

**Canadian organizations and the Grasslands Roadmap: A summary and review of  
conservation actions towards grassland conservation**

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## **Abstract**

Grassland conservation has been an area of increasing awareness and focus in Canada over recent years as the number of grassland Species at Risk has increased and more has been revealed of the incredible carbon storage capacity of our native grasslands (Climate Action Reserve, 2019). The Central Grasslands Roadmap was created to guide collaborative work between multiple sectors across Canada, the United States, and Mexico (Roadmap, 2020). The Roadmap identifies strategy areas and priority actions to protect and restore grasslands. This report gives a summary of organizations and coalitions based in Canada contributing to grassland conservation. The actions taken by 55 organizations are summarized in an Excel sheet and labelled with the numbered Roadmap priorities they support in order to analyse strengths and weaknesses of the current work in Canada. Results suggest that Canadian organizations are focused on education and engagement, the formation of partnerships with landowners, producers and other stakeholders, and funding conservation programs; however, community-centered research and legislative focused activism are underutilized.

## **Introduction and Background**

Grasslands are Canada's most threatened biome (Henwood, 2010). Canada's grasslands include the North American prairies of southern Manitoba, Saskatchewan and Alberta, smaller areas of grassland in southern interior British Columbia and southern Ontario and alvar grasslands in several other areas of the country. Grassland conservation has the potential to become a key player in meeting Canada's carbon reduction goals as grasslands sequester large amounts of carbon but can take over a century to regain that storage capacity after being disturbed (Climate Action Reserve, 2019). The Canadian Wildlife Service (CWS) is charged

with the conservation and management of migratory birds, species at risk and their habitats. The State of Canada's Birds report from 2019 showed a 57% decrease in grassland birds and an 87% decrease in those that require native grasslands specifically since 1970 (NABCI, 2019).

Grassland birds are suffering severe population losses, arguably more than any other group of birds in North America, and loss of their habitat to intensified agriculture, urbanization and industry is a key cause of those declines (Henwood, 2010). By 2003, 71% of the mixed prairie, 97% of the tall grass prairie and 48% of the short grass prairie in Canada had been developed (Government of Canada, 2014) and losses have continued steadily since. As most of Canada's grasslands are under provincial or private ownership, the CWS uses partnerships with producers, organizations, and other governments to work on country and continent-wide conservation of grassland habitat.

The Central Grasslands Roadmap was written as a collaborative guide to conservation across Canada, the United States and Mexico by connecting work across 8 sectors: Indigenous (First Nations and Métis), province and state-level agencies, industry, private land owners/managers/producers, academia, non-governmental organizations, foundations, and federal governments (Roadmap, 2020).

The Roadmap identifies priorities for participants to base collaboration around under three strategy areas:

- Create and Enrich Strong Partnerships
- Refine Effective Funding and Policy Initiatives
- Focus on Research to Improve Conservation

While the Roadmap is international, some of the priorities have a clear link to ongoing initiatives and potential opportunities in the United States, thus adapting the priorities of the Roadmap to Canada-specific ideas and actions has been a challenge taken on by the Canadian Working Group. To help support building partnerships and identifying the weaknesses and strengths in current grassland work in Canada, this project creates a database of organizations in Canada who contribute to the cause. The project also takes account of which Roadmap priorities organizations are addressing (intentionally or otherwise) to flag project specific collaboration potential and spot where there are current gaps in Nation or province wide actions.

### **Method/Approach**

The initial list of organizations to be included was compiled through an online search that used specific keywords “grassland conservation”, “prairie conservation” and “rangeland”, paired once with each region being documented: Canada, Ontario, Saskatchewan, British Columbia, Manitoba, and Alberta. The resulting information was scanned quickly to access news articles and organization websites which were then examined in more detail to determine if the organization fell within the defined scope.

The scope of the project was designed to avoid collecting excessive and irrelevant information while still capturing an accurate picture of grassland conservation across the country. The target of the project is organizations based within Canada, thus excluding international groups who work in Canada and governments of any level except as part of coalitions and partnerships that are Canada-specific. Partnerships and coalitions between organizations were recorded as separate entities if they complete actions and projects independent of the work already being done by participating organizations. Organizations who

have no public record of activity (such as website updates or publications) were excluded from the database.

