the Wilderness when I was a kid? If it was the latter then I guess I haven't grown up yet. But I think most of us have a longing to be, at least once in a while, in a place where we can feel like the first person in the middle of creation, preferably a grassland."

Our condolences go out to Shirley and the Hansen family. Many thanks to Maurice for his years of service to the community, to building bridges, and to the grasslands of B.C.



Annual Report 2023 - 2024

Bob Haywood-Farmer and Mike Dedels Grasslands Conservation Council of BC



Governance and Capacity

It was an exciting year for the GCC: We found some new funding sources and forged many new relationships across the province. We especially enjoyed getting to Williams Lake for our 2023 Annual General Meeting, which included wonderful visits to Cotton Ranch and Churn Creek.

At our AGM we welcomed Cathy Mumford and Hellen von Harbou Bayliff as new directors. We also bid farewell to Eleanor Bassett, with big thanks to Eleanor for planning our AGM and the interesting tours. Mike Dedels also moved into his first full year as Executive Director and continues to forge relationships around the province and work on all areas of our Strategic Plan.

The GCC also held its second "Loving the Grasslands" event in February, earning over \$32,000 which can be used to leverage other funding support for the upcoming year. We also did our first online auction with this event, giving donors across the province an opportunity to support us and giving sponsors a broader reach.

Funds received from Community Gaming Grants, the BC Interior Community Foundation, the Canadian Forage and Grassland Association (CFGA), BC Parks and donors like yourselves kept us busy in all areas. The workload involved with coordinating multiple projects funded through different parties again highlighted the need for the GCC to develop more in-house capacity for project management and fundraising. We also continue to be challenged to obtain continuing base funding for operations. Considerable time continues to be spent developing relationships with governments and major foundations.

We continue to receive interest from many potential volunteers across the province. Coordinating a volunteer network and finding meaningful projects in people's area of interest is a priority for this spring. We are also researching a membership management system and website improvement to increase membership engagement and retention.

Partnerships continue to be a priority. We enjoyed meeting with groups ranging from naturalist clubs to cattlemen's associations and talking to folks about our common goal of healthy, productive grasslands. It was very rewarding to connect with First Nations from across the province at the Resolve Conference on Indigenous-led restoration in Vancouver, and with the Penticton Indian Band at the En'owkin Centre on reserve land. Attending the Garry Oak Ecosystem Restoration Conference in Victoria was also inspiring, as was ongoing work with the Invasive Species Council. Hosting the leadership team of the Canadian Forage and Grassland Association on

a beautiful December day on Douglas Lake Ranch grasslands was another highlight.

The dedication of active Board members, and significant in-kind contributions from individuals, non-government organizations and other agencies, made this a very productive year for the GCC. We also connected with many past Directors and Staff, who gave valuable insights into the GCC's history and thoughts on the path forward.

Education and Outreach

Through the support of a Community Gaming Grant, fundraising and many partners, members and volunteers the GCC continued a very active outreach program in 2023-24 to bring awareness of the importance and value of grasslands and their stewardship.

Kristi Gordon was contracted by GCC to provide outreach to a variety of audiences and support the Board in reaching a broad audience through indoor and outdoor events . Kristi and Executive Director Mike Dedels had interactions with over 1,600 people at events held across the province.

Fairs, markets, conferences and other events were attended in the Kootenays, Cariboo, Okanagan, Thompson, Coast and Vancouver Island. This included participating in the B.C. Cattlemen's Association (BCCA) booth at the



PNE where we enjoyed introducing many of the attendees at the agriculture show to the grasslands of BC.

Youth education continues to be a priority. The GCC supported Kristi and Sonya Rokosh through Thompson Rivers University in developing grasslands curriculum. The Laurie Guichon Memorial Grassland Interpretive site (LGMGIS) hosted Merritt Nature Kids on a very hot May day to learn more about their environment.

Through the efforts of Director Heather Richardson, the GCC e-news and our social media platforms continued to see increased engagement with a variety of successful campaigns. The statistics for the outreach through social media are as follows: 826 e-news subscribers. 1,430 Facebook followers, 1,500 Instagram followers. Instagram reels (short videos) show off the grasslands and generate more views and interest. Our new Linkedin site has doubled to 524 followers, predominantly professionals and organizations. Social media is being used actively to promote events and pass along GCC and other organizations' grassland information. Traditional media included spots on CBC Daybreak and The Midday Show (CFJC) in Kamloops.

