
CONSERVATION

AGRICULTURAL POLICY REVIEW PART 4: SASKATCHEWAN'S CROWN LAND POLICIES

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The Canadian prairie is fast becoming a relic. In only 100 years it has been so radically transformed by human activity that it is now considered to be one of the most endangered natural regions in Canada. Native prairie is crucial to the existence of most prairie wildlife for all, or some portion, of their life cycles. Not surprisingly, many wildlife species that are dependent on native prairie habitat are also in decline. More than one-third of the birds and mammals designated on the 1988 list of the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) are from the prairie provinces.

There are four grassland types within prairie Canada: tall grass prairie, mixed grass prairie, fescue prairie, and aspen parkland (mixture of fescue grassland and aspen grove). The exact area of each grassland eco-type remaining in Saskatchewan is unknown; however, using Canadian Wheat Board leased and deeded rangeland statistics and adding acreage for Provincial and Prairie Farm Rehabilitation Administration

(PFRA) community pastures, Gayton estimates that approximately 11.3 million acres of native rangeland remain in Saskatchewan.² This represents only 17% of the province's original area of grassland. The preponderance of native rangeland is underlaid by soils of marginal productivity. These native areas are unevenly distributed, with the greatest concentration situated in the southwestern portion of the province, and most of the areas have experienced varying degrees of degradation to native communities through exposure to perennial overgrazing.

The Saskatchewan government, through Saskatchewan Rural Development (SRD), owns and administers over 9 million acres of Crown land designated as "agricultural." Included in those 9 million acres are over 7 million acres of grazing land (pers. comm., SRD-Lands). SRD-Lands estimates that more than 95% of their grazing lands are native range. The PFRA holds title to over 1.3 million acres of Saskatchewan grazing land. They estimate that

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Prairie Falcon

Wayne Lynch

80% (1.0 million acres) of their titled acres remain as native rangeland. Considering the figures, SRD and the PFRA together administer and manage approximately 68% of Saskatchewan's remaining native grasslands.

Not only are provincial and federal governments the major landlords of Saskatchewan's native range, they own the only large contiguous blocks of native grassland that exist in Saskatchewan. These vital areas act as habitat reservoirs and are essential for the maintenance of many wild species. Privately owned native prairie is highly fragmented, existing as a patchwork within a matrix of cultivated land. Given the obligate dependency of most of Saskatchewan's wildlife (particularly endangered species such as the Burrowing Owl, Ferruginous Hawk, Sage Grouse, etc.) on native grasslands, and with such vital areas of native prairie under Crown control, policy governing the management and dis-

position of "agricultural" Crown land can have a major effect on their health and welfare.

Wildlife Habitat Protection Act (WHPA) The WHPA designated approximately 3.4 million acres of agricultural Crown land as Wildlife Habitat Land (WHL). The Act and its regulations ensure that designated land cannot be sold by the government and that surface alterations do not take place at the expense of wildlife. Crown lands not eligible for inclusion in the WHPA include PFRA pastures, Saskatchewan Land Bank land, road allowances, national parks, Indian reservations, provincial forests, and provincial parks.

WHL was selected on the basis of terrestrial Wildlife Habitat Inventories conducted by Saskatchewan Natural Resources (now called Saskatchewan Environment and Resource Management [SERM]) during the late 1970s and early 1980s. Eligible Crown lands falling within these



Young Ferruginous Hawks in a nest built on the ground in the Frenchman River Valley

Gary W. Seib

areas was recommended for inclusion in the WHPA. These inventories catalogued the best habitat for terrestrial game species that existed in the province. The thrust of the selection process was aimed at White-tailed Deer, Mule Deer, Pronghorn, and Sharp-tailed Grouse. Most of the area represented by the inventory is considered to be essential wintering habitat for these species. In reality, much additional habitat is required for the maintenance of healthy wildlife populations (pers. comm., SERM-Wildlife Branch). Lands selected for their importance to rare and endangered species represent less than 4% of the total designated acreage. These lands are classified as "super critical," designation was based on their importance to Sage Grouse, Prairie Falcon, and Golden Eagle.⁴ Additional lands for rare and endangered species, such as Burrowing Owl, Piping Plover, Ferruginous Hawk, and Swift Fox, were included in the most recent additions

to the WHPA (pers. comm., SERM-Wildlife Branch).

