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THE POPPER PROPOSALS FOR THE GREAT PLAINS:  
A VIEW FROM THE CANADIAN PRAIRIES

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Abstract. The Popper thesis, that large parts of the U.S. Great Plains are best suited to their pre-settlement role of “buffalo commons” and should be returned to that state, might also be applied to portions of the Canadian prairies north of the 49th parallel. The Canadian Dry Belt, often referred to as the Palliser Triangle, has suffered drought and environmental degradation similar to the U.S. Great Plains. Rural depopulation began in the 1920s, and in the 1930s the region became known as the Canadian Dustbowl. As early as the 1920s, some farmers had begun to work together to develop land-use strategies suited to the dry environment, and the Lethbridge and Swift Current agricultural research stations had been established. It was not until the mid-1930s, however, that the federal government created the Prairie Farm Rehabilitation Administration. PFRA took a comprehensive approach to the problem. Along with the provincial governments and other groups, it embarked upon programs to change land-use, develop irrigation, improve farming techniques and diversify the agricultural economy. More recently, subsidies to agricultural producers have slowed the process of returning marginal farmland to pasture or wildland. Nevertheless, a large area of land in the Dry Belt is now under forms of management that are more compatible with the environment, such as the Grasslands National Park, wildlife lands, provincial parks, community pastures, and ecological reserves. The reestablishment of the “buffalo commons” in parts of the southern Canadian prairies has been under way for some time—but without the buffalo.

Recently Frank and Deborah Popper (Popper and Popper 1987) claimed that current agricultural methods practiced on the Great Plains could create heavy depopulation of the region. Therefore, they suggested returning portions of the region to its previous state or as they labeled it—the “buffalo
commons." Publicity achieved by the controversial Popper proposals for the U.S. Great Plains penetrated across the 49th parallel when Frank Popper delivered a featured address at the Grasslands seminar in Regina, Saskatchewan in mid-June 1991. The Dry Belt of the Canadian prairies, commonly, but incorrectly, named Palliser's Triangle (after the British army captain who explored parts of the western interior of Canada in 1857-58), would also seem, at first sight, to be a candidate for the Popper thesis promoting the return of much of the Great Plains to the status of "buffalo commons." It is a semi-arid northward extension of the U.S. Great Plains, and it has experienced broadly similar environmental and socio-economic problems.

For this discussion, I have defined the Dry Belt of the Canadian prairies (Fig. 1) as being coincident with the zone of brown soils in southeastern Alberta and southwestern Saskatchewan, an area of about 75 thousand square miles. This zone approximates the semi-arid portion of the Canadian prairies and is considerably smaller than the area which James Hector of the Palliser expedition caused to be termed Palliser's Triangle (Warkentin 1964).
The Dry Belt certainly can be defined in other ways. Villmow (1956) used a variety of climatic criteria. Allen (1973) brought together a number of interpretations to define “the western Canadian plains.” Following Webb’s (1931) identification of the Great Plains as being characterized by dryness, it seems to me that parameters of climate, soil (used here) or natural vegetation might all be argued to be suitable for the purpose of regional definition. The brown soil zone on the Canadian prairies has average annual precipitation from about 10 to 14 inches (Longley 1972), ranging from as low as 6 to upwards of 20 inches in particular years.

In terms of landforms, the Canadian Dry Belt is part of the glaciated plains of North America. Rolling till plains, dead-ice moraine, glacial lake basins, outwash plains, sand dunes, glacial spillways, and meltwater channels are all characteristic of the physical landscape (Abrahamsson 1972; Beaty 1975; Trenhaile 1990). Thus soils vary greatly in texture, depending on the surficial deposits, and range from sandy and highly drought-sensitive to heavy clay with good moisture retention. Elevation ranges from about 2000 feet in the east to 3000-3500 feet in the west. Natural vegetation consists of short-grass and mid-grass associations which cover most of the Dry Belt, with wetland associations—marsh plants, shrubs and small trees—in depressional and riverine habitats (Rowe and Coupland 1984). Small depressions are common in the widespread morainal landscapes.