Once the search was completed, the preliminary list was given to the project's supervisor Christian Artuso, a wildlife biologist at Environment and Climate Change Canada and member of the Canada workgroup on the Central Grasslands Roadmap. Christian gave feedback and comments and identified important organizations that had been missed in the initial search.

The feedback was reviewed and the list of organizations to be included in the Excel spreadsheet was determined. In-depth reading was done to create a 3-6 sentence summary of the actions each organization was taking to contribute to national/regional grassland conservation, this information was sourced from the organizations websites, action plans, and other publications they had created such as annual summary reports. An email or phone number was recorded when available as well as the organizations mailing address. When relevant, a list of partnerships and funders was added in another column to help give information on the network that already exists between many of these entities.

Finally, a classification system was used to identify where the actions of each organization connect with the identified strategy areas and priorities of the Central Grasslands Roadmap. Each strategy area was assigned a number; A – Partnerships and Engagement, B – Policy and Funding and C – Research to Improve Conservation. The 3-4 specific priorities outlined in the Roadmap under each strategy area were numbered to create a labeling system where each priority had a code of 1A, 2A, 3A, 4A, 1B, 2B, 3B, 1C, 2C, 3C, or 4C (table 1). The “codes” were used in a fifth column on the sheet to classify which Roadmap priorities the summarized actions of the organization are addressing.

Partnership and engagement	Policy and Funding	Research to Improve Conservation
Broaden communications and increase support (1A)	strengthen existing policy to better support communities (1B)	Address research needs to support sustainable grassland and human communities (1C)
Share knowledge and resources across cultures (2A)	develop new major legislation (2B)	integrate community-centered approaches to research (2C)
Create stronger public/private partnerships across scale and sector (3A)	funding to scale proven programs and support innovative solutions (3B)	construct sustainable models to support scaling conservation programs in grazing, regenerative agriculture and industry (3C)
Build collective action (4A)		refine shared core monitoring standards (4C)

Table 1. The three strategy areas identified on the Central Grasslands Roadmap are “Partnership and Engagement”, “Policy and Funding” and “Research to Improve Conservation”. This table lists the priority actions identified on the Roadmap to support each strategy and indicates which letter number pair will be used in this report to identify priority actions (Roadmap, 2020).

The number of times a priority was recorded in each province or at the national level was summed and recorded in tables on the “stats” tab of the excel sheet. The tables were used to generate bar graphs that display how many organizations are working on each priority, allowing for a visual representation of conservation strengths and weaknesses in each region and overall, across the country.

The completed Excel sheet, including summaries and graphs was sent to the Canadian Workgroup on the Central Grasslands Roadmap alongside a short document explaining the project and how the information was set up. The working group members were asked two questions:

- Are there any major gaps in organizations that should be included and/or their actions that should be added to this list?
- How do you foresee this document being useful to your work and what additional information could be added to support that?

Recommendations were added and the graphs were edited to account for the new information.

The above questions remain open and if you would like to share any ideas or incites please email [nstarlin@uoguelph.ca](mailto:nstarlin@uoguelph.ca) as the goal of this project is to create a living document that is updatable and can adapt to reflect the current state of grassland conservation in the country.

## **Results**

### **The Excel Sheet**

The Excel sheet created as part of this project has recorded 55 organizations. Please view the Excel sheet for summaries of what actions each organization is taking. The priorities are listed in their short forms in a column to facilitate searching for information based on area of interest.

Access the Excel file: [GrasslandOrganisationsCanada.xlsx](#)

### **National**

Fifteen organizations were recorded working to support grasslands at the National level in Canada. The “Partnerships and Engagement” strategy area is being addressed comprehensively across the board, with at least three organizations contributing to each priority. Priority 1A that seeks to broaden communications and increase support is a strength of national organizations. Many have informative and accurate information available on their websites that is written to be understood by the public (regardless of background and previous knowledge)

Challenges that still face national organization include the development and support for new major policy (3B), with only three contributing organizations, the development and refinement of grassland monitoring standards (4C) with only two contributors, and research to inform best practices for landowners and producers (2 and 3C).

