

CEC Grasslands Projects

Environmental Benefits Assessment (2011–2015)



Photo: Laura-Lie Schellenberg

The North American grasslands are the only shared, contiguous terrestrial ecoregion extending across the three countries. Between July 2011 and June 2015, the Commission for Environmental Cooperation (CEC) invested C\$990,000 in two 2-year projects focusing on grasslands conservation. The CEC conducted an assessment process to evaluate the impacts of this investment at two and four years post-project.

It is clear from this assessment that the CEC was critical to the success of consolidating a joint North American landscape-scale approach to grasslands, together with promoting a substantial amount of conservation work in the Central Grasslands. This is primarily due to its unique ability to target funds across jurisdictions and bring people from across the continent to work together on conservation strategies. The majority of initiatives funded by the CEC during the four years of grasslands programming continue to operate and a substantial number have grown and expanded, influencing other work.

The projects exceeded the following desired outcomes:

- **Establish a network of demonstration sites with private landowners engaged in economically and environmentally sustainable grassland management.** In Mexico, the extension NGO IMC-Vida Silvestre was established to share knowledge on beneficial management practices (BMP) implementation with ranchers and, in Kansas, a range school is conducted twice each year to share knowledge on BMPs and other information with ranchers and conservation professionals.
- **Capture as BMPs ecologically and economically sustainable grassland management pilots and expand the web-based BMP tool to include these and other BMPs.** A compilation of over a hundred BMPs are searchable by topic or geospatially in an online tool (nagrasslands.org) that also displays case studies, examples of stewardship on ranches, resources that support uptake, and provides a glossary of terms that attempts to reconcile differences in grassland conservation and rangeland management terminology between the three countries. According to the CEC's website analytics, the online tool has been the most used CEC sub-site for the last few years, with 11,700 visits in 2017.
- **Foster recognition of priority conservation areas as well as the ability to engage and inform ranchers and other producers of economic and biodiversity benefits from adopting sustainable practices.** The *Assessment and Revisions of North American Grassland Priority Conservation Areas*¹ supported through the CEC was used to inform a number of publications, including *Recommendations for Grassland Bird Species Conservation in the Northern Great Plains (NGP) Business Plan*² and a draft conservation investment strategy for the Rio Grande Joint Venture, as well as work by the Bird Conservancy of the Rockies to define microhabitats of Sprague's pipit in Mexico, and demonstrate links between GPCAs through migratory connectivity of grassland birds.
- **Increase the trend in lands being managed sustainably.** More than 360,000 additional acres (146,000 ha) of rangeland were placed under sustainable management across the three countries as a result of CEC-funded initiatives. In Mexico, two properties hosting pronghorn, Aplomado falcon, golden eagle, and an estimated 120,000 migratory grassland birds and totaling 110,641 acres (44,775 ha) were enrolled for pilot and demonstration projects.
- **BMPs are more widely employed by landowners and managers across the continental grassland ecoregion, leading to improved habitat quality and quantity, concurrent with increased economic benefits for ranchers.** Through a habitat stewardship program in Saskatchewan, targets are now designed for Sprague's pipit, Greater sage grouse, Swift fox, Burrowing owl, Piping plover, Loggerhead shrike and the Northern leopard frog. And through activities conducted by the South of the Divide Conservation Action Program, 50,000 acres (20,234 ha) are currently enrolled for Greater sage grouse, Sprague's pipit and Loggerhead shrike and another 200,000 acres (80,937 ha) are identified and waiting for funding. Fifteen ranches totalling 250,000 acres (101,171 ha) are under a sustainable management agreement with the Kansas Grazing Lands Coalition and another 250,000 acres (101,171 ha) of 'reference' ranches are waiting to be enrolled.