GCC contracted NerdyaboutNature to produce videos on the Gary Oak Meadow ecosystem and carbon storage in grasslands. We also produced

reels with Tourism Kamloops and Tourism Kelowna, using their networks to highlight spring flowers on the grasslands. Social media promotes our advocacy efforts at Record Ridge and Harewood Plains.

The GCC again produced an engaging magazine titled, Diversity in the Grasslands, thanks to the efforts of Director Toni Boot with support from Community Gaming Funds. Twenty-two hundred copies were distributed to GCC members, folks at numerous outreach events and BC Cattlemen's Association members who steward so much of B.C.'s grasslands. We printed an additional 1000 copies for use through the fall and winter, thanks to funding support from Cenovus and the Kamloops Daybreak Rotary Club.

The GCC also produced swag in the form of stickers, T-shirts and bike socks to increase public awareness of the Council and of grasslands. Our new Canadian-made bamboo shirt featuring grassland species is available with other materials at www.bcgrasslands.org.

Stewardship and Protection

GCC carried over \$25,000 from an anonymous donor for invasive species management and grassland restoration in the Lac du Bois Grasslands to support the Friends of Lac du Bois stewardship

efforts. We also received \$5,000 from the Parks Enhancement Fund to control some of the new invaders at Lac du Bois. Directors Dennis Lloyd, Mandy Ross and Ian Barnett have led efforts in fund development and project implementation at Lac du Bois. Our trial at Red Hill has been a very useful demonstration project. We are proposing further restoration work and, to aid in restoration planning, have applied for funding to initiate a retrospective study of air photos from the last 100 years to look at changes in forest and sage cover.

Another focus of the GCC has been one of the few Crown grassland areas in the Nicola Valley, the Lundbom, primarily in the Laurie Guichon Memorial Grassland Interpretive Site. Spotted knapweed has been expanding quickly there over the last 20 years, and the GCC has undertaken demonstration work there. We received \$15,000 from the McLean Foundation in the spring of 2022, but between the challenge of sites with cheatgrass, herbicide authorization requirements, weather and wildfire, it has been challenging as a small NGO to move forward. We will be looking at options for 2024 to initiate action on this infestation.

Across the province there are many other local groups, such as the Friends of Churn Creek, working on grassland stewardship. The GCC continues to engage with many of these groups

and will be looking to enhance partnerships over the coming year. If you are interested in partnering on a project, please reach out to us.

We had ongoing discussions with the Ministry of Water, Land and Resource Stewardship regarding a proposed grassland strategy and other projects such as native seed production. We engaged with the Range Branch of the Ministry of Forests regarding potential GCC collaborations and with the Wildfire Branch regarding involvement in Cultural and Prescribed burning.

Science and Research

With \$11,500 in funding from the Canadian Forage and Grassland Association (CFGA) we were able to do point inventory work on sites throughout the Thompson Nicola, looking at native, mixed and seeded grasslands. Over 300 points were completed to contribute to the National Grassland Inventory.

The GCC is working with Thompson Rivers University and Monte Creek Winery on development of a small demonstration site looking at restoration of old hayfields to a more natural condition. This will be an interesting exercise for the students. The GCC will be looking at engaging with TRU on additional projects in 2024.

Grassland monitoring continues to be a priority. We were glad to get out with Stephanie Russell of BC Parks to read transects within Tunkwa Lake Park and look forward to working on more monitoring.

Policy

The GCC was very involved in policy work in 2023-24. Grassland loss continues to be a major concern and the GCC made representations regarding residential development proposals from the Harewood Plains in Nanaimo to the Naramata Bench, and on southeast coal proposals

in the East Kootenays and a mine proposal on the rare West Kootenay grasslands at Record Ridge near Rossland. As the only NGO representing the grasslands province- wide it is incumbent on the GCC to ensure that approving agencies understand the permanent losses to BC's biodiversity that happen when we develop grasslands.

We also presented on soil carbon to the Ministry of Agriculture Standing Committee in their Consultation on Agricultural Soil and Carbon Sequestration, and with the Ministry of Water, Land and Resource Stewardship on the Draft Biodiversity Guidelines for BC. In addition, we wrote a letter to the Premier expressing concern over potential grassland losses with legislating growth under the *Housing Supply Act*.

