a TEACHERS' guide to



DRYLANDERS

A NATIONAL FILM BOARD OF CANADA feature production

Suggested Uses

History

- Increases student understanding and appreciation of settlement problems in the Canadian West after 1896.
- Creates an awareness of the effects of drought and depression on this region during the 1930's.
- Supplements Canadian History course in Grades 10 and 13.

Geography

- Provides useful background material for the study of wheat farming on the prairies.
- Increases student understanding and appreciation of man's relation to his environment.
- Supplements the Geography course in Grades 7, 12 and 13.

Conservation

- Provides a vivid reminder of what can happen when natural resources are misused.
- Supplements Conservation studies in the Intermediate and Senior Divisions.



ABOUT THE FILM

This first full-length English-language feature film by the National Film Board of Canada is an authentic and dramatically moving portrayal of the problems of pioneer settlement and wheat farming on the Canadian Prairies. It begins in the difficult years of settlement just after 1900 and culminates in the tragic drought and depression of the 1930's. Filmed entirely on location in what was once called the Saskatchewan "dust bowl", it vividly recreates the life of the period through the story of one family.

Here history comes alive in a story that Canadians of all ages will appreciate. A young man, who has returned home after service in the Boer War, feels dissatisfied with his position as a store clerk in Montreal. Restive in the face of work which now seems monotonous, he chooses to homestead in Saskatchewan, which at that time is being opened to settlement. Although his wife supports his wish to be his own master, she expresses her doubts and fears as their wagon rolls farther and farther from "home" into an empty wilderness of grass.

The man is too occupied in building a home and a barn, and raising a crop, to have room for doubts in his undertaking; and, as settlement grows and community life develops, his wife comes to share his love of the land. Then adversity strikes; and when drought and dust destroy the crops, it is the woman's strength that carries the family through.

At the film's end in 1938, when the long-awaited rains restore again the fertility of the parched earth, we get a glimpse of the good life in store for those who use land wisely instead of mining it for immediate gain.



THE PROBLEMS OF SETTLEMENT ON THE PRAIRIES

Aims

- To understand the basic problems of prairie agriculture.
- To appreciate the dangers and hardships faced by prairie settlers in the years just after 1900.
- To develop an awareness of political, social, economic and technological factors which made the wheat boom possible.

Background By 1900 the frontier in the United States had virtually ceased to exist, and settlement turned towards the last region of free and untouched land which remained on the North American continent. Canada had experienced the frustrations of a thirty-year wait for an opportunity to participate in the world network of investment and trade. Now the untouched and unwasted expanse of the Canadian prairies lay awaiting exploitation. The essential capital and capital goods were available in greater volume than ever before and at rates that were so low as to be totally unprecedented. Because of the new shipping which had come into being with the decline of the old sailing vessels, great quantities of grain and flour could be transported to European markets at relatively low cost.

The technical problems of farming and home building on a rolling grassland region with relatively few trees and a rigorous semi-arid climate had been solved slowly and painfully on both sides of the international boundary. American farmers had developed the necessary techniques: the chilled-steel plow to break the hard sun-baked ground; the self-binding reaper; the endless loading belts; the railway boxcar. Canadian scientists also made their contribution, among them Charles Saunders who in 1911 developed Marquis wheat, a hardy strain which could mature in the short growing season.

With every advantage in its favour, with the forces of the world converging momentarily to people the Canadian west, the government of Canada had little more to do than to direct the abundant energies at its disposal. This task it carried out with considerable skill. The homestead system and the railway land-grant system were the twin pillars of the project, and the res-

ponsibility of persuading settlers to come to Canada fell to Clifford Sifton, Minister of the Interior in Laurier's cabinet. Under his direction, the federal government instituted a systematic campaign of publicity, with full-page advertisements in thousands of newspapers on both sides of the Atlantic, and hard-selling Canadian agents travelling throughout the American farmlands, persuading experienced American farmers and former Canadians that a great future lay north of the border. The results of this campaign astounded even its most enthusiastic supporters as settlers came in scores of thousands from central Canada, Great Britain, the United States and Europe. Immigration, which had dwindled to little more than a trickle in 1896 with only 16,835 settlers coming to Canada, rose to 55,747 in 1901 and skyrocketed to an amazing 211,653 in 1906.

