



North American Grasslands Alliance

A Framework for Change

Please cite this report as:

CEC. 2013. *North American Grasslands Alliance: A Framework for Change*.
Montreal, Canada. Commission for Environmental Cooperation. 25 pp.

Acknowledgements

North American Grasslands Alliance: A Framework for Change is the outcome of three CEC Grasslands Experts and Partners Trilateral Meetings in 2012-2013 (see pp. 24-25 for the full list of participants). The document was refined by Gerardo Bezanilla, Sue Michalsky and Duane Pool, with technical review by the North American Grasslands Working Group. It was prepared by Itzia Sandoval (program assistant), with support from Karen Richardson (program manager), Sarah Heiberg (project coordinator), Jeff Stoub (communications and publications manager), and Johanne David, Jacqueline Fortson and Douglas Kirk (editors). Graphic design by Ana Bercovich and Gray Fraser (cover).

ISBN: 978-2-89700-034-9 (print version)

ISBN: 978-2-89700-035-6 (electronic version)

Disponible en español:

ISBN: 978-2-89700-036-3 (versión impresa)

ISBN: 978-2-89700-037-0 (versión electrónica)

Disponible en français:

ISBN: 978-2-89700-038-7 (version imprimée)

ISBN: 978-2-89700-039-4 (version électronique)

Legal Deposit – Bibliothèque et Archives nationales du Québec, 2013

Legal Deposit – Library and Archives Canada, 2013



For more information:



Commission for Environmental Cooperation

393, rue St-Jacques Ouest, Bureau 200

Montréal (Québec) Canada H2Y 1N9

t (514) 350-4300 f (514) 350-4314

info@cec.org / www.cec.org

Publication Details

Publication type: *Project Report*

Publication date: *August 2013*

Original language: *English*

Review and quality assurance procedures:

Final party review July-August 2013

QA12.02



Being a cattle producer, I am aware of the importance of improving and maintaining ecosystems... Knowing that an alliance to protect North American grasslands is already working on it, is another laudable effort worth collaborating with.

Mateo Giner Mendoza
Administrator, Rancho Epigmenia
Mexico

We probably don't vote with our dollars the way that is best for nature.

Justin Pepper
Director of Prairie Bird Conservation, Audubon
USA

The most important piece for me is public awareness because then consumer preference and policy are driven in the right direction.

