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PFRA Community Pastures: History and Drama of a Prairie Commons

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Given the widespread damage to environmental protection in omnibus Bill-C38, it was easy to miss the fate of more than a million acres of humble prairie grasslands. But in that bill, the federal government ended the very successful PFRA Community Pasture Program, which cared for 23 pastures (0.7 million acres) in Manitoba and 62 (1.77 million acres) in Saskatchewan. Saskatchewan's pastures alone are 1.25 times the size of Prince Edward Island and include some of the largest remnants of protected native prairie remaining in the world.

With this termination, ownership of the community pastures reverts to the provincial governments of Saskatchewan and Manitoba, who now struggle to find a transition. Manitoba is fine-tuning crown ownership. Saskatchewan has a different plan - Agriculture Minister Lyle Stewart announced that the pastures would be sold or leased to the farmer/rancher patrons who currently bring their cattle to the pastures for summer grazing. Sale or lease, Stewart is quick to assure us, will require that each pasture remains whole with a 'no-cultivation no-drainage' conservation easement. However, management of the pastures would fall entirely to the purchaser or lessee, and there will be neither enforcement nor regulation backing up the conservation provisions. A wide array of Saskatchewan citizens, including pasture patrons, conservationists, artists, and First Nations groups, oppose this plan. Despite this, the Saskatchewan

Government is rapidly pursuing this strategy. The first 10 pastures are currently for sale, and the government hopes to sell or lease them this summer.



Why is the government's plan a problem? The crux of the issue is that the PFRA pastures do more for us than produce cattle. The current professional management program coordinates multiple functions and benefits. Pasture managers enable sustainable grazing on endangered ecosystems, while tending the sometimes conflicting habitat requirements of many species at risk. The pay-off for such management includes soil conservation, water conservation, and carbon sequestration, in addition to the economic value of the cattle. The wise option would be to retain this expertise that has been developed over nearly 80 years, but it is unlikely that pasture patrons could afford to pay for this on their own. Nor should they. We cannot reasonably expect farmers and ranchers, nor any

other business sector, to forego private good to protect a public good. Given the environmental, cultural, and recreational public benefits of expert pasture management, there should also be some public contribution. The problem with the provincial government's plan is that it focuses only on the agricultural benefit of the pastures, and threatens the other benefits because individual farmers cannot afford management for multiple-uses. Dismantling the current system, which includes both pasture managers and system-wide biological and range experts, would also result in a great loss of local ecosystem expertise, which may be particularly necessary as the prairies adjust to climate change.

History

The Community Pastures have a long and revered history in Saskatchewan. After the Canadian prairie was hastily opened for farming, the Rockies' rain-shadow took its natural toll, leading

to the "Dirty 30s." In 1935, Parliament created the Prairie Farm Rehabilitation Administration Act (PFRA) to halt soil erosion and avert further hardship to farm families. The PFRA was charged with restoration, and much has been accomplished since then. With the planned return of these fragile grasslands to private hands, are we destined to repeat this history?

Since 1935, we have learned a great deal about the ecology of grasslands, including the important role of grazers (bison in the past and cattle today) and mixed-use land management. For fragile grassland ecosystems, the Community Pasture Program played a pivotal role in this learning. For example, following a brief experiment with breaking and reseeding 'tame grass' monocultures in the 1960s and 1970s, PFRA managers learned the remarkable value of native grasses, and now 87% of PFRA lands support native species. The pastures program could be dubbed Canada's Grassland



University for its role in research and adaptation. Government ownership facilitated a multi-stakeholder focus, land access, and cross-sector forward thinking. PFRA pastures remain the logical places to continue research and demonstration for state-of-the-art land use, farm livelihood, and conservation. Research on current and complex questions continues, including how to manage grass in the different prairie ecoregions under a 'new climate normal.'