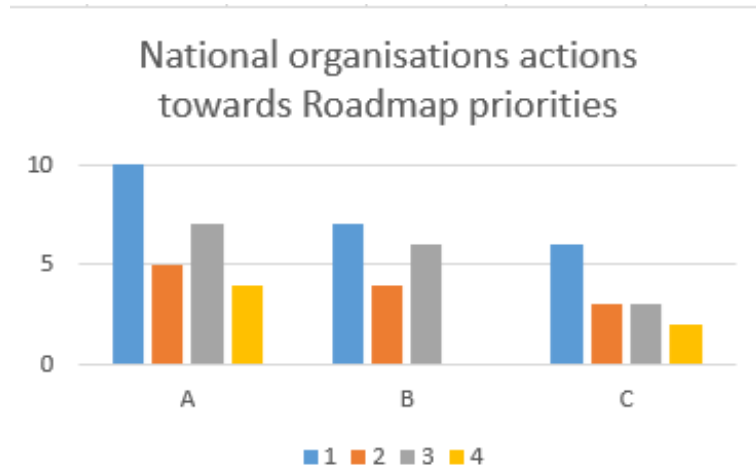


Fig.1.1 The number of national organizations whose actions fall under each identified priority of the Grasslands Central Roadmap. The strategy areas are, A: Create and Enrich Strong Partnerships, B: Refine Effective Policy and Funding Initiatives, and C: Focus on Research to Improve Conservation. See Table 1 for details on each priority (1, 2, 3, or 4).

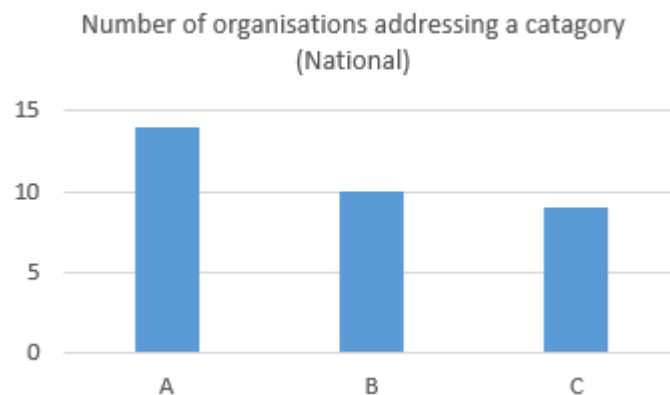


Fig. 1.2 The number of national organizations addressing each Central Grasslands Roadmap Strategy Area by contributing to one or more identified priority. The strategy areas are, A: Create and Enrich Strong Partnerships, B: Refine Effective Policy and Funding Initiatives, and C: Focus on Research to Improve Conservation

## Ontario

There are five Ontarian organizations recorded as there are only small pockets of native grasslands in the province, mostly the savanna, alvar, and some tall-grass ecosystems located in



the southern most part of the province. This small number of organizations together addresses all but one roadmap priority at least once, the exception being 2B, developing and supporting new major policy. Strengths in Ontario are 1A, broadening communications, 3B funding and supporting proven programs and innovative solutions, and 1C, research that supports sustainable grasslands and communities.

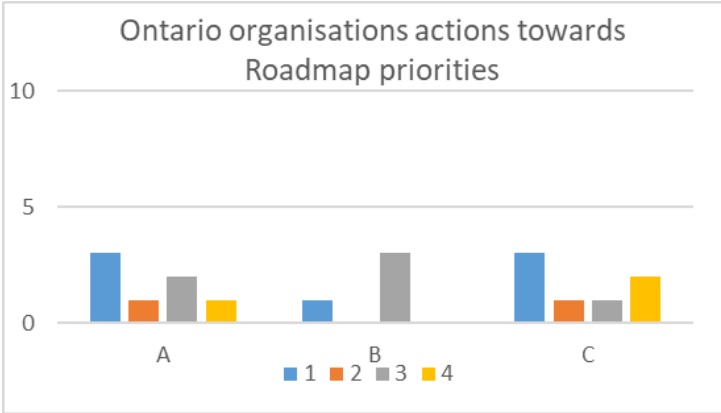


Fig. 2.1 The number of Ontarian organizations whose actions fall under each identified priority of the Grasslands Central Roadmap. The strategy areas are A: Create and Enrich Strong Partnerships, B: Refine Effective Policy and Funding Initiatives, and C: Focus on Research to Improve Conservation. See Table 1 for details on each priority (1, 2, 3, or 4).