Sue Michalsky
Director, Ranchers Stewardship Alliance
Canada

Preface

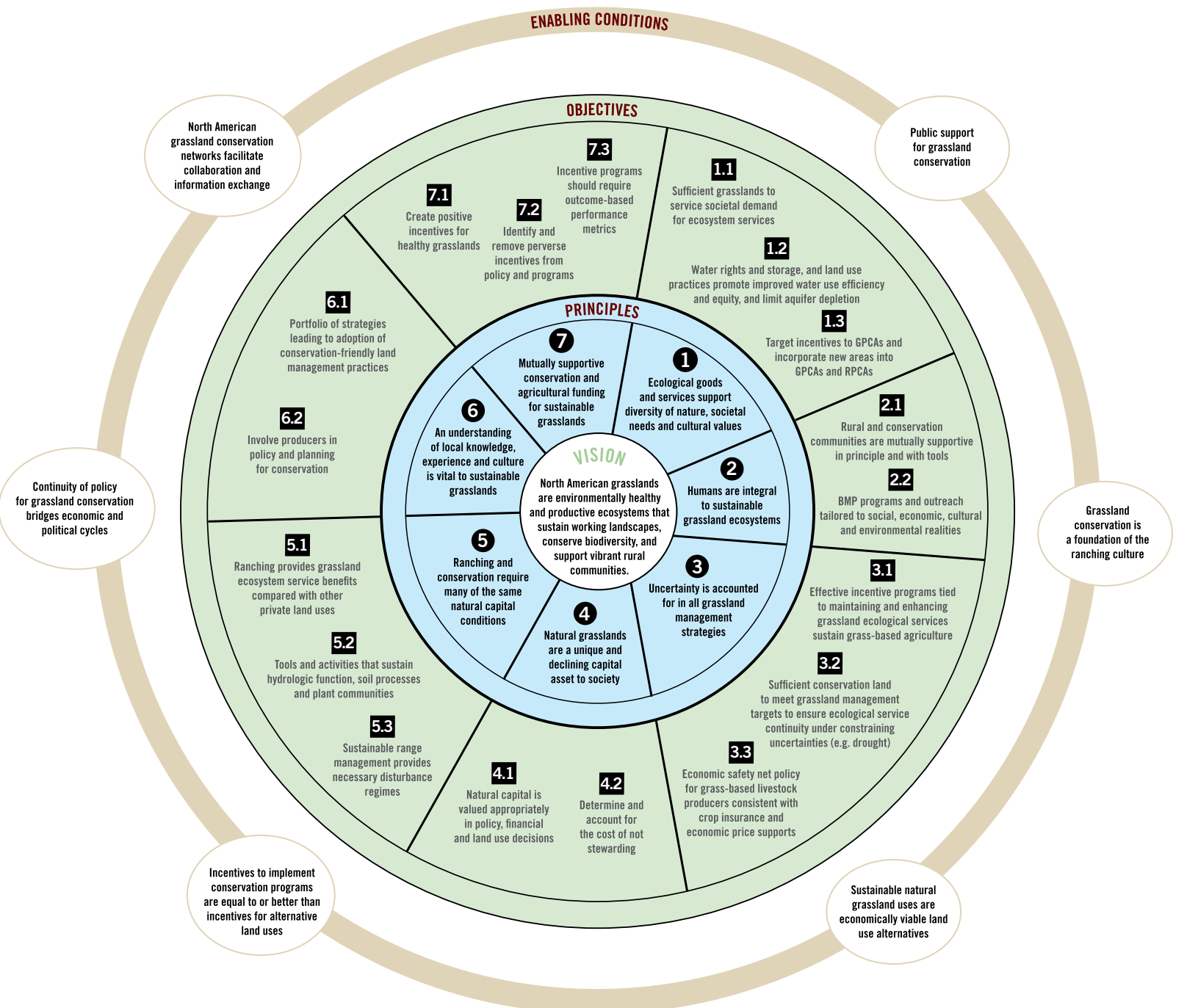
The central grasslands of North America are the spine of the continent, supporting livestock production, sustainable ranching, and diverse plant and animal species. From 2011, the Commission for Environmental Cooperation supported a project entitled *North American Grasslands: Management Initiatives and Partnerships to Enhance Ecosystem and Community Resilience*. The goal of the project was to address several issues related to the loss of grasslands through the provision of comprehensive scientific information; data from pilot studies with land managers and ranchers; an extensive set of beneficial management practices aimed at accelerating sustainable actions to help slow and stop the disproportionate rates of grassland conversion; and the establishment of a continental partnership to advance grassland conservation and sustainable use through collaborative action.

As part of the project outputs, a web-based tool was developed to host and disseminate almost 100 beneficial management practices (BMPs) from ranchers, conservation organizations, government and academic bodies in Canada, the United States and Mexico. In addition, data on the density and status of grassland birds in Northern Mexico, an important indicator

of overall grassland biodiversity health, were collected and synthesized to produce analyses on trends in bird abundance and distribution. Several pilot projects with rancher groups, including a beef industry supply chain analysis, a private lands wildlife biologist extension program, and research into market-based incentives for sustainable rangeland management were carried out. Outreach material including a video to promote BMPs was also produced. Lastly, the project established the North American Grasslands Alliance (NAGA) – an Alliance of government agencies, rancher groups, non-government organizations and other interest groups. During the course of the project, three meetings with partners and experts were held to establish NAGA and develop the multi-faceted collective approach to support North American grasslands presented here. The approach is supported by a diagram illustrating how the framework components work together, supporting the vision to achieve a desired state for North America's grasslands. This framework document lays a strong foundation to bring about the deep changes that are required for a continentally integrated planning and management approach to achieve lasting sustainability of this uniquely shared terrestrial ecosystem.



Framework Summary



Vision

North American grasslands are environmentally healthy and productive ecosystems that sustain working landscapes, conserve biodiversity, and support vibrant rural communities.

The vision statement of the North American Grasslands Alliance reflects an overall objective or desired state of a sufficiently conserved grassland base that supports and sustains viable human communities and economic and cultural activities, as well as ecological goods and services¹ such as biodiversity, groundwater recharge and carbon sequestration. Many varied

issues and opportunities exist that could contribute to a North American strategy to achieve this vision.

The vision recognizes that many national and regional differences exist that will impact strategies to support the vision. Strategies and actions will need to occur at the trinational, national, transboundary and regional level.



Courtesy of Trevor Herriot

1. Ecological goods and services, ecosystem goods and services, ecological services and ecosystem services are used interchangeably in this document and should be interpreted in the broadest sense of their definition.