When Captain Palliser made his exploratory survey of the Canadian prairies in the nineteenth century, he described the high, flat, semi-arid brown soil region south of the South Saskatchewan River ("Palliser's Triangle") as unfit for cultivation. However, deceived by several seasons of unusually heavy rainfall, a flood of settlers swarmed even into this area, and the ranching for which it was best suited soon gave way to the great export specialty of wheat.

Between 1900 and 1914, half a million homesteads —160 acres of free land—were taken up in the West. It was soon discovered that economic

wheat farming in the best growing areas was uncertain within such a small unit and virtually impossible in the relatively infertile Palliser Triangle. As a result, the farms in this area grew larger and larger until 1,200 acres was not uncommon. For many settlers the first winter found them housed in the typical sod huts built of the only material readily available in the treeless plains. These, however, soon gave way to substantial frame houses flanked by barns and granaries and protected from the almost constant prairie wind by rapidly growing stands of trees.

Such was the situation faced in DRYLANDERS by Colin Greer when he and his family took over their homestead in the dry farming area south of Swift Current in the Province of Saskatchewan.



Suggested Activities and Topics

- Try to determine what personal qualities were needed to enable a young inexperienced family to face the rigours and challenges of establishing a new life on the open prairie.
- Report on the world-wide economic forces which directed thousands of settlers into the Canadian West.
- Estimate to what degree developments in the United States were responsible for the wheat boom in Canada.
- Prepare a bar graph to indicate the growth in settlement and wheat production between 1896 and 1914.
- Discuss the relationship between prairie development and the improvement in transportation.
- Report on methods used by Clifford Sifton to encourage settlement of the western wheatlands.
- Read about Palliser's exploratory survey of the Canadian prairies.
- Prepare a story of settling on the prairies as seen through the eyes of one of the Greer children.

THE PROBLEM OF WHEAT FARMING ON THE PRAIRIES

- Aims To understand the factors of soil, rainfall and temperature which affect wheat growing on the prairies.
 - To recognize and identify the main wheat belt and, particularly, the dry belt.
 - To appreciate the problems faced by prairie wheat farmers over the past sixty years, and to become aware of the major trends presently at work.

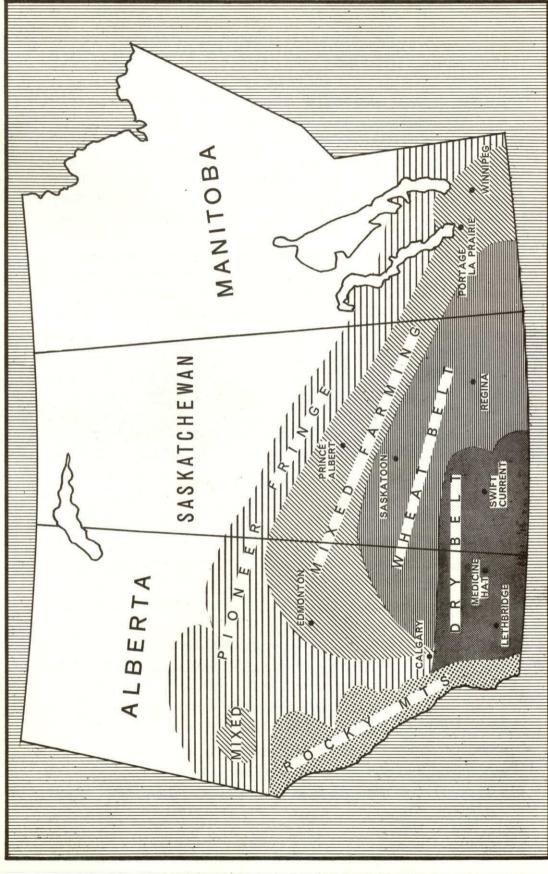
The Main Wheat Belt This region corresponds roughly to the black and dark brown soil zones and those areas known as tall-grass prairie, where the annual rainfall averages between 15 and 20 inches. It includes southwestern Manitoba and extends across south central Saskatchewan into eastern Alberta. Here, particularly on the Portage and Regina Plains, grows much of the world's finest hard wheat and here are produced yields in excess of 35 bushels per acre.