The Dry Belt, however, also contains a critically important enclave known as the Cypress Hills, a more humid island-like bedrock-upland refuge (Nelson 1973) of black soils and forest reaching a maximum elevation of 4800 feet in southeastern Alberta. This enclave provides a vital source of wood, water, pasture and hay for farmers and ranchers in the surrounding areas. The Cypress Hills have an average annual precipitation of about 15 to 19 inches, and creeks flowing out of the Hills furnish an important source of irrigation and livestock water.

Nomadic Plains Indians and the buffalo frequented the Dry Belt (Dickason 1980) until the construction of the Canadian Pacific Railway (CPR) in 1882-83. The earliest non-Indian occupation, involving cattle ranching, preceded the CPR. Various American cattlemen pastured their herds north of the 49th in the late 1870s (Evans 1979) and, for a number of years, Fort Benton on the Missouri was an important supply base for what is now southern Alberta. Whisky traders also moved across the Line from Fort Benton, and their negative impact on the Indians of the Dry Belt led the Canadian government to found the North West Mounted Police in 1873, to bring order to the Canadian side of the border. In 1876, the force established
their headquarters at Fort Walsh (Plate 1) in the Cypress Hills. The peace 
which they maintained permitted the open-range cattle and sheep ranching 
industry (McGowan 1975) to flourish in the region for three decades.

The railway, however, brought farmers into the region. The Dominion 
Lands Act of 1872 and ensuing treaties with the Indians had opened up the 
Canadian prairies to homesteading (Barr and Lehr 1982). Agricultural 
settlement in this region was handled in much the same way as in the 
American West. Officials employed a survey of Townships and Ranges 
(Tyman 1972) almost identical to that used in the U.S. westward expansion. 
In both Saskatchewan and Alberta, the Rural Municipality (RM) served as 
the unit of rural local government. The RM usually consisted of a square 
containing 9 townships; occasionally it was a rectangle containing 12, and in 
very rare cases it might use a physical feature such as a major river as a 
boundary. Thesystem persists to the present day in Saskatchewan. In Alberta 
the original RMs were grouped into larger Municipal Districts in the 1940s, 
producing a form of local organization akin to the county system in the U.S.
The British and Canadian governments wanted to settle western Canada and to kill off any sentiment for annexation to or by the United States. However, the first railway into the Canadian prairies was an American one, the St. Paul, Minneapolis and Manitoba—linking St. Paul with Winnipeg in 1877. The “Manitoba” belonged to James J. Hill and was the forerunner of his Great Northern Railway across the northern U.S. plains (Pyle 1916). In view of the American ownership of this line, the Canadian government deemed it essential that an all-Canadian line be built across the prairies north of the 49th parallel and that it be linked by a route across Canadian territory north of the Great Lakes to the railways of eastern Canada. Thus the CPR, a land-grant railway modeled on earlier American colonization railroads, was built west from Winnipeg in 1881, crossed the Dry Belt in 1882-83, and became a true transcontinental in 1885 with through trains from Montreal to Port Moody (Vancouver, BC).

A railway through the open range of the Dry Belt proved unprofitable. Denser settlement was needed to provide the CPR with more traffic. Irrigation agriculture along the western edge of the Dry Belt, around Lethbridge, proved successful in the 1890s (den Otter 1971), and in the next decade dryland farmers pushed into the eastern edge as the homesteading waves swept westward across Saskatchewan. Within a few years they were settling the former open range both north and south of the Cypress Hills (McGowan 1975). Meanwhile, catastrophic livestock losses during the winter of 1906-07, so graphically portrayed by Wallace Stegner (1955) in Wolf Willow, devastated the open-range cattle industry.

Some observers with first-hand experience in the Dry Belt viewed this invasion by dryland farmers with trepidation. Irrigators in southern Alberta (den Otter 1982) were instrumental in developing awareness that precipitation in the region was highly variable. In response to these concerns, at least in part, the Canadian government established the Lethbridge agricultural research station in 1906. The introduction of irrigation and dryland farming techniques in the region were important thrusts right from the outset.