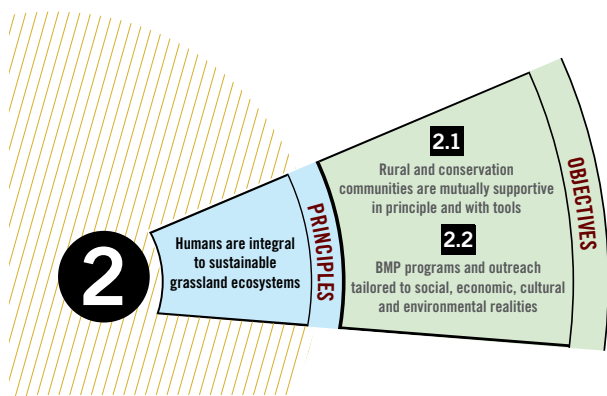
Principles and Objectives

The vision of the North American Grasslands Alliance is based on a set of foundational principles for a trinational conservation strategy. Each principle (in bold font below) is associated with several objectives (the sub-bullet points) that need to be met in order for that principle to be upheld. These principles and objectives help partners to assess the alignment of their operations and/or activities with regards to achieving the overall vision.



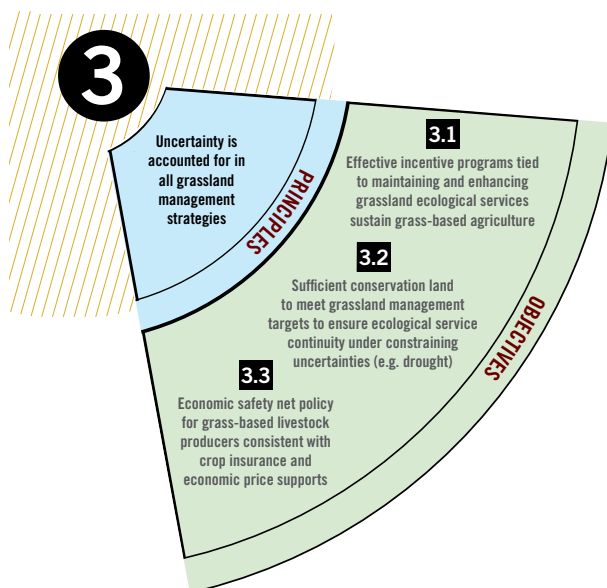
1. **Ecological goods and services provided by grasslands support the diversity of nature, societal needs and cultural values.**

- 1.1 Continental and regional grasslands need to be of sufficient quantity and quality to service societal demand for ecosystem services.
- 1.2 Water rights and storage, and land use practices must promote improved water use efficiency and equity, and limit aquifer depletion.
- 1.3 Target conservation and restoration incentives to grasslands priority conservation areas (PCAs) as a minimal basis for conservation planning. Additional core grasslands and areas in need of restoration need to be identified and incorporated into grassland PCAs and Restorable PCAs.



2. Humans are and will continue to be an integral part of sustainable grassland ecosystems, resulting in increased demand for both natural capital² and secondary products.

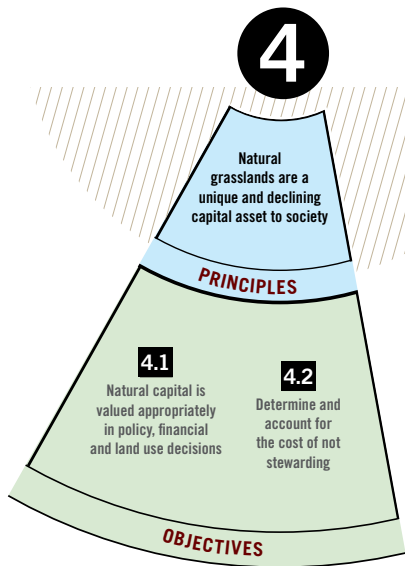
- 2.1 Rural and conservation communities must be mutually supportive both in principle and with tools.
- 2.2 Programs and outreach must be tailored to social, economic, cultural and environmental realities to facilitate the uptake of beneficial management practices (BMPs).



3. Uncertainty is accounted for across all levels of grassland management strategies, ensuring the viability of grassland systems' ecological and economic sustainability.

- 3.1 Effective incentive programs tied to maintaining and enhancing the ecological services provided by grasslands are required to sustain grass-based agriculture.
- 3.2 Sufficient minimum conservation land must be secured to meet grassland management targets, including population and habitat goals, to ensure continuity of ecological services under a range of constraining uncertainties, to offset additional capacity requirements during disasters such as drought.
- 3.3 Policy that provides a set of economic safety nets for grass-based livestock producers consistent with crop insurance and economic price supports.