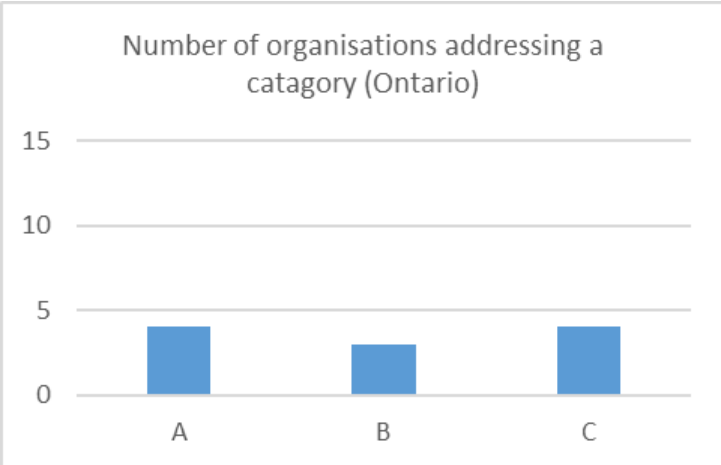


Fig. 2.2 The number of Ontario organizations addressing each Central Grasslands Roadmap Strategy Area by contributing to one or more identified priority. The strategy areas are A: Create

and Enrich Strong Partnerships, B: Refine Effective Policy and Funding Initiatives, and C: Focus on Research to Improve Conservation.

**British Columbia**

British Columbia grassland conservation shows comprehensive action across strategy area A, especially within priority 3A, creating stronger public/private partnerships across sectors, where 5/8 organizations are actively forming partnerships with landowners and producers through conservation covenants, restorations and management projects. There are currently no British Columbian groups addressing 2B, developing new major legislation, and 2C, using a community-centered approach to research.

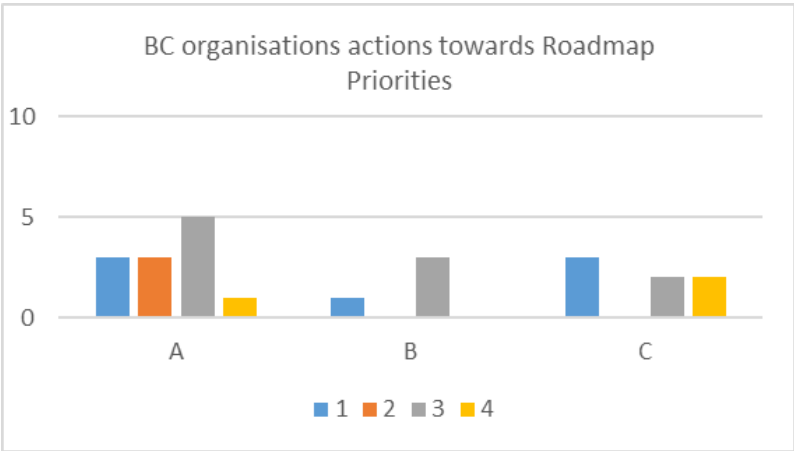


Fig. 3.1 The number of British Columbian organizations whose actions fall under each identified priority of the Grasslands Central Roadmap. The strategy areas are A: Create and Enrich Strong Partnerships, B: Refine Effective Policy and Funding Initiatives, and C: Focus on Research to Improve Conservation. See Table 1 for details on each priority (1,2,3, or 4).

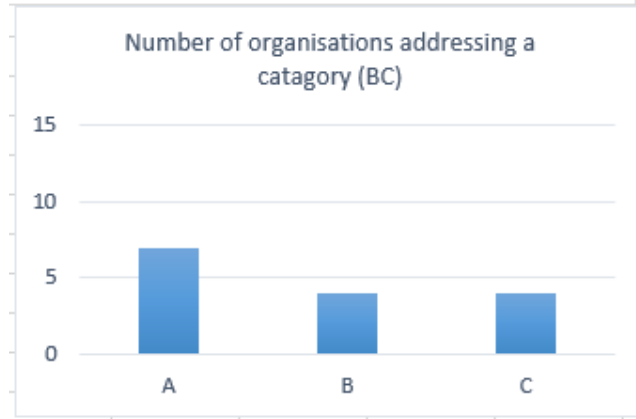


Fig. 3.2 The number of British Columbia organizations addressing each Central Grasslands Roadmap Strategy Area by contributing to one or more identified priority. The strategy areas are, A: Create and Enrich Strong Partnerships, B: Refine Effective Policy and Funding Initiatives, and C: Focus on Research to Improve Conservation

### Saskatchewan

Saskatchewan has strong and comprehensive action towards all priorities under strategy area A, building partnerships and engagement. Saskatchewan currently lacks unified action towards forming and strengthening policy and legislation (1B and 2B). Saskatchewan also has low activity on C, research, priorities other than 3C, constructing sustainable models to support scaling conservation programs in grazing, regenerative agriculture, and industry, lacking in community centered research towards monitoring and conservation (1, 2 and 4C).