Initially, grain crops harvested by the new settlers were encouraging. With the promise of opportunity, farming population in the Dry Belt increased rapidly, with much of the increase coming between 1906 and the beginning of the First World War. Table 1 shows populations of Census Divisions 4 and 8 in Saskatchewan and 1 and 3 in Alberta, all four of which are wholly or largely contained within the Dry Belt (Fig. 2). The enthusiasm of this boom period was shaken somewhat in 1914, however, when drought
resulted in widespread crop failure throughout the Dry Belt (Jones 1987; Laut 1976). Wind erosion of light soils caused considerable concern. When the scenario was repeated in the later years of the decade, the alarm bells were sounded. The Alberta side of the Dry Belt was the hardest hit at this time. The population of Census Division 1 in Alberta showed very little increase between the 1916 and 1921 censuses (Table 1).

Some of the homesteaders on sandier soils abandoned their lands, and a number of farmers began to agitate for better farming methods and land-management strategies suited to the drylands. The first haphazard steps back towards “buffalo commons” status were taken. It was being recognized that the areas of lighter soils in the Dry Belt were fit only for low-density livestock grazing since they were highly susceptible to erosion if brought under the plough. The Swift Current agricultural research station was established by the federal government in 1921 with a mandate to address these issues. The first of the “community pastures” appeared in Saskatchewan the following year (Laut 1976). It represented an awareness of the need to avoid wheat monoculture and also to provide access to additional grazing lands for the
TABLE 1  
POPULATIONS OF CENSUS DIVISIONS WHOLLY CONTAINED  
WITHIN THE CANADIAN DRY BELT, 1901-1986

<table>
<thead>
<tr>
<th>Census Division</th>
<th>1901</th>
<th>1906</th>
<th>1911</th>
<th>1916</th>
<th>1921</th>
<th>1926</th>
<th>1931</th>
<th>1936</th>
<th>1941</th>
<th>1946</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sask. CD 4</td>
<td>1,324</td>
<td>2,908</td>
<td>10,497</td>
<td>21,121</td>
<td>23,198</td>
<td>24,740</td>
<td>28,126</td>
<td>25,806</td>
<td>22,300</td>
<td>19,557</td>
</tr>
<tr>
<td>Sask. CD 8</td>
<td>379</td>
<td>2,717</td>
<td>17,569</td>
<td>37,120</td>
<td>45,667</td>
<td>44,470</td>
<td>49,361</td>
<td>45,690</td>
<td>42,845</td>
<td>37,457</td>
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<tr>
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<td>3,144</td>
<td>7,765</td>
<td>24,738</td>
<td>29,927</td>
<td>30,664</td>
<td>25,624</td>
<td>28,849</td>
<td>29,699</td>
<td>29,595</td>
<td>31,256</td>
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<tr>
<td>Alberta CD 3</td>
<td>278</td>
<td>745</td>
<td>9,330</td>
<td>13,266</td>
<td>17,404</td>
<td>12,149</td>
<td>15,066</td>
<td>14,742</td>
<td>15,518</td>
<td>14,7496</td>
</tr>
<tr>
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<td>16,691</td>
<td>17,386</td>
<td>17,925</td>
<td>17,511</td>
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<td>14,989</td>
<td>14,659</td>
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<td>Sask. CD 8</td>
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<td>39,643</td>
<td>41,328</td>
<td>41,717</td>
<td>39,311</td>
<td>36,009</td>
<td>35,146</td>
<td>35,723</td>
<td></td>
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<tr>
<td>Alberta CD 1</td>
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<td></td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>Alberta CD 3</td>
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<tr>
<td>New Alta.CD 1</td>
<td>28,317</td>
<td>34,496</td>
<td>39,140</td>
<td>38,858</td>
<td>39,149</td>
<td>46,990</td>
<td>55,375</td>
<td>56,592</td>
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</tbody>
</table>

Source: Various Censuses of Canada. For the boundaries of these Census Divisions, see Figure 2.
small livestock farmer who was economically unable to purchase or lease the acreage of pasture which he needed.