Enterprises allowed on WHL include exploration for, and extraction of, resources such as oil and natural gas; maintenance related to existing electrical transmission, radio, and telecommunication lines plus provincial highways and municipal grid road; grazing of livestock and hay-ing; and agricultural cultivation of land already cultivated prior to inclusion in the WHPA. No consultation with SERM biologists is required in conjunction with authorizing the aforementioned uses. Saskatchewan Rural Development District Lands agrologists are responsible for approving and authorizing all the permitted activities on WHL. The Act and its regulations do not change the terms and conditions of agricultural leases as issued under the Provincial Lands Act.⁴

On lands designated as super



Sage Grouse

Gary W. Seib

critical, agricultural activities associated with grazing, haying, and permitted cultivation are allowed with no restrictions or conditions. Activities associated with the exploration and extraction of oil and gas are allowed, but SRD-Lands must notify petroleum companies that SERM-Wildlife Branch approval is required prior to initiation of work. Industry is then expected to comply with several conditions associated with minimizing the disturbance their activities may cause to breeding endangered wildlife species.

Policy and Management of Saskatchewan's Provincial Agricultural Crown Land SRD-Lands is responsible for the administration of agricultural Crown land in the province. According to the SRD-Lands Administration Manual, their mission is to "enhance the economy of the province and to serve the public interests through responsible agricultural Crown land management and the promotion of proper land use." Enhancement of the provincial economy is achieved through the lease and sale of Crown lands and the operation of provincial community pastures.

SRD-Lands Policy and Program Development section is responsible for reviewing legislation, evaluating policies and programs, and generating new research from which rangeland management programs can be generated. Personnel are initially organized in four regions that contain 18 districts. Most decisions affecting the administration of Crown lands have been decentralized to this level. District Lands agrologists are responsible for the administration of leased lands and community pastures within their districts. Range agrologists, working with the District Lands agrologists, monitor range conditions, conduct research in rangeland agrology, and work with SRD clients and the general public on rangeland development (pers. comm., SRD-Lands).

There are two areas within SRD-Lands' jurisdiction that can potentially impact on native grassland habitat: Crown land sales and the management of grazing leases, hay leases, and provincial community and cooperative pastures.

Crown Land Sales The purpose of Crown land sales is "to sell saleable leased agricultural Crown land to leaseholders to improve the equity base for farm operation and agriculture in Saskatchewan."⁷ Crown land sales policy is currently being reviewed by the provincial government. The controversial "rent-to-own" program has been discontinued and tender sales are on hold. The only Crown land currently eligible for sale is available at market value to those individuals holding long-term leases. The lessee follows an application procedure that includes approval from the affected rural municipality (RM) and the appropriate SRD-Lands District Lands agrologist. If there are no tax arrears or sales restrictions (e.g.,

WHL lands) sale of the land can proceed. Land may be sold to existing grazing cooperatives/ associations providing that a majority of the members have voted in favour of the purchase. Disposition of land amongst the members is the responsibility of the cooperative/association.

Approximately 3.26 million acres of leased Crown land (grazing and cultivated) is eligible for sale to lessees (pers. comm., SRD-Lands). Excluding the 1 million acres of cultivation leases, approximately 2.26 million acres of grazing land would be eligible for sale. SRD-Lands estimates 95% of their grazing lands are native ranges; therefore, approximately 2.15 million acres of native habitat remains eligible for sale. Privately owned native grassland has been proven vulnerable by a study done in southwestern Saskatchewan which found that, between 1980 and 1990, 37% of Crown grassland sold to private interests was cultivated.⁹

Management of Crown Lands Provincial lands are leased "to enhance the viability of farms and ranches by leasing lands reserved for multiple-use and/or future higher economic use." Provincial lands can be leased to individuals, corporations, or partnerships.