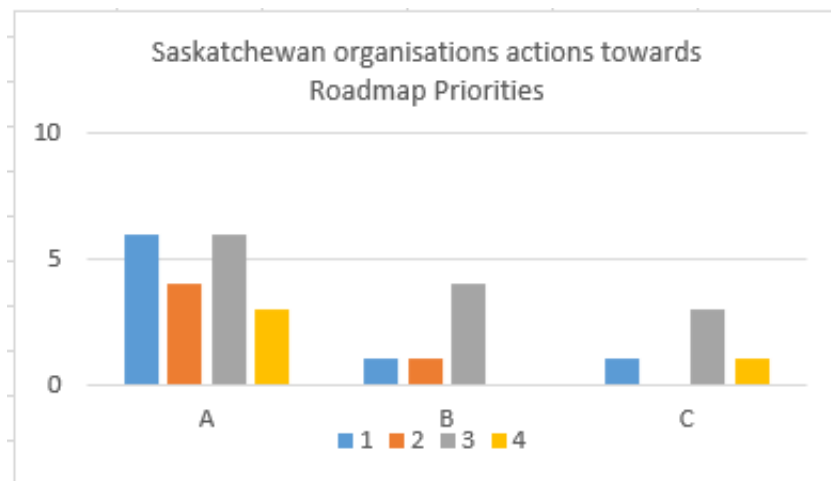


Fig. 4.1 The number of Saskatchewan organizations whose actions fall under each identified priority of the Central Grasslands Roadmap. The strategy areas are, A: Create and Enrich Strong Partnerships, B: Refine Effective Policy and Funding Initiatives, and C: Focus on Research to Improve Conservation. See Table 1 for details on what each priority (1, 2, 3, or 4) is.

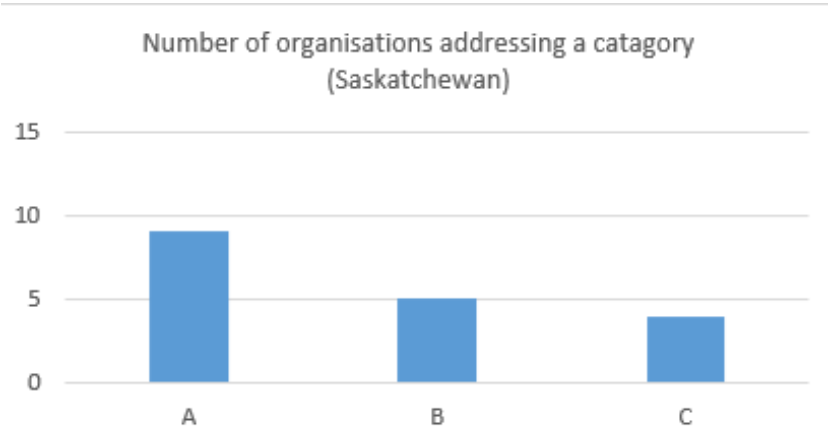


Fig. 4.2 The number of Saskatchewan organizations addressing each Central Grasslands Roadmap Strategy Area by contributing to one or more identified priority. The strategy areas are, A: Create and Enrich Strong Partnerships, B: Refine Effective Policy and Funding Initiatives, and C: Focus on Research to Improve Conservation

**Manitoba**

Of the 6 organizations recorded in Manitoba, four are working on at least one research priority and they are all addressing at least one communication and engagement priority; grassland actions in this province are centered on landowner and producer partnerships and knowledge sharing. There are currently no Manitoba-based groups working towards policy and legislation (1 and 2 B); however, as the only province with legislation on endangered ecosystems (and with tall-grass prairie and alvar listed as Endangered), Manitoba as is leading in this area.