The six or seven years following the First World War were highly variable in terms of precipitation in the Dry Belt, but the region produced several good crops and grain prices also were fairly high (Table 2). Nevertheless, as shown by Jones (1987) for southeastern Alberta and by Paul (1977) for a series of RMs along the CPR mainline in southwestern Saskatchewan (Table 3), rural depopulation was already beginning. Some who had reaped their windfall profits from a few good harvests on their small farms were quick to bail out at the first signs of trouble. Many of those who stayed bought up lands which had become available and expanded the scale of their own operations in order to keep them economically viable. Grain farming was becoming a large-scale, commercial enterprise. Mixed farming began to appear as a number of operators sought to diversify from grain monoculture into livestock.

Cattle ranching, meanwhile, had by no means disappeared from the region. Some areas were clearly unsuited to any other form of agriculture. While the vast open-range ranches no longer existed, more modest spreads with fenced units on leased Crown (government) lands were commonplace. Bennett (1969) in Northern Plainsmen has chronicled the ranchers' way of life in the Maple Creek area of Saskatchewan, where the industry was well established prior to the First World War and where dryland grain farmers made relatively few inroads. The Rural Municipality of Maple Creek was never very heavily populated (Table 3); its rural depopulation has been less marked than in nearby RMs where some lands of very poor quality were ploughed up in the period 1918-1925 and then abandoned within a generation or less.

The second half of the 1920s revealed increasing apprehension about the ability of the Dry Belt to sustain grain farming over the longer term, particularly on the lighter soils. Beginning with 1924, a dry year, widespread soil erosion developed especially in southeastern Alberta (Jones 1987). The real downturn, though, came in 1929 with the beginning of the Depression. Grain prices plummeted. The farm price for spring wheat which averaged $37.85 per tonne (metric) in 1929 sank to an average of $17.27 in 1930 and $12.86 in 1932 (Table 2). A series of years with precipitation below average plunged the Dry Belt into a devastating drought. This time the effects on population were greatest in southwestern Saskatchewan. Rural depopulation occurred in all six selected RMs, but especially in those dominated by grain farming (Qureshi 1977) out-migration increased drastically in the 1930s (Table 3). Wind erosion and dust storms were frequent in this decade.
<table>
<thead>
<tr>
<th>Year</th>
<th>$/tonne</th>
<th>Year</th>
<th>$/tonne</th>
<th>Year</th>
<th>$/tonne</th>
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<td>1934</td>
<td>22.41</td>
<td>1952</td>
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<td>1970</td>
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<td>71.66</td>
<td>1935</td>
<td>22.05</td>
<td>1953</td>
<td>48.48</td>
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<td>50.17</td>
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<tr>
<td>1918</td>
<td>73.12</td>
<td>1936</td>
<td>33.80</td>
<td>1954</td>
<td>43.78</td>
<td>1972</td>
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<td>85.25</td>
<td>1937</td>
<td>38.58</td>
<td>1955</td>
<td>49.94</td>
<td>1973</td>
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<td>1956</td>
<td>44.61</td>
<td>1974</td>
<td>149.59</td>
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<td>27.93</td>
<td>1939</td>
<td>19.84</td>
<td>1957</td>
<td>46.24</td>
<td>1975</td>
<td>127.27</td>
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<td>1940</td>
<td>21.31</td>
<td>1958</td>
<td>48.32</td>
<td>1976</td>
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<td>45.92</td>
<td>1943</td>
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<td>1961</td>
<td>60.92</td>
<td>1979</td>
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<td>1944</td>
<td>45.93</td>
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<td>35.64</td>
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<td>60.26</td>
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<td>1981</td>
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<td>1946</td>
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<td>1949</td>
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<td>1967</td>
<td>59.34</td>
<td>1985</td>
<td>134.00</td>
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<td>54.76</td>
<td>1968</td>
<td>48.25</td>
<td>1986</td>
<td>105.00</td>
</tr>
<tr>
<td>1933</td>
<td>17.27</td>
<td>1951</td>
<td>55.85</td>
<td>1969</td>
<td>47.47</td>
<td>1987</td>
<td>115.00</td>
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</table>

(labeled the Dirty Thirties) and the region became known as the Canadian Dust Bowl (Wheaton 1992). In the summer of 1937, Canada's highest-ever temperature of 113.6° F was recorded at Yellow Grass and Midale, Saskatchewan.