In 2005, University of Saskatchewan professor Suren Kulshreshtha and his colleagues conducted an economic analysis of the PFRA Community Pasture Program. They calculated the total benefits of the program (in equivalent dollar terms) as \$55 million prairie-wide - 2.5 times the \$22 million cost of the program. Public benefits provided 62% of the value with 47% public contribution to the cost, with the rest of costs and benefits accruing to producers. In sum, the PFRA Community Pasture Program was not broken; it needed none of the fundamental changes now planned. Is the dilemma one of ideology; where people are cognizant of the price of things but not their true value?

Pasture Interests

Patrons. Consider a farm family who has 35 cows and mostly produces grain. After spring calving, when the grain-related workload begins to peak, the cow-calf pairs are sent to the PFRA community pasture, to be looked after by an experienced manager. In fall the cows come home and may 'clean up' the grain fields, be fed non-marketable grain, and graze field edges and land not well suited to cultivation. In the agricultural statistics this is classified as 'cattle on farms', and is the category that has benefited most from community pastures. The proposed change is unwelcome to many mixed farmers because they do not have ready cash to buy their share of the pasture but if they cannot use the

pasture in summer, they may be compelled to sell the herd altogether, foregoing agricultural diversification. Without cows, they may be inclined to press more of their marginal land into crop production, further threatening grassland soil conservation and biodiversity.

Pasture managers. Pasture managers, by-and-large, are cowboys adept in a horse-based pastoral tradition and many live on their pasture year round. With a relatively small number of cows on mixed farms, farmers may not own a horse, nor stay in practice roping. When an animal suffers foot rot or pinkeye, it can be controlled when treated early. The pasture manager and a summer range rider can team rope an animal and within minutes it is treated and goes free again, options that are much more difficult for independent farmers. Patron groups have called their pasture manager "their best asset."

Pasture managers also upheld a common policy on pasture access for hunters, fishers, and bird watchers. Managers attend courses to recognize and respond to invasive weeds, emerging diseases and treatments, and improvements in animal care. They become intimately familiar with trails and water sources, and learn to recognize subtle changes in the plant communities and wildlife. Pasture managers can influence such changes by managing the timing and duration of grazing, placement of salt blocks, cross fencing and the like. In sum, the pasture managers are trained professionals. Importantly, the pasture manager was at arms length from patrons and other interests and was a member of an administrative team that included scientists and practitioners with a variety of expertise and joint decision-making in the valued Canadian democratic tradition.

When new demands arise vis-à-vis species at risk, for example, pasture managers are a cohesive group of collaborators. Pasture managers have supplied daily food to swift foxes in their 'soft-release' pens and assisted in counts of threatened wildlife. Training and policy adaptation, coupled with the pasture managers' experience makes them valuable experts and key partners in grassland conservation. But, if the pastures are privatized, we will lose this expertise, and pasture managers will lose both their jobs and their homes.

Societal benefits. In addition to the ecosystem services provided by the pastures, Canada has signed biodiversity conventions and other UN agreements on the conservation of nature. Conservation and sustainable use of resources touches the very foundation of human life and dignity. For grassland biodiversity and future opportunity we have less than 20% left. PFRA pastures alone comprise 3% of the prairie and are among the cream of the crop. Moreover, the PFRA pastures can do more than address species at risk – managers can act to avoid species becoming at risk.

Press releases would have it that endangered species would be protected under the new pastures 'business model' but reality leads us to question this optimism. Experts are clear, for example, that the federal Species at Risk Act applies to federal land only. Saskatchewan once led the provinces in implementing endangered species protection, putting us comfortably on par with our North American trading partners. But Saskatchewan scaled down the species at risk program some years ago. We have lost Environment Ministry capacity at a time when species-at-risk pressures and resource development have increased. We have neither conservation officers nor the political will to monitor and enforce species at risk and conservation easement legislation.

Cultural & historical benefits. The pastures protect 10 key archeological and historic sites, many of which document First Nations tenure on these lands. For instance, Wolverine pasture contains a sun dial, Battle Creek and Monet pastures contain burial sites and teepee rings, and Val Marie pasture contains a former buffalo drive site. As usual, First Nations groups have not been consulted by either federal or provincial governments.