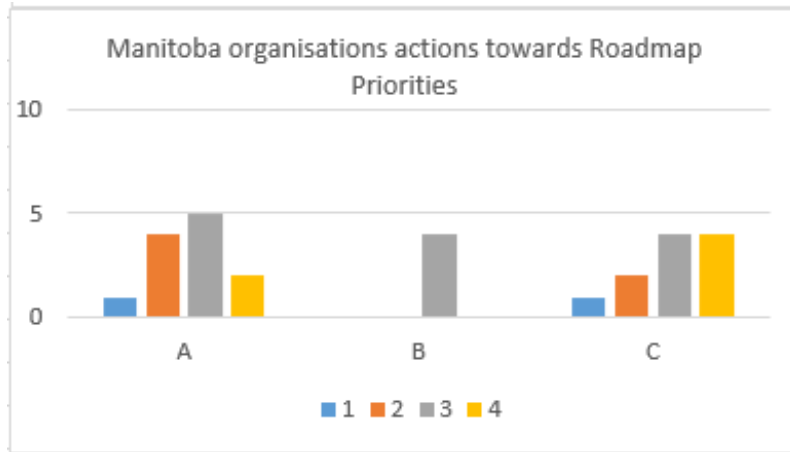


Fig. 5.1 The number of Manitoban organizations whose actions fall under each identified priority of the Grasslands Central Roadmap. The strategy areas are A: Create and Enrich Strong Partnerships, B: Refine Effective Policy and Funding Initiatives, and C: Focus on Research to Improve Conservation. See Table 1 for details on each priority (1, 2, 3, or 4).

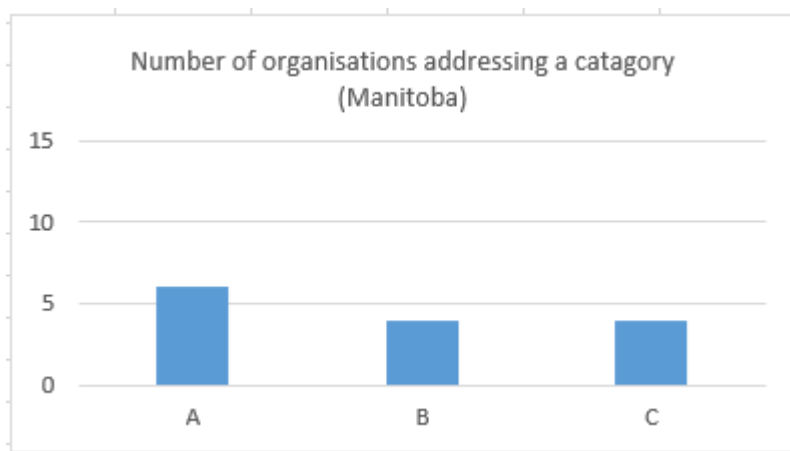


Fig. 5.2 The number of Manitoba organizations addressing each Central Grasslands Roadmap Strategy Area by contributing to one or more identified priority. The strategy areas are A: Create and Enrich Strong Partnerships, B: Refine Effective Policy and Funding Initiatives, and C: Focus on Research to Improve Conservation

### Alberta

Ten organizations were recorded in Alberta. All ten address communication and engagement under at least one priority, with seven working to form private/public partnerships (3A) and five sharing knowledge and resources across the province (2A). The province lacks efforts to form major legislation (2B) but three groups do work towards strengthening existing local and

provincial policy (1B). Six out of the ten organizations contribute to research, addressing each priority under strategy area C at least twice.