At the beginning of the 1930s the prairie provinces were a much more important part of Canada's economy than is the case today. The country's other resource industries still awaited the boom years of the Second World War and the two decades which followed, and secondary manufacturing was still in its infancy. In 1931, one Canadian in four lived in the prairie provinces compared with only one in six today. The "wheat economy" (Fowke 1957) had fuelled a great national growth earlier in the century and its failure in the 1930s hit the whole country very hard. The Saskatchewan and Alberta provincial governments were bankrupt. The federal government was forced to act, particularly in the face of public pressure following Roosevelt's "New Deal" for the U.S. in 1933.

The Canadian government thus created the Prairie Farm Rehabilitation Administration (PFRA) in 1935. With its headquarters in Regina, it has remained an important federal presence on the prairie agricultural scene ever since. Along with the provincial governments and other groups, it embarked upon programs to change land use, develop irrigation, improve farming techniques and diversify the prairie agricultural economy (Agriculture Canada 1961). While its mandate was prairie-wide, its primary target was the Dry Belt and its goal was to put that region back on its feet and allow it to contribute once more to the Canadian economy.

PFRA's chief land-management initiatives were the community pasture program and the development of additional irrigation (Plate 2). In practice, for a variety of reasons, these two main thrusts were largely concentrated in Saskatchewan and Alberta respectively. The two provincial governments followed PFRA's lead, particularly with regard to retiring marginal lands from cultivation, developing community pastures of their own, and assisting resettlement of people leaving the drought-stricken areas. A large area representing 3% of the Dry Belt is now in community pasture (Fig. 3). An appreciable expansion of irrigation (Fig. 4) has occurred in the western section in Alberta, particularly in the PFRA St. Mary River Project. The development and refinement of dryland farming techniques, however, permitted grain farming to continue in the Dry Belt, especially on the heavier soils.

The community pasture "movement," for indeed it can be described as such, deserves further elaboration here. It began with the establishment of
TABLE 3

POPULATIONS OF SIX SELECTED SASKATCHEWAN RURAL MUNICIPALITIES IN THE DRY BELT

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<td>1,497</td>
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<td>729</td>
<td>678</td>
<td>541</td>
<td>526</td>
<td>574</td>
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<td>110 Piapot</td>
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<td>1,015</td>
<td>960</td>
<td>783</td>
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<td>477</td>
<td>427</td>
<td>410</td>
<td>526</td>
<td>479</td>
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<td>952</td>
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<td>567</td>
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<td>1,877</td>
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<td>400</td>
<td>359</td>
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<td>338</td>
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</table>

N.B. Population of Rural Municipality does not include population of any incorporated centres within the R.M.

* Boundaries of RM's 110 and 111 changed between 1976 and 1981, in both cases adding much extra territory and farmland; RM 137 reduced very slightly at the same time by a small expansion of the city of Swift Current. The second column for 1976 shows figures for that year adjusted for the boundary changes.

Source: Various Censuses of Canada.
the Matador pasture in Saskatchewan within a 200 square mile area of land formerly leased to a Scottish and American company (Laut 1976). Officials terminated the lease in 1921 and the Canadian government, after much deliberation, appointed a manager to run it on their behalf as a community pasture, thereby establishing a precedent for their later activities. Costs were to be met by charging livestock owners a small annual fee per head to graze their cattle on the pasture. PFRA championed the cause of community pastures in southwestern Saskatchewan in the 1930s, creating them both by buying out farmers on eroded lands and by using lands which had been abandoned and/or forfeited by non-payment of loans or taxes.