2. Natural capital is defined as the indispensable resources and benefits, essential for human survival and economic activity, provided by the ecosystem. Natural capital is commonly divided into (1) renewable resources (agricultural crops, vegetation, wildlife) and (2) non-renewable resources (fossil fuels and mineral deposits).

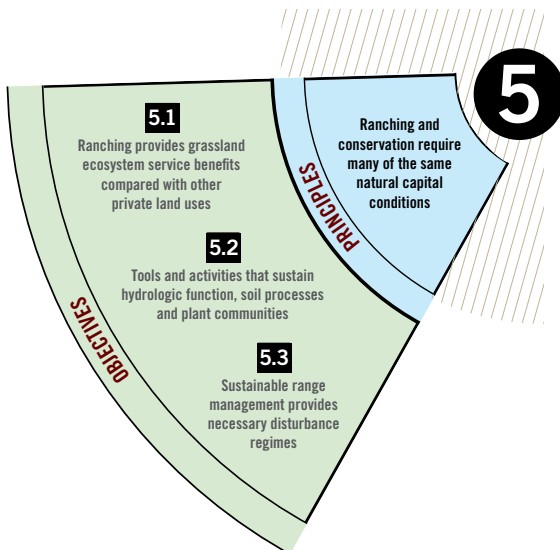


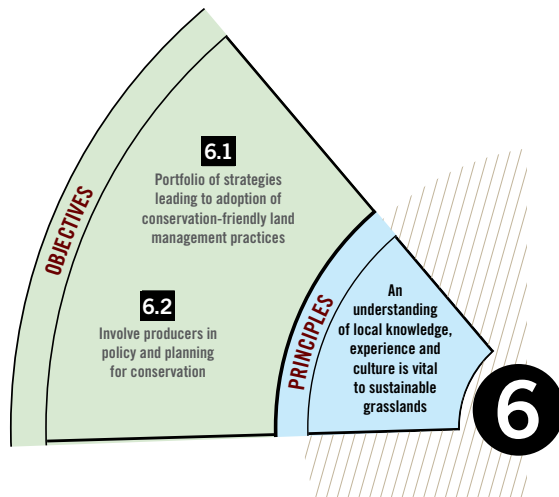
4. Natural grasslands are a unique and declining capital asset that provides irreplaceable services to society, landowners and land managers. ---

- 4.1 Natural capital needs to be valued (monetarily or otherwise) appropriately in all policy, financial and land use decisions.
- 4.2 The ecological costs of land use change from ranching to agricultural or other uses (i.e., the cost of not stewarding) must be determined and losses accounted for.

5. Ranching and conservation require many of the same natural capital conditions for sustainable economic, social and ecological goals. ---

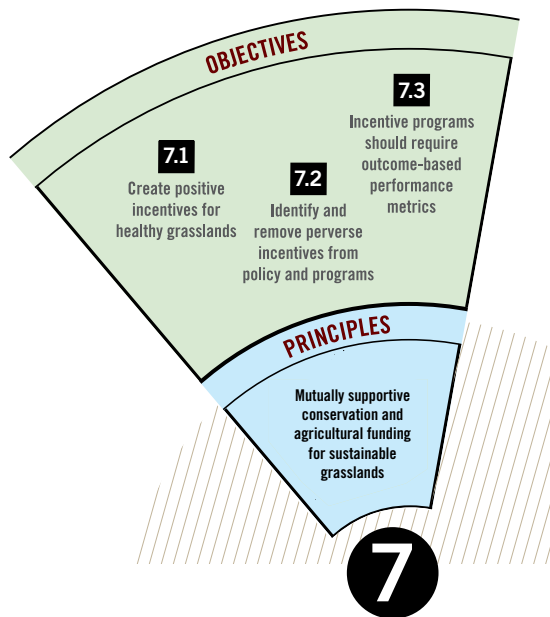
- 5.1 Encourage ranching as an effective means to conserve grassland ecosystem services in terms of benefits to society compared with alternate private land uses.
- 5.2 Promote the use of tools and activities that sustain hydrologic function, soil processes and plant communities.
- 5.3 Promote sustainable range management as an effective means of providing necessary disturbance regimes.





6. An understanding of local knowledge, experience and culture is vital to communicate the importance of grassland conservation and sustainable land management practices.

- 6.1 Develop a portfolio of strategies that lead to the adoption of conservation-friendly land management practices taking into account local knowledge, experience and culture.
- 6.2 Involve producers in policy and planning for conservation.