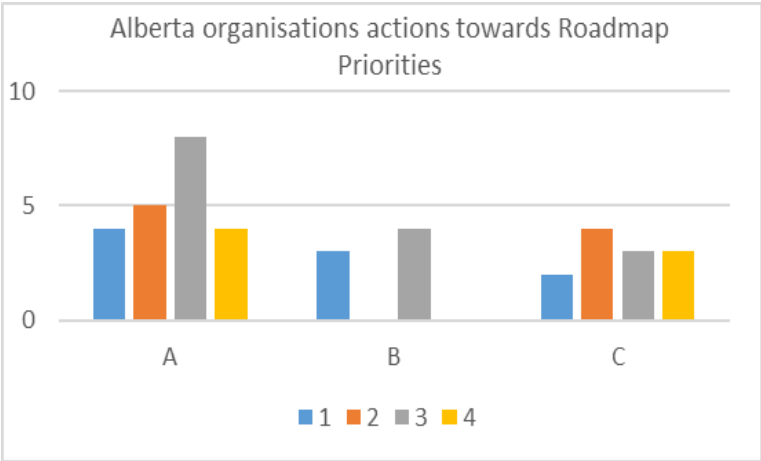


Fig. 6.1 The number of Alberta organizations whose actions fall under each identified priority of the Grasslands Central Roadmap. The strategy areas are A: Create and Enrich Strong Partnerships, B: Refine Effective Policy and Funding Initiatives, and C: Focus on Research to Improve Conservation. See Table 1 for details on each priority (1, 2, 3, or 4).

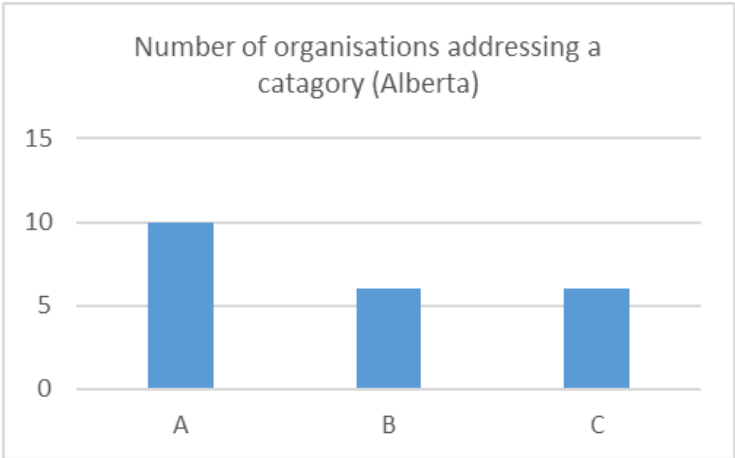


Fig. 6.2 The number of Alberta organizations addressing each Central Grasslands Roadmap Strategy Area by contributing to one or more identified priority. The strategy areas are A: Create and Enrich Strong Partnerships, B: Refine Effective Policy and Funding Initiatives, and C: Focus on Research to Improve Conservation

**Overall**

A total of 55 organizations were recorded. Over half of these organizations work to form private and public partnerships across sectors (3A) and/or to broaden communication and support for grassland conservation (1A). Overall, the priority lacking action is noticeably 2B, the formation and support of new legislation, with only six groups contributing to this effort, mostly at the national level. Fifty organizations are contributing to communication and engagement in some form, thirty-two are contributing to policy and funding work (funding being the main focus of most, with twenty-four organizations contributing to priority 3B), and thirty contributing to conservation research.

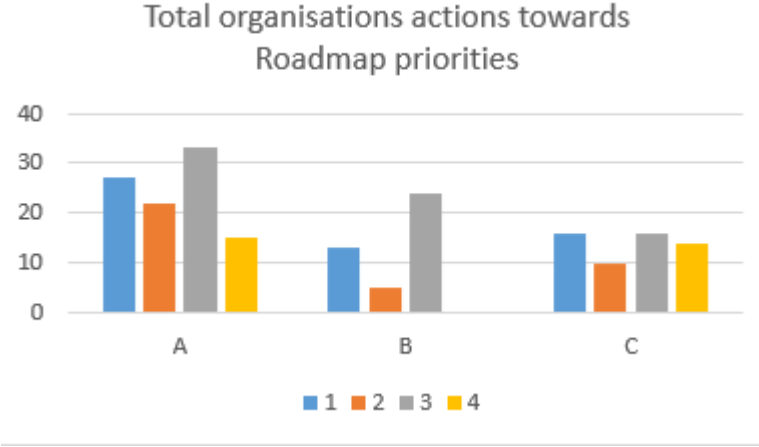


Fig. 7.1 The number of Canadian organizations whose actions fall under each identified priority of the Grasslands Central Roadmap. The strategy areas are A: Create and Enrich Strong Partnerships, B: Refine Effective Policy and Funding Initiatives, and C: Focus on Research to Improve Conservation. See Table 1 for details on each priority (1, 2, 3, or 4).