Commons

The Community Pastures represent a publicly shared 'commons', famously discussed by Garret Hardin as the 'tragedy of the commons'. Commons supply four classes of 'goods and services': production, life-supportive and life-fulfilling processes, and preservation of future options. Cattle are the production good. Well-managed pastures also provide air and water purification, soil conservation, and carbon sequestration (life-supportive processes), and are the context for many fulfilling activities including art, science, hunting, and bird-watching. Several prairie painters and photographers use pasture landscapes and organisms as their subjects, and the pastures provide a rich source of research data for biologists, geologists, and other scientists. In 2005 alone, 25 studies were conducted on community pastures. These pastures are home to over 30 species at risk of extinction (mammals, birds, reptiles, insects, and plants), so the future biodiversity of the grasslands are in many ways dependent on the pastures. The provincial government's current plan addresses only production. Although they tip their hats to the ecosystem services provided by the pastures by including conservation easement clauses in the sale and lease agreements, the absence of regulation or monitoring, as well as the ease of altering these requirements for re-sale, provide very weak

protection which promises to get even weaker over time.

The 'tragedy of the commons' is that the sustainability of shared resources is threatened by unequal distribution of benefits and costs of overuse. Benefits associated with grazing additional cattle on a pasture go to the individual ranchers, whereas the costs of overgrazing are distributed among everyone. Thus, according to Hardin, the 'rational' option for each rancher is to overuse the resource and hope that others do not do the same. Hardin discussed three management options to prevent commons overuse: central management, privatization, and moral appeals to the greater good (i.e., voluntary constraint). Of these, Hardin preferred centralized management, or as he termed it "mutual coercion, mutually agreed upon", with effective monitoring and incentives to prevent violations. The PFRA program was an example of this solution. The monitoring was provided by pasture managers and incentives included excellent rates for grazing and breeding of cattle, and preservation of wildlife habitat for hunters, conservationists, and artists. As usual in our society, the life-supporting services of soil conservation, air and water purification were assumed to be free and thus of no value.

With the termination of the PFRA program, the governments' proposed solution is to dissolve the commons by privatizing management in the hopes that owners' self-interest will sustain the ecosystems. The provincial government is adamant that they will sell or lease only to pasture patrons, so self-interest in this case primarily involves only one of the four categories of goods, production. Most farmers and ranchers are aware of the importance of biodiversity for their long-term interests, using systems such as integrated pest management rather than chemicals, whenever possible, to preserve soil health. However, the 'whenever possible' is

generally defined by short-term economic necessity for producers, thus risking the long-term health of these pastures and the public benefits associated with healthy grasslands. In the 1960s and 1970s, overgrazing of these pastures was common, and both range productivity and biodiversity declined. Overgrazing results in the decrease of grass species preferred by the cattle and the increase of less-preferred and invasive species, thus reducing biodiversity and range health, outcomes that have been prevented with expert pasture management.

Since Hardin's article, other effective means to ensure the health of commons ecosystems have been observed. For instance, when commons are clearly identified, as is the case for the Community Pastures, informal social governance can work as long as trust, shared norms, and relationship networks exist among the sharing groups. Since the federal and provincial governments' announcement of the end of centralized management of the pastures, several citizens groups have emerged. The Community Pasture Patrons' Association (CPPA), composed of farmer/rancher patrons focuses primarily on agricultural needs and benefits, Public Pastures – Public Interest (PPPI) represents the environmental and conservation interests, and the First Nations Joint Venture (FNJV) initiative champions cultural and historical interests as well as collaborative management (see also <http://protecttheprairie.ca> and <http://pfrapastureposts.wordpress.com>). Despite historic distrust between these populations, the groups have identified shared goals and are beginning the process of establishing shared norms to find a way to communally manage the pastures to maximize all categories of interest.