7. Conservation and agricultural funding should be mutually supportive of sustainable grasslands and range management practices.

- 7.1 Create positive incentives that promote sustainability, resilience and ecological health of grassland ecosystems.
- 7.2 Identify and remove perverse incentives from policy and programs.
- 7.3 Government incentive programs should require outcomes based performance metrics focused on addressing the source of issues which may be ecological, social or economic in nature.

Enabling Conditions

The enabling conditions provide a benchmark against which partners can evaluate their operating environment. Where these conditions are in place, they accelerate the implementation of actions conducive to meeting the above principles and objectives and achieving the vision. The conditions include:



Courtesy of Courtney Couch

Blue Grama

1. Broad public support for grassland conservation.
2. Grassland conservation is a foundation of the ranching culture.
3. Sustainable uses of natural grasslands are an economically viable alternative to other land uses.
4. Incentives to implement sustainable, productive conservation programs are equal to or better than incentives for alternative land uses.
5. Continuity of policy for grassland conservation that bridges economic and political cycles.
6. North American grassland conservation networks that facilitate all levels of collaboration and information exchange.

Strategic Priorities to Achieve the Vision

The changes required to stem the loss of the grasslands across North America can only occur through prioritizing goals and actions. These five priorities are strategically important to achieving the vision of grasslands as *environmentally healthy and productive ecosystems that sustain working landscapes, conserve biodiversity, and support vibrant rural communities.*

Concrete goals are associated with each priority, supported by a number of actionable tasks to reach those goals. Things that could help or hinder progress toward each strategic priority, as well as examples of activities to complete the tasks are highlighted in the boxes on these pages.



PRIORITY # 1: Engage urban and rural society

GOALS

1. Increase understanding and appreciation of the role of grasslands in the provision of ecological services and food production.
2. Use messaging focused around the ecological and economic costs associated with the loss of grassland.
3. Brand and certify environmentally and economically sustainable ranching as a grassland-friendly land use.

Things that help

Access to society to garner long term grasslands support

Cross-sectoral teams focused on grasslands engagement

A continent-wide state of grasslands assessment

Accounting for and awareness of grasslands values

Matrix of beef supply chain beneficial practices

Things that hinder

No coordinated efforts to reach society

Conflicting goals for government and agriculture industry

Lack of information on the values of grasslands

No valuation of the cost of (not) stewarding grasslands

No validation/certification mechanism for sustainable ranching

TASK 1: Establish a trinational coordination structure, that will allow effective cooperation in the grasslands building on existing initiatives, and supported by complementary partners

Activity example

Secure funding and institutional support for a trinational North American Grasslands Alliance Coordinator

TASK 2: Develop a social marketing and communications campaign related to sustainable grasslands

Activity example

Review existing socio-economics surveys to determine attitudes towards grasslands conservation and roles of ranchers. Synthesize the results and determine gaps

TASK 3: Carry out education strategies focused on grassland resource sustainability and ecosystem services

Activity example

Develop and target ranch management curriculum for rural schools (e.g., module to determine appropriate stocking rates in math curriculum)

PRIORITY # 2:

Engage current and future stewards of the land

GOALS

1. Recognize that ranching and conservation are mutually beneficial.
2. Involve ranchers in conservation planning and policy discussions.
3. Highlight the links between conservation and ranching and the use of beneficial management practices (BMPs) in primary education, extension and outreach to rural communities.

Things that help

Capacity of governments and NGOs to deliver programs and support

Dedicated government funding to support rangelands conservation and BMPs

Updated rural education programs on values of, and techniques for, sustainable grasslands

Peer to peer outreach and training programs

Recognition of exemplary stewardship

Things that hinder

Prohibitive cost as a barrier to government and ranch engagement

Lack of professionals providing technical assistance to ranchers

A disinterest or lack of capacity to provide and participate in education programs

Lack of agency stability and continuity

Unawareness of the economic benefits of BMPs

TASK 1: Empower and encourage people to be stewards of their land and to seek out available resources and tools

Activity example

Develop a central clearinghouse and discussion forum for sharing technical and practical information (e.g., BMPs) from all three countries, with translations as appropriate



Courtesy of Courtney Couch

Buffalo Grass

PRIORITY # 3:

Improve the economic sustainability of ranches

GOALS

1. Communicate that economically sustainable ranchers and ranching communities are the keystone to conservation success.
2. Improve ranch profitability through the development and implementation of a wide variety of outcome-based beneficial management practices (BMPs); incentive tools that help achieve economic parity with alternate land uses; and improved competitiveness of conservation incentives, risk insurance and other programs for ranchers.