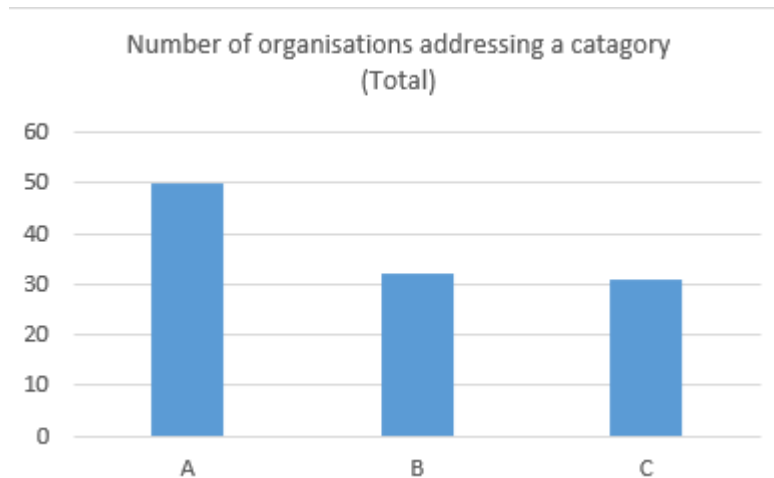


Fig. 7.2 The number of Canadian organizations addressing each Central Grasslands Roadmap Strategy Area by contributing to one or more identified priority. The strategy areas are A: Create and Enrich Strong Partnerships, B: Refine Effective Policy and Funding Initiatives, and C: Focus on Research to Improve Conservation

### Recommendations

All priorities under strategy area A are being addressed across the country and grassland holding provinces, indicating that there should be increasing public awareness of grassland importance among Canadians. There have been exceptional efforts by organizations to engage with landowners and producers through conservation covenants, restoration projects and land management (priority 3A) and significant funding has been pushed towards supporting and strengthening these efforts (3B). Despite the engagement of landowners, there is still a lack of community centered research being done. Strong partnerships exist with landowners, a potential next step for Canadian grassland conservation might be taking full advantage of these connections by engaging landowners in the development of research questions that address their needs and motivate their participation in conservation. There also seems to be a gap in work towards pushing for major legislation in Canada for grassland conservation. Advocacy for major legislation requires many unified voices and a centered message. Groups like the Green Budget



Coalition are a strong start in supporting new legislation. A potential role for the Roadmap in Canada could be serving as a link between the listed organizations to develop large spread ideas and support for grassland focused legislation.

Members of the workgroup gave comments on how the information in the report and Excel sheet might be useful to their work. Potential uses for the information gathered included informing philanthropy and grant-making strategies.

Having a clear picture of the work being done in grassland conservation is crucial to organizations, groups, and initiatives seeking to support that conservation. The goal of this report is to create a preliminary review of the work done by Canadian organizations that can be added to and updated to monitor as a “living document” of centralized information. Alongside similar projects that have catalogued efforts in the United States and International efforts, the work in this project seeks to facilitate network formation between organizations, build support and facilitate collective action.

### **Biases**

The material in this report is meant to give a snapshot of grassland conservation in Canada and give recommendations based on that snapshot. It does not capture research done by academic institutions and international organizations, potentially leaving out influential work being done outside of NGOs, this could contribute to the low reporting in research-based priorities (C) and policy (B). This report was written by a coop student working with the Migratory Birds Conservation Division of Canadian Wildlife Services, and was supported by colleagues, therefore the information may be biased by an increased awareness of bird focused groups and their projects. All information in this review is based on the public information organizations

share online with some input of knowledge from Canada workgroup on the Central Grasslands Roadmap, therefore the report does not account for plans and actions taken by groups outside of what those groups have chosen to document online. The online search style used for this report biases it against groups without a strong Web presence. The “classify and count” method used to measure work being done in this report does not account for the quality and quantity of work being done within organizations on given priorities, potentially under or over estimating impacts.

### **Acknowledgments**

Thank you to Christian Artuso of Canadian Wildlife Services for providing feedback and guidance on the content and format of the project throughout the entire research and writing process, to Cliff Wallis of the Alberta Wilderness Association and Jeremy Pittman from the University of Waterloo who provided comment on organizations that had been missed in the original draft, and to Lauren Atkinson of the Walton Trust, Andre Vallille of the Metcalf Foundation, and Matt Gray of Rocky Mountain Observatory for giving comments on how the information in the Excel sheet and report might be used in their work.

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