Grazing Leases SRD-Lands determines carrying capacities for range sites across the province and applies them to individual and cooperative grazing leases. Carrying capacities are defined in the Lands Act regulations as: "the number of head of cattle which may be pastured upon a quarter section of grazing land for a grazing season of seven consecutive months of average precipitation without causing deterioration in forage production." These values do not

fluctuate annually (pers. comm., SRD-Lands).

Stocking rate; seed mixtures for rejuvenation of tame forage, pasture development, and marginal land reclamation; grazing dates; and grazing management systems can be recommended by SRD-Lands, but lessees are not obligated to follow these recommendations. The most common grazing system implemented on private and cooperative grazing leases is season-long because it is simplest and management requirements are minimal. Season-long continuous grazing does little to control livestock distribution or eliminate localized overgrazing. Many documented cases of range deterioration have been attributed to the long-term use of continuous grazing. SRD-Lands has the authority to force patrons to practice sound pasture management but they do not. Currently, SRD-Lands is trying to work with lessees and cooperatives to improve management practices, but there is strong resistance to change (pers. comm., SRD-Lands).

In the opinion of surveyed range ecologists outside the civil service range conditions on Crown grazing leases across Saskatchewan rated as poor to fair. Range condition is the present state of the vegetation compared with the climax or original plant community on this site.² Climax is defined as the highest ecological level of plant community development capable for perpetuation under prevailing climatic and soil conditions (pers. comm., PFRA-Pasture Planning Service [PPS]). Range in poor condition has only 0-25% of the climax vegetation present on the site, while range in fair condition has 26-50% of the climax vegetation present.

Annual cultivation of a grazing lease is permitted only with the prior written consent of the Minister of Agriculture. This approval is requested following a field inspection by the District Lands agrologist. If soils are marginal (e.g., saline, alkaline, highly erodible or rocky), or if the parcel is protected under the WHPA, agrologists would recommend that the parcel remain in native vegetation. If, however, the parcel supports “a good stand of native grass” or is a “bush quarter overlaying good clay loam,” and is not within the bounds of the WHPA, the request would be granted by the agrologist with no further approvals required. Agrologists base their decisions on their opinion of the highest and best agricultural use of the land. The conversion of a grazing lease to a cultivation lease under SRD-Lands approval is considered permanent as SRD-Lands will not approve its conversion back to a grazing lease. Prior to 1988, the provincial government paid development costs for conversions and, as a result, they were quite common. These costs are now the responsibility of the lessees, consequently requests are rare (pers. comm., SRD-Lands).

The Provincial Land Improvement Policy

In March 1991, SRD-Lands introduced the Provincial Land Improvement Policy to “assist lessees of agricultural Crown land to improve the productivity of their leases.”⁸ Under this policy, lessees can receive financial assistance for range improvement and range development, and lease rate adjustments for rejuvenating tame forage stand and establishing perennial forages on marginal land.

a) Range Improvement: In order to be eligible for range improvement assistance, lessees must have their

grazing lease inspected by an SRD-Lands agrologist. If the range is in poor condition the lessee may apply. The application must include a detailed aerial photograph showing fences, watering sites, corrals, etc.. Once the application is accepted, the lessee is required to enter into a Range Improvement Agreement (not less than five years and not more than ten) with SRD-Lands that stipulates several restrictions on the grazing regime. These restrictions usually include number of cattle grazing, length of grazing season, the format for the required annual grazing records, and any other measures required to hasten the recovery rate of the range (e.g., changes in paddock size, location and number of watering sites, etc.).⁸

Lessees who enter into range improvement agreements with SRD-Lands will have lease rates reduced to the average rate for range in similar condition. This reflects actual stocking rate as opposed to potential stocking rate. This policy rewards lessees who mismanage their Crown land by reducing their lease rates as part of the rejuvenation assistance. This is unfair to lessees who strive to maintain the productivity of their leased land as their rates will remain the same or rise.