1. Pool, Duane and Arvind Panjabi. 2011. *Assessment and Revisions of North American Grassland Priority Conservation Areas*. Background Paper, Commission for Environmental Cooperation. 66 pp.
2. Correll, M.D., N. Drilling, A. Dwyer, T. L. George, A. W. Green, A. O. Panjabi, D. C. Pavlacky Jr, L. Quattrini, A. Shaw, R. A. Sparks, E. H. Strasser, A. Van Boer. 2016. *Recommendations for Grassland Bird Species Conservation in the Northern Great Plains (NGP) Business Plan*. Final report. Bird Conservancy of the Rockies, Brighton, Colorado, USA.

The projects achieved the following desired outcomes:

- **Increase the number of hectares that are managed in a way that supports overall biodiversity.** By supporting a monitoring program for wintering grassland birds in the Chihuahuan Desert, approximately 30 biologists and 22 technicians were trained in a bird monitoring methodology which produced qualified staff with expertise in grassland bird identification and ecology and intimate knowledge of grasslands. For the first time, comparable standardized measures of density and species richness are available for 17 Grassland Priority Conservation Areas within the Chihuahuan Desert and informing conservation and ranch management plans.
- **Make BMPs available to ranchers and their partners through broad dissemination via Internet, regional nodes, and the North American Grasslands Alliance³ (NAGA).** Studies and initiatives supported and disseminated by the CEC include the Flint Hills Beef Industry Supply Chain Analysis, Private Lands Wildlife Biologist Extension Program, *Prairie Beef and Biodiversity: A Payment for Ecosystem Services Program Design for Ranches on Natural Grasslands in Canada*⁴; and *Analysis of the Effects of Fire, Grazing, and the Distance to Wetlands on Grassland Bird Abundance*.⁵

The projects did not achieve the following outcomes:

Unfortunately, the expected creation of a sustainable trinational Alliance did not materialize since the grasslands projects ended before the Alliance could achieve final form and become functional.

- Having in place an Alliance that is functional at national and regional levels and supports an expanded framework for integrated economic and conservation solutions for sustainable grassland management.
- Ensuring grassland values are communicated broadly.
- Delivering strategies to support grassland conservation by an organization independent of CEC funding.
- Allowing the general public to demonstrate broad support for public and private measures in support of grassland conservation.

Overarching impacts of the grasslands projects:

- The projects facilitated dialogue between partners, conservation practitioners and ranchers, which created new relationships and partnerships that resulted in additional resources for grasslands conservation, and improved or increased conservation results.
- Similarly, new partnerships were formed between NGOs, between NGOs and government agencies, and between NGOs and ranchers that improved relationships, increased resources, and improved or increased conservation results.
- Policy and planning initiatives were influenced by CEC-funded work on grasslands, including a Critical Habitat designation⁶ and a species-at-risk Action Plan⁷ in Canada; a species re-assessment and a State of the Birds report in the United States⁸; and conservation business plans including a bird conservation plan in Mexico.⁹
- Recognition, adoption and/or replication of CEC-funded initiatives/activities occurred frequently, either within an organization or by other organizations or partnerships.
- An exemplary model of highly successful conservation programming in the sequence of work was seed-funded by the CEC and implemented by the Bird Conservancy of the Rockies in the Chihuahuan Desert. This program model refined the Grassland Priority Conservation Areas, trained and supported rangeland biologists in helping to implement conservation practices on ranches, monitored bird populations and habitat, and adjusted programming to improve the success of conservation activities.

3. North American Grasslands Alliance: A Framework for Change is the result of a participatory process (including 72 participants from three countries) to develop a consensus-based framework for governments, landowners and conservation organizations to work together to protect and sustainably use native grasslands.

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

4. CEC. 2013. *Prairie Beef and Biodiversity: A Payment for Ecosystem Services Program Design for Ranches on Natural Grasslands in Canada*. Montreal, Canada. Commission for Environmental Cooperation. 35pp.

5. CEC. 2013. *Analysis of the Effects of Fire, Grazing, and the Distance to Wetlands on Grassland Bird Abundance*. Montreal, Canada. Commission for Environmental Cooperation. 189pp.

6. Research results from *Analysis of the Effects of Fire, Grazing, and the Distance to Wetlands on Grassland Bird Abundance* were used in designation of critical habitat for Sprague's pipit under the Species At Risk Act in Canada.