Saskatchewan citizens' reaction to what many perceive to be a crisis reflects what is known

about best practice in commons management and decision making. Although the PFRA system provided excellent management of these fragile common ecosystems, the federal governments' precipitous decision to end central governance may provide an opportunity to evolve to an equally effective local management system, provided the provincial government doesn't act to derail this developing solution. Before discussing the decision facing the Saskatchewan government, it is useful to consider what is known about decision-making in complex situations.

Decision Making in Complex Situations

Research in behavioural economics indicates that, despite the fact that human decision-making is always biased, there is a process that is more likely to result in optimal decisions in complex situations. Both individually and in groups, we pay more attention to, and consider more important, arguments that support options that intuitively appeal to us. Thus, we tend to consider only half of the information available to us. However, we can protect ourselves from this bias by having people with different preferences discuss the options. This works because each group highlights the benefits of a different option, increasing everyone's thinking about the pros and cons of all options.

There are several different 'preference perspectives' on pasture management. The business of farming or ranching requires one set of decisions. An overlapping but different set is required to manage habitat for the tall-grass loving Sprague's pipit, a non-descript little song-bird. Similarly, with public sharing of costs and benefits, ground squirrels could be tolerated without strychnine poisoning, avoiding the secondary poisoning of predators, meadowlarks and other seed-eaters. This could be done at little or no cost to the patrons. The resulting

burrow-punctured pasture could then support badgers, burrowing owls, tiger salamanders and the grassland plant and animal community in and outside those burrows. Fortunately, much of what farmers and ranchers do on their own benefits wildlife and some of nature's ecological services. Furthermore - and we wish to be especially clear on this point - the full participation of farmers and ranchers is required to maintain the last of the grassland biodiversity we still have. It would be impractical, if not impossible, to maintain grassland biodiversity without large grazers. Grazing of cattle is a 'necessary,' but not a 'sufficient' factor in the conservation equation. Biodiversity and grassland sustainability interests substantially overlap with farm and ranch interests but each also has unique space. The unique farm/ranch interests are in the area of livelihood, economics, and business efficiency. The unique biodiversity and ecosystem-service interests are strategic species care, saving a margin of value for nature, and banking grass and soil resources to minimize a variety of risks. And the unique cultural/historical interests involve the history of a particular piece of land, emphasizing preservation of artifacts such as teepee rings, sun dials, burial sites, and buffalo drive sites.

The citizens' groups that have formed to represent the multiple benefits of the pastures, CPPA, PPPI, and FNJV, as well as the union of pasture managers, provide the type of multi-perspective debate recommended by behavioural economics. Together, these groups can potentially achieve an optimal solution for continued pasture management, if given enough time to present and process all perspectives. In contrast to single-issue decisions, which are made primarily on the basis of intuition (or ideology), multi-interest decision-making requires time, both to develop respect between the various interest groups, and for each to fully

consider information formerly disregarded because it didn't match one's intuitive preference. The benefits of such thoughtful decision-making are obvious in this case, preserving both human interests and the increasingly-endangered grassland ecosystems.

Challenge for Provincial Government

At the moment the provincial government seems fixed on enacting privatization quickly. Citizens have invited the Saskatchewan Government and, with less hope of success, the Federal Government, to enable dialogue toward a democratic governance model including crown ownership for all pastures. If we accomplish that, the remaining challenge will be to devise a transition plan that maintains management for both public and private benefits and costs, risks and interests.

The choice facing our government is between ideology and adaptation. As a conservative government, the Saskatchewan Party intuitively prefers privatization of public resources. In contrast, if citizen groups are given a small amount of time – we've asked for 1 year – this moment could present a shining opportunity for Saskatchewan to display state-of-the-art, mature decision-making to protect one of our most valuable and valued shared resources. We believe that, with our history of community cooperation, Saskatchewan is uniquely positioned to show the world how this is done. It will be interesting to watch whether Brad Wall and his Saskatchewan Party colleagues, who have previously shown themselves to be responsive to the best interests of their citizens, can rise to this challenge. As Saskatchewan citizens, we sincerely hope so, for our children and grand-children, on and off the farm.



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