b) Range Development: This improvement option refers to the conversion of native range to tame pasture.⁸ To qualify for this option, an SRD-Lands agrologist must conduct a field assessment of the range to determine if conversion is the best agricultural use of the land. Areas within the site that are suited for improvement are identified based on parameters such as topography, soil structure and texture, stoniness, and other factors. Once approval has been granted, the lessee must agree

to a development plan and complete a Land Development Contract with SRD-Lands prior to work being initiated. Lessees develop leased land at their own expense. However, in consideration for their costs, rental rate increases that would be applied to the lease, because of its increased productivity, would not be charged until six or eight years after the conversion.

Coupland suggests that the conversion of native grassland to tame (exotic) grasses has been done without consideration for the long-term consequences.¹ He found no empirical evidence supporting claims that exotic grasses outperform native species with regard to yield or forage nutrient quality.

c) Rejuvenation of Tame Forages: To qualify for this option, the lessee must obtain permission from an SRD-Lands agrologist. The area broken must be reseeded to a perennial forage within four years. To allow the lease to recover some of the development costs, annual crops, including a nurse crop, may be grown on the broken area for up to three years without a cultivation surcharge.⁵

d) Marginal Land Protection: Perennial forages may be grown on lands designated as cultivated lands in a lease agreement. Lease rates will be reduced to reflect the change in production if an SRD-Lands agrologist determines that the land is marginal for annual cultivation. Rental adjustments will occur the year the request is made, but will not be retroactive to the original date of conversion.⁵

Hay Leases and Permits Provincial lands may be leased for harvesting native hay or for the production of perennial tame hay crops. Annual hay permits are also issued on va-

cant Crown lands for harvesting native or tame hay. Lessees and permittees are required to harvest the quantity of hay authorized in a "good and husband-like manner and without waste."

According to SRD-Lands, permits are predominantly issued on native haylands, while leases are issued on a mixture of native, tame, and irrigated lands. There are no data established for hay cutting. Hay can be harvested whenever the lessee chooses. Hay-cutting operations in Saskatchewan disrupt native wildlife during their sensitive reproductive period, especially ground-nesting birds whose normal hatching period usually coincides with the prime cutting period. Nests established in cut areas can be destroyed by haying machinery and there is a high probability the incubating female may be killed or injured as well. The one exception to this is on Crown lands adjacent to the Quill Lakes, where annual permits only allow haying after 15 July to protect nesting waterfowl.

Provincial Community Pastures The intent of the Provincial Pasture Program is to provide community grazing services to patrons' livestock that have been accepted under the Provincial Allocation Policy. Community pastures are managed by pasture managers that are under the direct supervision of SRD-Lands agrologists.⁶

There is no policy formulated for the management of provincial community pastures. Management philosophy has been "to maximize grazing for beef production while minimizing ranges damage." SRD-Lands has just recently begun to gather range trend information within their community pastures, as a

method of evaluating the effectiveness of range management systems. Range agrologists are recording livestock weights at the beginning and end of each grazing season, setting up enclosures, taking forage clippings to measure productivity, and completing annual reports cards on range conditions (pers. comm., SRD-Lands).

Provincial pastures are currently in transition from predominantly season-long (continuous) grazing systems to more intensively managed rotational systems. Today, there are no pastures that operate under a season-long grazing regime. Every pasture manager moves livestock at least twice during the grazing season. The goal of community pasture systems is to operate pastures as demonstration sites of sound management principles. Many pasture patrons maintain additional private and leased pasture and it is hoped that management practices demonstrated on community pastures will carry over to such lands (pers. comm., SRD-Lands).