Treasurer's Report 2023/24

The GCC remains financially stable, with a heavy reliance on our year-end fundraiser. Review of our financial statements for the 2023/24 fiscal indicates we had substantial project funding awards from the previous year that were carried over to this year. Although funding this year did not include large project support, fundraising and other smaller grants enabled us to spend \$145,816, to cover a ½ time Executive Director, overhead costs and project activities; dominated by education and outreach and stewardship projects at Lac du Bois. We currently have \$122,625 in bank GIC investments and cash accounts, of which \$31,937 is committed to deferred projects to be funded in the next fiscal year. This leaves us with \$90,688 in unencumbered funds.

The GCC acknowledges and deeply appreciates the support we receive from the grassland's community and our directors. Over \$100,000 in donated services contributed to the well-being of this organization and the grasslands. When reviewing our statements, our directors remain concerned about achieving a stable funding source

Income & Expense Statement	
April 1, 2023 - March 31, 2024	1 April 2023 to
	March 31/24
ncome	111011 32/24
Donations and Gifts	\$ 9,627
Membership Fees	3,755
Fundraising Events-Receipts	37,754
Promotion items sales	5,139
Administration from Projects	7,100
Interest Income	365
BC Gaming Comission Grant	30,000
BC Interior Community Foundation	11,385
Cenovus	3,500
Canadian Forage	11,500
Kamloops Naturalists	470
Thompson Nicola Regional District	2,200
BC Parks	5,000
Deferred Revenue fr prior year	65,962
Total Income	\$ 193,757
xpense	
Fundraising Event Expenses	5,164
Communications	24,952
Promotion items expense	6,635
Project Expense & Contracts	34,613
Executive Director Fees	44,125
Executive Director Expenses	12,053
Insurance	2,667
Office (bookeeping/other)	5,993
Travel and Board Expenses	498
GST - non recoverable exp	2,014
Administration Expenses	7,100
Total Expense	145,815
Year to date Sur	
Project balance deferrals at year	
Net surplus in Operations for	year \$ 16,005
L W. J D	100 107
In-Kind Donations Received	100,187
Auditors' Report: We have examined the books and Conservcation Council of BC and found no significar We conclude that these statements fairly represent	nt errors.
Council as a March 31, 2024. Dennis Lloyd Dennis Lloyd Michael Dr.	Worlds

for future operations. We are attempting to secure significant funding from several sources to support longer-term projects, facilitate flexibility and project continuity and improve the financial stability of the organization. Finally, I would like to acknowledge the tremendous contribution Hallie MacDonald makes, keeping excellent records of all GCC income and expense transactions, and by providing the Board with regular financial updates.



The *Grasslands Conservation Council* relies on a strong and diverse membership to ensure it can uphold its mission of keeping the grasslands of BC intact and healthy.

We encourage you to keep your membership with our organization up-to-date. We also accept memberships and donations through Canada Helps (www.canadahelps.org/en/)

MEMBERSHIP:	☐ 1 year individual membership - \$35	1 year corporate membership - \$250
	NAME:	
	ADDRESS:	
	PHONE:	EMAIL:
DONATE:	I would like to make a donation of:	\$
TOTAL:	(Membership + Donation)	\$

All donations over \$25/yr will receive a tax receipt. The \$35 annual membership fee to the Grasslands Conservation Council of BC is not tax deductible.

Payment: Cheque or money order - payable to Grasslands Conservation Council of BC **Mail to:** P.O. Box 3341, Kamloops, BC V2C 6B9

Signature (REQUIRED):	
Date:	
We value our members and supporters, and are committed to rewarding your support with increased member services.	
☐ Please add me to the email notification list.	
☐ Please remove me from the email notification list.	

The GCC is a registered charity in Canada (Charitable Registration Number: 870042777RR0001).

Help keep BC's

GRASSLANDS Forever

for your children
for your grandchildren

Consider a gift to the Grasslands Conservation Council as part of your annual giving. We are the only not-for-profit society in BC that is dedicated to the conservation of B.C.'s grasslands. 100% of our resources go to projects that work towards sustaining our precious grasslands.

Your contribution to GCC will help continue needed outreach, stewardship and research activities. Together we can ensure that the diverse grasslands of B.C. and the biodiversity they support are here for future generations. Learn more about GCC and our projects at: **www.bcgrasslands.org**







Grasslands Conservation Council of British Columbia

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