Things that help

New funding for conservation policies and incentive programs that fit ranching business model

Research linking production benefit to conservation benefit available to ranchers

Connecting producers to consumers through communication of standards, certification and branding

Economic diversification of ranchers (e.g. hunting leases, ecotourism, rock hounding, bird watching)

Things that hinder

Lack of societal will to pay for the ecological services that sustain them

Crop production research more available than grassland management/productivity research

Lack of market incentives/incentive programs

TASK 1: Develop and support policies that make ranching more economically competitive

Activity example

Identify and evaluate existing programs and policies in each country that provide both positive and perverse incentives for grassland conservation

TASK 2: Use research effectively to advance conservation on the ground

Activity example

Create decision support tools for ranchers that incorporate the results of research findings and allow for evaluation of potential outcomes resulting from a change in management

TASK 3: Improve profitability through incentives, market development and diversification

Activity example

Develop market-based incentives to attract consumer support of sustainable grass-based ranching

PRIORITY # 4:

Harmonize agricultural and environmental policy

GOALS

1. Eliminate policies and incentives that promote the loss of grasslands.
2. Improve markets and economic returns for grass-based alternate land uses by improving communications and linkages between government agencies with differing mandates and between different levels of government.
3. Increase involvement of agricultural and environmental government agencies in conservation initiatives.

Things that help

Trinational partnership including both agriculture and environment sectors

Public and decision-maker awareness of full-cost accounting including ecosystem services

Favourable neighboring country immigration policy that affects land use pressure

Things that hinder

Conflicting societal goals impede actions on grasslands conservation

Inadequate consideration for grassland ecosystem services on bank balance sheets and for loans

Unfavourable neighboring country immigration policy that affects land use pressure

TASK 1: Improve communications, linkages and involvement between and among agencies and stakeholders to improve policy for grassland conservation

Activity example

Expand the North American Grasslands Alliance and formalize membership



Big Bluestem

PRIORITY # 5:

Identify, increase and improve the applicability of research and monitoring

GOALS

1. Deepen and broaden research and monitoring efforts to better inform conservation in working landscapes including: i) valuing ecological services; ii) targeting BMPs, protection and enhancement to prioritized habitats, species and threats; iii) incorporating economic and social components of research required to inform policy and promote conservation ethic; and iv) monitoring conservation programming and practices to inform and improve efficiency.
2. Increase funding for research and monitoring.
3. Engage institutions in grassland research and monitoring.
4. Communicate research findings and monitoring results to key audiences.

Things that help

Well-funded applied research and monitoring

A social science and multi-disciplinary focus of new programs

Willingness to consider new approach to conservation and research

Things that hinder

Adaptive management loop is rarely completed or first funding to cut

Lack of databases with consistent protocols for analysis and public access

Lack of baseline data and planned analysis before starting a monitoring program, to understand changes and trends

TASK 1: Target and expand research and monitoring that focus on improving the sustainability of grasslands