Development plans for provincial community pastures are not reviewed by any outside agency to assess pasture environmental impacts, however, range sites scheduled for development are first checked for any reservations, such as inclusion in the WHPA. SRD-Lands agrologists, range agrologists, and pasture managers develop plans, and if funding is available the plans can proceed. Currently, funding for pasture conversion and/or rejuvenation is low, however, if funding were to improve, rejuvenation of tame paddocks would be a priority. Brush control is usually achieved through burning. Areas slated for burning are typically rested for a full grazing season and are then burned the follow-

ing spring. The use of herbicides is diminishing because of low success rates and high associated costs (pers. comm., SRD-Lands).

Stocking rates (the number of animals on a unit of land during a particular period) are based on the amount of forage consumed by a 1,000-lb. cow with or without calf. The average weight of range cows in Saskatchewan today is approximately 1,200 to 1,300 lbs.. There is a direct correlation between the size of the animal and the amount of forage consumed. Some provincial pasture managers may make some downward adjustments in stocking rates to adjust for increased cattle weights, but more commonly adjustments are not made since pasture patrons often react negatively to decreases in stocking rates (pers. comm., SRD-Lands). Using corrected 1,000-lb. animal weights for carrying capacity and stocking rate calculations can underestimate forage consumption by at least 20%.³

Wildlife are not formally recognized in provincial community pasture policy. Wildlife utilization of forage is not factored in when carrying capacities and stocking rates are determined. Wildlife sensitive time periods and/or areas are not considered in planning cattle movements. Generally, riparian areas are not managed as separate units within range management plans (pers. comm., SRD-Lands).

Range ecologists outside of the civil service were contacted to assess average range conditions on provincial community pastures. Seventy-five percent were rated as poor to fair and 25% were rated as good to excellent. Range condition was considered to be very dependent on individual pasture managers. In

general, southern pastures were rated better than those in the north. This was attributed to southern drought conditions forcing a more conservative use of the resource.

PFRA Community Pasture Program The PFRA is a branch of Agriculture Canada working in the prairie provinces. The Community Pasture Program began in 1937 as a method of dealing with the vast acreage of farmland abandoned during the drought of the 1930s. Today, there are 87 community pastures across the prairies. Saskatchewan has 62 PFRA community pastures covering approximately 1.8 million acres. According to the PFRA, approximately 80% of their 1.2 million titled acres remain as native range, much of which is considered critical habitat for wildlife.

The PFRA Community Pasture Program does not have written policies governing pasture management, development, or multiple land use, however, the program does have four objectives:

- 1) to protect marginal soils from erosion by maintaining permanent cover on these lands;
- 2) to help producers with small farms by allowing them to use the pastures for summer grazing;
- 3) to encourage high-quality, long-term cattle production by providing a breeding service using good bulls; and
- 4) to manage the rangeland resources to ensure a healthy relationship between soil, plants, and animals.

PFRA Range Management The PFRA's unwritten goal for range management is to strive to maintain

65% to 75% of the range in the climax community (good to excellent range conditions).

Range management biologists base carrying capacities on long-term precipitation rates, soil types, plant communities, and the forage intake requirements of a 1,000-lb. cow. Stocking rates in PFRA pastures are almost always set below carrying capacities. Stocking rates use the 1,000-lb. cow as the standard, but are multiplied by a correction factor of 1.4 to account for today's larger cow size. The rates vary from year to year because of fluctuations in forage supply, mainly due to the previous year's grazing history and the amount and distribution of seasonal precipitation. Stocking rates are set to try to maintain a 40% forage carryover at the end of grazing season (pers. comm., PFRA-PPS).

Grazing systems manipulate grazing in a planned manner, optimizing livestock production through correct stocking rates and forage use levels. In PFRA pastures, the type of grazing system employed varies according to the resources available within, and the management goals of, individual pastures. The most commonly used grazing system is complementary (graze seeded pasture during the vulnerable spring period while deferring native range for summer grazing), followed by deferred rotation (defer grazing on several pasture units in a planned rotation), and finally rest-rotation (requires four or more paddocks and each year one is given total rest while other fields are grazed in rotation). Season-long or continuous grazing is still used on PFRA pastures. The extent of its use could not be ascertained, but it was implied that the implementation of grazing systems was difficult because of resistance to change (pers. comm., PFRA-PPS).