PFRA pastures (Fig. 3) are managed directly by federal government appointees and involve planting of new grasses, rotational grazing schemes, weed, pest, and disease control programs and provision of water supplies for livestock. They have been largely successful in meeting their goals but have also produced some new environmental problems in lieu of the erosion that was common when the lands were cropped.
Both the Saskatchewan and Alberta governments also maintain large areas of community pasture (Fig. 3) through their own programs. Several of the Saskatchewan pastures are grazed only by sheep, but cattle are far more important overall. Besides the federal and provincial operations, there are also numerous generally smaller community pastures in Saskatchewan administered by co-operative grazing associations (Fig. 3).

There were other very direct government land-management initiatives in the Dry Belt in the 1930s and 1940s. The transfer of jurisdiction over natural resources in 1930 by the Ottawa government to the Alberta and Saskatchewan provincial governments included the Cypress Hills Forest Reserve, much of which was quickly given provincial-park status (Scace 1975). During the Second World War the federal government took over ownership of another much larger block of land on the Alberta side, the 1,000 square mile Suffield Military Reserve (Fig. 5). This rather sandy area had suffered a great deal of soil erosion during the Dust Bowl years and, consequently, very little farming population remained to be relocated at the time of the transfer (Alberta 1972).
Thus a considerable amount of land in the Dry Belt was "deprivatized," to use the Poppers' terminology, in the 1930s and 1940s. This tendency towards reestablishment of the "buffalo commons," however, was largely offset by a number of other trends in the postwar period. The years from the end of the Second World War through the early 1970s were fairly kind to many in the Dry Belt. Grain prices had risen dramatically during the war and remained high in the years that followed (Table 2), precipitation was more abundant, in the 1950s especially, and the postwar boom encouraged large capital investments in the region. Encouraged by the labor shortage and high prices during World War Two, grain farming became highly mechanized. Under such circumstances the smaller farmer found it increasingly difficult to adapt and compete. Many of the small-scale mixed farmers who had diversified into livestock to reduce their erosion problems were squeezed out, retired or were forced to switch to straight grain. The remaining farms increased in size (Plate 3) and rural depopulation continued at a rapid pace, yet cropland area once again began to expand.
This trend has been encouraged by a number of government programs. The Canadian Wheat Board, which organizes the shipment of grain from farm to market, operates a quota system by which the amount of grain a farmer can deliver to an elevator depends on his cultivated acreage. The Crop Insurance Program, half the cost of which is paid by the federal government, is also based on acreage of cropland. Thus it pays the farmer to have more land under the plough (Ryder and Boag 1984; Henderson 1991), and this has encouraged new cultivation in the Dry Belt right on through the 1980s despite the drastic drop in grain prices in recent years. Since some of this land is very susceptible to erosion, its conversion to cropland goes against the environmental ethic that had been fostered earlier by the devastation of the 1930s.

Figure 5. Federal lands (excluding PFRA community pastures), Indian Reserves and provincial parks in the Dry Belt.

There were other dimensions to this reversal of the “buffalo-commons” trends of the rehabilitation period. PFRA programs that developed large-scale irrigation projects, mostly in southern Alberta (Fig. 4), involved large subsidies to farmers. It soon became clear that the market for high-value irrigated specialty crops (Plate 4) could be supplied more than adequately by production from projects already in existence, such as the Taber Irrigation
District (Kromm 1991). Consequently most of the new irrigated lands were utilized for low-value hay and forage crops only, as a support to the livestock industry of the region. Much of the irrigation was accomplished by gravity flooding and lands had to be levelled for this purpose. Salinization problems appeared. Seepage from unlined canals and ditches and from return flows led to new saline groundwater discharge in low areas (Environment Council of Alberta 1982). Community pastures provided subsidized grazing, planted new grasses, and often used large applications of herbicides and insecticides. In short, production rather than environmental sustainability became the top priority. As we have already seen, new ground breaking was stimulated by a variety of government programs as well as by the market incentive. The trends of the 1930s and 1940s were reversed in the 1950s and 1960s and this reversal continued on into the 1970s. Clearly the delicate ecological balance of the Dry Belt had been forgotten once more.
New agricultural activity seriously affected wildlife habitat. In cropland areas numerous sloughs and marshes were drained, while bush and many of the occasional patches of woodland removed (Sugden 1984), all in the name of more efficient cultivation. Incentives from the federal and provincial governments to drain wetlands and to increase cropland area contributed significantly to this process. Although agencies such as Ducks Unlimited and the Canadian Wildlife Service, on the defensive at this stage, were able to preserve some wildlife lands, generally the philosophy of increased agricultural production dominated the three decades following World War Two.