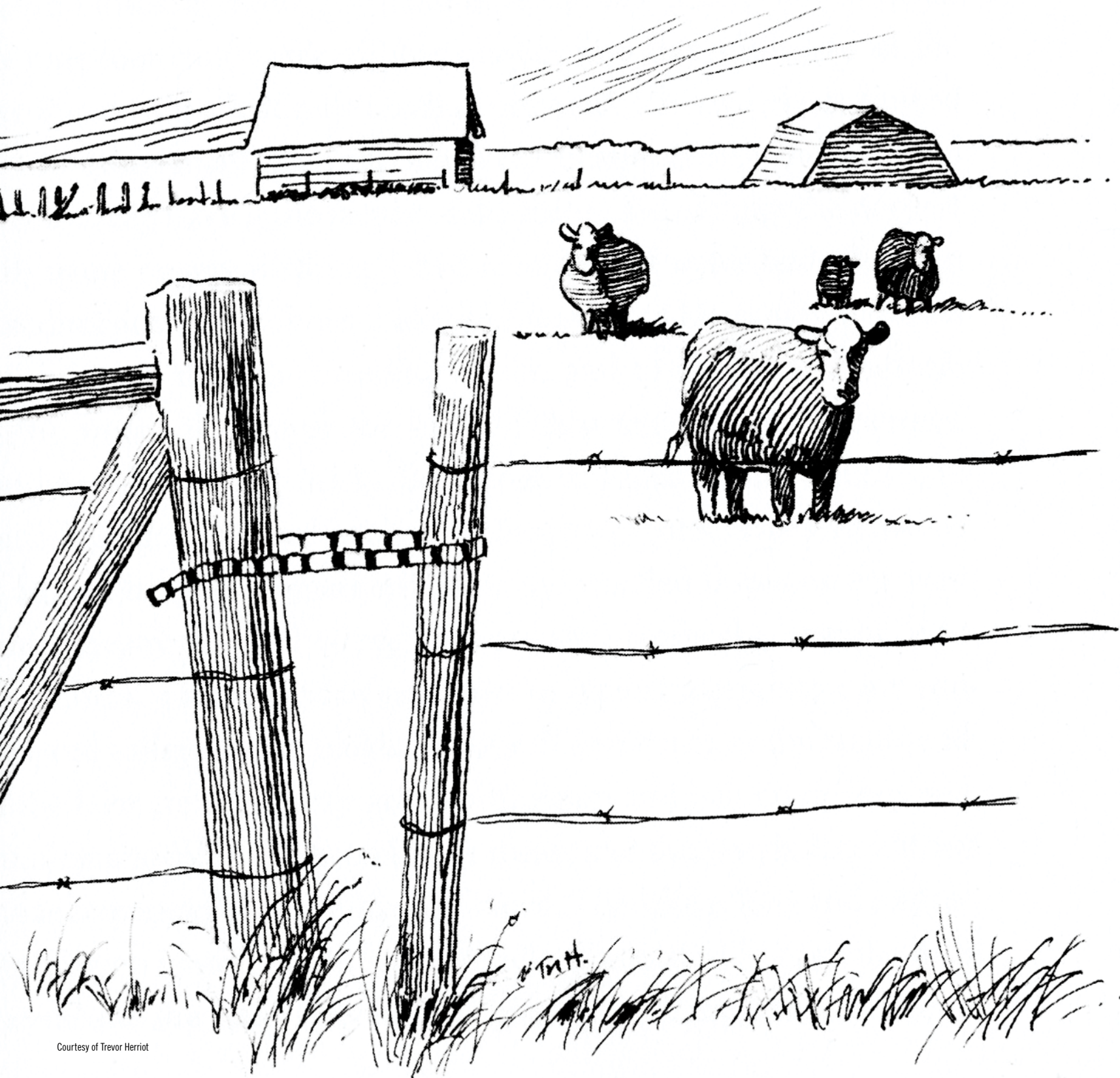
Activity example

Continually improve the delineation and adaptation of Grassland Priority Conservation Areas based on new science, information and threats

TASK 2: Increase funding for research and monitoring, including social science, to better inform conservation in working landscapes

Activity example

Encourage universities and other research institutes to engage and expand research for conservation and sustainable management of grasslands





Invitation

You are invited to take up and champion these foundational principles, objectives and priorities to sustain working landscapes, conserve biodiversity, and support vibrant rural communities across North America.

Please adopt this framework document, in whole or in part, to help maintain and conserve grasslands for present and future generations.

Together, our contributions will sustain North America's grasslands as environmentally

healthy and productive ecosystems, engage the public and institutional support needed to build momentum for grasslands conservation, and increase the awareness of the ecological and economic values of sustainable grasslands.

As part of a collective voice and strong alliance, our actions will ensure healthy grasslands forever.

A special thank you to all participants for their contribution to the *North American Grasslands Alliance: A Framework for Change* document

Humberto Berlanga García (*Comisión Nacional para el Conocimiento y Uso de la Biodiversidad*)

Gerardo Bezanilla Enríquez (*Universidad Autónoma de Chihuahua*)

Elco Salvador Blanco Madrid (*Agro Cultura Empresarial*)

Pedro Angel Calderon Dominguez (*Rocky Mountain Bird Observatory*)

Jim Chu (*US Forest Service*)

Roger Cogan (*Appleton-Whittell Research Ranch of the National Audubon Society*)

Lizardo Cruz Romo (*Comisión Nacional de Áreas Naturales Protegidas*)

Brenda Christine Dale (*Environment Canada Canadian Wildlife Service*)

Mauricio De la Maza Benignos (*Pronatura Noreste*)

Garry Donaldson (*Canadian Wildlife Service*)

Kevin Ellison (*Wildlife Conservation Society*)

Antonio Esquer Robles (*The Nature Conservancy*)

Larry Fisher (*University of Arizona, School of Natural Resources and the Environment*)

Guy Foulks (*US Fish and Wildlife Service*)