The primary use of PFRA pastures is agricultural therefore, and multiple-use plans must mesh with that priority. The PFRA's leased agreement with the provincial government stipulates that all provincial Crown lands within PFRA pasture boundaries must be used for agricultural purposes. If a portion of a pasture is removed from agricultural use, control and management of that area will automatically revert back to the province. Consequently, the PFRA will not specifically set aside any area within a pasture for an alternative use (pers. comm., PFRA-PPS).

The PFRA is an active participant in the Swift Fox release program and has modified development plans (halt pasture conversion and/or rejuvenation) in relevant pastures to protect fox dens. Sage Grouse leks within pastures have been identified and pasture development plans take such areas into consideration. In pastures in the Weyburn area, fenced enclosures have been placed around trees as nest sites by Ferruginous Hawks. The PFRA, with guidance from Ducks Unlimited, has completed inventories and begun to initiate management recommendations to enhance waterfowl production on pastures within priority areas of the North American Waterfowl Management Plan. Grazing systems that accommodate nesting waterfowl habitat requirements are currently being implemented in Mount Hope/Prairie Rose and Monet PFRA pastures. The PFRA is not an active participant in the Burrowing Owl Program, but there are a significant number of nesting burrows within pastures and the PFRA restricts pesticide use in areas where they have been identified (pers. comm., PFRA-PPS).

Forage use by wildlife is not con-

sidered when carrying capacities and stocking rates are determined. However, the PFRA recognizes that wildlife utilize their pastures and suggest that the 40% carryover is primarily for wildlife use (pers. comm., PFRA-PPS). According to PFRA inventories, riparian areas represent less than 2.4% of their total pasture area, therefore an emphasis has not been placed on their management. Grazing systems that provide livestock control in terms of both numbers and duration have been implemented in riparian areas on a limited scale (pers. comm., PFRA-PPS). According to wildlife biologists and range ecologists outside the civil service, riparian areas comprise a considerably larger area within PFRA pastures than indicated by PFRA inventories.

The PFRA's current development plans are not directed towards the large scale conversion of native grasslands to tame forage. During the mid- to late 1970s, the PFRA undertook a fairly extensive program of converting native range to tame pasture (crested wheatgrass was the favoured replacement). The end result of this conversion program was a number of unmanageable plots within the confines of larger paddocks. Future development will be directed at increasing the management capabilities of these plots, either through limited consolidation of the tame plots and fencing, or by hastening their return to native vegetation (pers. comm., PFRA-PPS).

The PFRA develops five-year plans for each community pasture. Included in these plans are new fence locations, water development sites, paddocks designated for improvement/development, and sites selected for woody growth control. The PFRA's range ecologists review these plans to ensure the integrity of

the range is maintained. Since 1987, pasture plans have also been reviewed by SERM-Wildlife Branch. The PFRA considers this review to be an environmental assessment, in which SERM is to identify development plans that could negatively impact on wildlife and the environment. The PFRA's pasture development plans must receive SERM approval prior to their implementation regardless of whether they will affect titled or provincial Crown lease land (pers. comm., PFRA-PPS).

Once pasture development plans have received PFRA internal approval, they are forwarded to the SERM-Wildlife Branch. Plans are then distributed to the relevant regional wildlife biologist. These biologists concentrate on three types of developments in their assessment of PFRA pasture plans: new fence line construction, conversion of native range to tame pasture, and woody growth control. New fence line construction going through forested areas is flagged to ensure minimal clearing occurs. The conversion of native range to tame pasture is closely scrutinized. Critical terrestrial habitat maps are overlaid to ensure that the area to be converted does not include critical habitat. In grasslands, the major area of concern lies with Sharp-tailed and/or Sage Grouse habitats and wintering habitat of Pronghorn and Mule Deer. Also flagged are potential developments that could interfere with Ferruginous Hawk, Golden Eagle, and Prairie Falcon nesting habitat. Burrowing Owl habitat does not receive much consideration in this review because the data base on this species within PFRA pastures is poor. In the parkland, brush clearing proposals are carefully reviewed. In this regard, species of concern include White-tailed Deer, and Sharp-tailed and Ruffed Grouse (pers. comm., SERM-

Wildlife Branch). Regional wildlife biologists do not comment on the effects of grazing management on wildlife habitat.