Even while these “anti-Popper” tendencies were at work, however, other factors began to swing the pendulum slowly back again. During the 1950s oil and gas development increased in the Dry Belt, along with potash, sodium sulphate and other mineral industries. Such additions to the regional economy provided supplementary off-farm income to some residents, and full-time jobs to a few who abandoned agriculture entirely. Therefore on
Figure 6. Hutterite colonies in the Dry Belt. The colonies are represented by points in Alberta and by area symbols in Saskatchewan.

Some farms there is no longer the need to break the maximum amount of land in order to survive. Also the Hutterites expanded rapidly into the Dry Belt during the 1950s (Bennett 1967; Laatsch 1971). A number of small mixed and straight-grain farmers sold out to the Hutterites and received a good price for their land. Hutterite agricultural operations are less influenced by the economic climate of the moment. They practice an intensive but usually highly diversified farming style which includes a variety of crops and livestock (Simpson-Housley 1974). Their land-management strategies are more long-term than those of the small farmers whom they displaced and, after an initial period of experimentation, they tend to find the mix of enterprises best suited and least threatening to the ecology of their lands. There are now thirty or more Hutterite colonies (Fig. 6) (Plate 5) in the Dry Belt, covering about a thousand square miles or 1.3% of the total area.

In the 1970s and 1980s a change in public attitudes toward the environment has also been beneficial. Recently government policy for the management of Crown lands and provincial parks has been scrutinized more closely (Henderson 1991). Utilization of natural resources on these lands is handled
with more care and the policy has become more restrictive, particularly in and around provincial parks. The provincial governments have been much more active in recent years in purchasing or otherwise protecting areas for use as wildlife habitat and there have also been some ecological reserves established. At present a portion of the Great Sand Hills (Epp and Townley-Smith 1980) is under consideration for inclusion in Saskatchewan's ecological-reserve program. Dinosaur Provincial Park in Alberta (Plate 6) has a high profile now that its international significance is recognized. Writing-On-Stone (Fredeen 1991) and the Cypress Hills Provincial Parks are increasingly valued. The federal government is also much more visible in this sphere, with greater attention being paid to Fort Walsh National Historic Park and the move towards full legal status for the Grasslands National Park (about 300 square miles) in southern Saskatchewan adjacent to the U.S. border.

All of these various factors have had an impact on land use in the region. In their own limited way, parts of the Dry Belt began the first halting moves back towards "buffalo commons" status as early as the 1920s. Wallace Stegner (1955) gives a moving account of one family's participation in this
process, after the failure of their homestead on the bald prairie south of the Cypress Hills and immediately north of the 49th parallel. The process has reached a stage where almost half the land in the Dry Belt is publicly owned. Large areas are now under forms of management that are, at best, much more compatible with and, at worst, less exploitive of the environment than intensive grain farming and unregulated private grazing. These include (Rump and Harper 1977) the extensive controlled grazing on the leases of Crown land for ranching (Fig. 7); the community pastures; the provincial parks and ecological reserves; Grasslands National Park; the Hutterite colonies; Suffield Military Reserve; and the numerous wildlife lands too small to be shown on Fig. 5. With a touch of irony, a handful of buffalo ranchers have developed herds in the area. Over large expanses of the Dry Belt in the southern Canadian prairies, then, the re-establishment of the “buffalo commons” proposed by the Poppers has been under way for some time—but almost entirely without the buffalo.
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Figure 7. Canadian Dry Belt, Crown (government) lands leased for ranching.

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References


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