7. The Designing Grassland Stewardship Conservation Programming on Natural Grasslands used for Livestock Production implementation model (name adapted from PBAB to Results-based stewardship/programming) was incorporated into the South of the Divide Multi-species at Risk Conservation Action Plan (Approach 3.1: High Priority) under the Canadian *Species At Risk Act*.

8. The Monitoring Program for Wintering Grassland Birds in The Chihuahuan Desert provided data and trends for the re-assessment of Sprague's pipit by the USFWS under the Endangered Species legislation, and the North American Bird Conservation Initiative's *The State of the Birds 2014* report.

9. The identification and refinement of North American Grassland Priority Conservation Areas was used in the *Chihuahuan Desert Grassland Bird Conservation Plan*, in the *Business Plan for the Northern Great Plains* of the National Fish and Wildlife Foundation, and is being used in the conservation business plan currently being developed for the Rio Grande Joint Venture.

Key lessons from implementation of the CEC-funded grasslands projects:

- The amount of funding and length of time an organization or initiative is funded are proportional to the success of programming.
- Due to the short time-frame of CEC projects, it is important to work with credible, experienced organizations that are established and already set up to implement an initiative or activity. However, this limits capacity building and targeting of funds, as not all regions have such organizations or experience.
- Transfer of technical information may be the most critical component to support when working with ranchers, as it appears to be the main limiting factor in some jurisdictions and is key to successful implementation of BMPs.
- The impacts on conservation appeared to be greatest when funding was focused on implementation on the ground. Land management is what ultimately drives conservation success or failure. All conservation work is done with a goal of influencing what happens on the ground. When effectively implemented, this is where the success of conservation can be truly measured and from where success stories must be told.

Finally, a number of recommendations for future work came out of the assessment. Some recommendations involve furthering the work began by the two grassland projects, and others are new ideas. These recommendations have been grouped into five main themes below.

- 1 Advance the North American Grasslands Alliance toward a stand-alone working network, by supporting a coordinator and steering committee.
- 2 Continue to support increasing conservation work on ranchlands, including leveraging agricultural agencies, increasing collaboration, supporting planned grazing and technology transfer, promoting additional rural economic activities, and incentives such as payment for ecosystem services and succession planning. Monitoring bird abundance and distribution under different beef production systems also needs continued support.
- 3 Improve the effectiveness of grasslands conservation, including through cross-disciplinary research and management (e.g., climate change and conservation, ranchers and grassland birds), better engaging the universities, further refining the GPCAs, determining the regional threats and response strategies throughout the Central Grasslands, engaging other sectors such as energy production and crop farming, and increasing the recognition of sustainable beef in the North American marketplace.
- 4 Implement a continent-wide strategy to increase public support for grasslands, targeting the general public (consumers) to drive a societal shift in support of grassland conservation.
- 5 Prepare an investment guide for grasslands conservation, including areas of greatest need, greatest opportunities, partners, and specificities and similarities across jurisdictions.

Guided by the Open Standards for the Practice of Conservation developed by the Conservation Measures Partnership, this assessment process included interviews with 13 individuals from the three countries and representing the trilateral steering committee, CEC staff, partners managing initiatives and individuals implementing conservation projects and practices on ranchlands. Actual project-end and post-project outcomes were compared against desired outcomes to assess the effectiveness of the projects. Information gleaned from the interviews, in combination with known outputs and dissemination metrics, formed the basis of the assessment.

The CEC grasslands projects were undertaken with the financial support of the Government of Canada, through Environment and Climate Change Canada; the Government of the United States of America, through the Environmental Protection Agency; and the Government of the United Mexican States, through the *Secretaría de Medio Ambiente y Recursos Naturales*. Experts at the Canadian Wildlife Service, the *Comisión Nacional para el Conocimiento y Uso de la Biodiversidad* and *Comisión Nacional de Áreas Naturales Protegidas* of Mexico, and the Fish and Wildlife Service, Forest Service and Association of Fish & Wildlife Agencies in the United States provided guidance.



cec.org