Currently the Canadian Wildlife Service (CWS) is not involved in reviewing the PFRA five-year pasture plans. Over the past 25 years, the CWS has tried to establish a cooperative agreement with the PFRA that would formalize CWS's input into pasture development and management, but this process has met with little success. The PFRA seeks CWS involvement on an individual pasture basis only (pers. comm., CWS).

Range ecologists outside of the civil service were asked to assess range conditions on PFRA pastures. The pastures were ranked the same as provincial community pastures with 75% poor to fair and 25% good to excellent. Assessors felt range condition was very much dependent on individual pasture managers.

Discussion There is a problem with society's current view of native prairie, which is reflected in descriptions such as "unimproved land" or "wasteland." Breaking native range and seeding tame grass with legume species or annual crops is considered "improvement" or "development." We must begin to view native prairie in a new way, a way that values its richness and diversity as a foundation of sustainable economic activities.

The World Conservation Strategy identified the Canadian prairies as an area of international significance for conservation. The Prairie Conservation Action Plan considers: "Every remaining prairie wetland as precious, each aspen forest as critical, and every tract of native grassland a national treasure."¹⁰

In Saskatchewan, the geographic area occupied by native prairie has shrunk to 17% of its original area and native vegetation communities associated with these remnants have usually been denatured by perennial overgrazing. Together, the federal and provincial governments own, administer, and manage approximately 68% of this vanishing resource. Numerous rare and endangered species of fauna and flora depend upon native grasslands for their continued survival. There is an obligation for government to manage this resource for all of Saskatchewan, not solely for Saskatchewan's livestock producers. A Statistics Canada survey from 1981 showed that over 82% of Canadians expressed support for preserving endangered species. The conservation and sound management of Saskatchewan's native Crown-owned grasslands would be a major step towards this.

The intent of Saskatchewan's WHPA is to protect that portion of the provincial agricultural Crown land that is considered critical to maintenance of terrestrial wildlife populations. To date, 3.4 million acres have been enrolled under the protection of the WHPA. According to SRD-Lands, they administer over 7 million acres of grazing land of which an estimated 95% (6.65 million acres) remains as native range. Therefore, the WHPA protects approximately 51% of the province's native agricultural Crown land from sale and alteration.

Unfortunately, the WHPA has little influence over the ecological health of these protected habitats. In this regard we must depend on the stewardship of the administrators, managers and clients of SRD-Lands. The WHPA is a reality only because it does not infringe upon grazing and

haying rights of lease holders. If the WHPA had attempted to adjust farming/ranching activities to accommodate wildlife sensitive periods and habitats it would likely have never received legislative approval.

Loss of native habitat is one of the most significant threats to wildlife species and ecosystems. The Prairie Conservation Action Plan calls for governments to more explicitly incorporate conservation of native prairie into their programs. This is reiterated in Saskatchewan's Round Table on the Environment and Economy report "Conservation Strategy for Sustainable Development in Saskatchewan" which was accepted by the provincial government in June 1992.^{5,10} This report recommends that: "Governments and agricultural producers develop program and policies to ensure the sustainable use of grazing resources."

Toward that end it advises:

- 1) management plans should be developed for all Crown grazing lands to ensure sustainable use of grazing resources and to achieve multiple land use; and
- 2) all remaining native rangeland should be managed to maintain Saskatchewan's biological diversity. Damaged areas should be restored to productive native rangelands.