Kevin France (*Alberta Environment and Sustainable Resource Development*)

Sally Gall (*Buenos Aires National Wildlife Refuge*)

Mateo Giner Mendoza (*Rancho Epigmenia*)

Renny Grilz (*Nature Conservancy of Canada*)

Kerry Grisley (*Alberta Fish & Game Association*)

Mary Gustafson (*American Bird Conservancy*)

Juan Carlos Guzmán Aranda (*Alianza Regional para la Conservación de Pastizales del Desierto Chihuahuense*)

Sarah Heiberg (*Commission for Environmental Cooperation*)

Jurgen Hoth (*Alianza Regional para la Conservación de Pastizales del Desierto Chihuahuense*)

Curtis Hullick (*The Manitoba Habitat Heritage Corporation*)

Fawn Jackson (*Canadian Cattlemen's Association*)

Genevieve Johnson (*Desert Landscape Conservation Cooperatives*)

Pedro Jurado Guerra (*Instituto Nacional de Investigaciones Forestales, Agrícolas y Pecuarias*)

Linda Kennedy (*Audubon Appleton-Whittell Research Ranch*)

Duane Kriese (*U.S. Fish and Wildlife Service*)

Ken Kriese (*U.S. Fish and Wildlife Service*)

Tracy Kupchenko (*ESRD-Rangeland Management Branch*)

Ben Larson (*National Wildlife Federation*)

Gregory Levandoski (*Rocky Mountain Bird Observatory*)

Tanya Luszcz (*Partners in Flight BC*)

Michael Margo (*United States Department of Agriculture -NRCS*)

Amy Markstein (*Bureau of Land Management*)

Brian Martin (*The Nature Conservancy*)

Willis Donald McLennan (*Alberta Forage Industry Network*)

Alicia Melgoza Castillo (*Universidad Autónoma de Chihuahua*)

Robert Mesta (*Sonoran Joint Venture*)

Susan Michalsky (*Ranchers Stewardship Alliance*)

Rod Mondt (*Sky Island Alliance*)

Carlos Raúl Morales Nieto (*Instituto Nacional de Investigaciones Forestales, Agrícolas y Pecuarias*)

Tara Mulhern Davidson (*Agriculture & Agri-Food Canada*)

Larry L. Norris (*Desert Southwest Cooperative Ecosystem Studies Unit*)

Arvind Panjabi (*Rocky Mountain Bird Observatory*)

Justin Pepper (*National Audubon Society*)

Duane Pool (*Rocky Mountain Bird Observatory*)

Ronald (Ron) Pulliam (*University of Georgia*)

Adrián Quero Carrillo (*Colegio de Postgraduados*)

Óscar Ramírez Flores (*Comisión Nacional de Áreas Naturales Protegidas*)

Karen Richardson (*Commission for Environmental Cooperation*)

Aimee Roberson (*Desert Landscape Conservation Cooperatives*)

Tahnee Robertson (*Southwest Decision Resources*)

Vicente Rodríguez Contreras (*Comisión Nacional para el Conocimiento y Uso de la Biodiversidad*)

Roberto Rodríguez Salazar (*Universidad Autónoma de Chihuahua*)

Homer Sanchez (*United States Department of Agriculture -NRCS*)

Martin Sanchez Vilchis (*Comisión Nacional de Áreas Naturales Protegidas*)

Itzia Sandoval (*Commission for Environmental Cooperation*)

Forrest Sherman (*Southwestern Arid Grassland Ecology*)

Karen Simms (*Bureau of Land Management*)

Dean Smith (*Association of Fish and Wildlife Agencies*)

Daniel Svingen (*US Forest Service*)

Jésus Terrazas Rico (*Asociación Ganadera Local de Ascensión*)

Tamara Thies (*National Cattlemen's Beef Association*)

William Van Pelt (*Western Association of Fish and Wildlife Agencies*)

Lilia Vela Valladares (*Pronatura Noreste*)

Jesús Villa Perches (*Ejido Lajitas NCPE*)

Allison Vogt (*Association of Fish and Wildlife Agencies*)

Donald Watson (*Alberta Fish & Game Association*)

Sarah Wren (*Environment Canada, Canadian Wildlife Service*)

Karen Yarza Sieber (*World Wildlife Fund*)



Commission for Environmental Cooperation
 393, rue St-Jacques Ouest, bureau 200
 Montréal (Québec) Canada H2Y 1N9
 t 514.350.4300 f 514.350.4314
 info@cec.org / www.cec.org