Management to maintain biodiversity on Saskatchewan's native range requires more than just preservation. The term wildlife must be expanded to include more than deer, antelope, grouse, and ducks. It should encompass all of our native flora and fauna. Multiple-use management must include more than altering development plans and fencing nest sites. Native range must be catalogued in

inventories and mapped. Managers must be educated as to the plant and animal species present within their pastures and the habitat requirements specific to them. The provision of moderately grazed range will not solve the "wildlife problem." Grassland wildlife species also evolved under a grazing regime and there are certain species, Burrowing Owls for instance, that prefer nesting in heavily grazed areas. Livestock movements can be managed to create a diversity of grassland habitats while maintaining optimal livestock production.

Policy governing the management of federal and provincial grazing lands should be rewritten to reflect public rather than solely agricultural interests. Provincial and PFRA pastures should continue to provide supervised grazing programs, but management should be expanded to provide an optimal balance of conservation, public access, and other land uses. The province of Alberta is currently managing its public grazing reserves under such a policy. The reserves offer a variety of recreational opportunities including hunting, hiking, trail riding, camping, sight-seeing, cross-country skiing, and snowmobiling. Maps are available to assist recreational users by showing access and designated travel routes. These designated routes give the public optimal access to the reserves while minimizing both damage to grazing lands and conflicts with other users. Adoption of a similar policy in Saskatchewan would provide opportunities for all its people to enjoy true economic and social benefits from grazing and other uses of our Crown lands.

There is a problem with society's view of native prairie, reflected in descriptions such as "unimproved land" or "wasteland."

In order to achieve true multiple-use and maximum biodiversity on Saskatchewan's Crown grazing lands, the PFRA and SRD-Lands will need to form partnerships with ranchers, other government agencies, conservation organizations, and the public. Committees composed of representatives from such groups should review all pasture development and management plans prior to implementation. If we work together we can achieve the far-reaching benefits of soil and water conservation, a healthy livestock industry, environmental sustainability, and multiple resource use.

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1. COUPLAND, R.T. 1977. Concerns respecting the "improvement" of rangeland by use of exotic grasses. Paper presented at symposium "Classification and Utilization of Grazing Lands in Southern Saskatchewan," sponsored by the Ecologics and Land Resources Research Coordinating Group of the College of Agriculture, Univ. of Saskatchewan. 14 pp.
2. GAYTON, D.V. 1991. Grazing pressure on Saskatchewan rangelands. *Rangelands* 13:107-108.
3. PYLE, W. 1990. Managing Saskatchewan rangeland. New Pasture and Grazing Technologies Project. 118 pp.
4. SASKATCHEWAN ENVIRONMENT AND RESOURCE MANAGEMENT. 1990. Policy and procedure for "The

- Critical Wildlife Habitat Protection Act" lands administration (draft). Government of Saskatchewan. 31 pp.
5. SASKATCHEWAN ROUND TABLE ON ENVIRONMENT AND ECONOMY. 1991. Conservation strategy for sustainable development in Saskatchewan (draft). Saskatchewan Round Table Secretariat, Regina. 44 p.
 6. SASKATCHEWAN RURAL DEVELOPMENT. 1989. Provincial land lease allocation policy. Government of Saskatchewan. 6 pp.
 7. ——. 1991a. Provincial lands sales to lessees. Government of Saskatchewan. 4 pp.
 8. ——. 1991b. Provincial land improvement policy. Government of Saskatchewan. 3 pp.
 9. WESTERN RESOURCES MANAGEMENT ASSOCIATES. 1992. Landscape ecology: a management approach for the Sweetgrass-Frenchman agro-ecological area. Agriculture Canada — Prairie Farm Rehabilitation Administration. 64 pp.
 10. WORLD WILDLIFE FUND. 1989. Prairie Conservation Action Plan. World Wildlife Fund, Canada. Toronto. 38 pp.
 11. WROE, R.A., S. SMOLIAK, B.W. ADAMS, W.D. WILMS, and M.L. ANDERSON. 1988. Guide to range condition and stocking rates of Alberta grasslands, 1988. Alberta Forestry, Lands, and Wildlife, Public Lands Division. 33 pp.



Eastern Screech Owl

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