The Dry Belt This sub-region corresponds generally to the area known as the short-grass brown soil prairie, where the annual rainfall is usually less than 15 inches. Not easily definable, its limits in the north and east merge almost imperceptibly into the main wheat belt, while in the west the region extends into the foothills south and west of Calgary. The events in our film took place in this dry belt and were shot near Swift Current.

Although most of the occupied land of the dry belt is used as pasture, wheat is still a very important crop. It occupies a smaller proportion of cropland and produces yields distinctly lower than elsewhere on the prairies, rarely exceeding 15 bushels per acre except in irrigated areas. So-called dry farming involving summer fallowing is the usual method of cultivation. For obvious reasons, grain farms in this belt are the largest on the prairies, and average at least 1,000 acres.

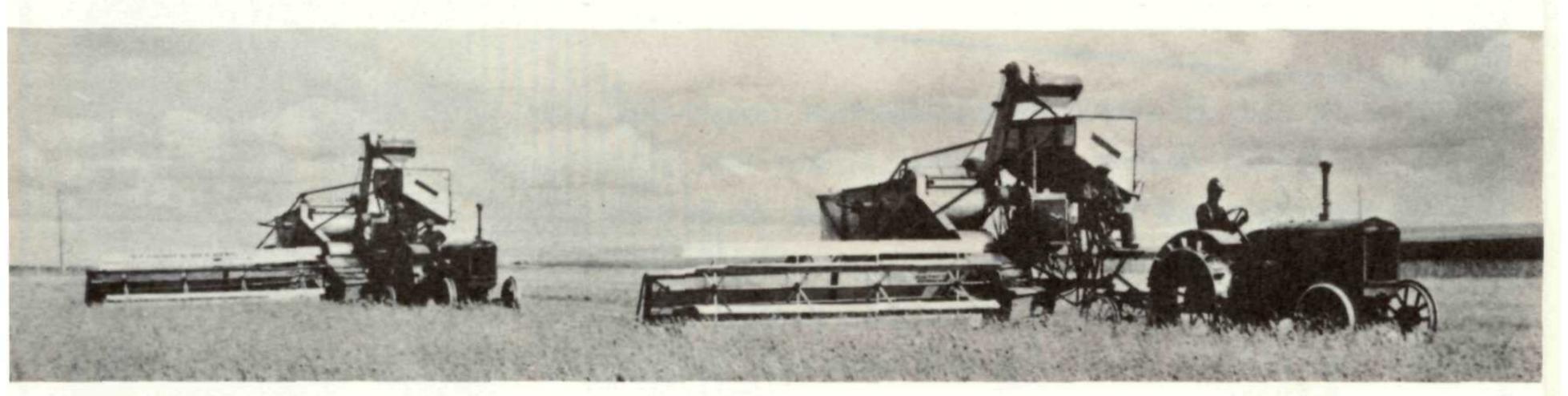
Problems and Trends The wheat farmer in the past has been subject to the vagaries of world demand for his product. Fortunately, such hazards are being reduced by the introduction of more orderly marketing methods. International agreements have tended to stabilize world wheat prices, while within Canada itself all wheat is sold by the Canadian Wheat Board, thus ensuring that each prairie district gets a fair share of the market. Western farmers themselves have met the problems peculiar to prairie agriculture in many ways. Probably the best-known institution is the co-operative which provides marketing, purchasing and storage services, and schemes to solve such questions as crop insurance and irrigation.



It is doubtful if any method will ever be devised that will completely eliminate difficulties faced by the wheat farmer. To his marketing problems must be added the natural hazards of wind, frost, hail and drought, as well as that of parasites. However, diversification is becoming more common in an effort to overcome the uncertainties of the single staple crop. This tendency is being extended even into the main wheat belt itself.

An examination of prairie agriculture reveals a number of related and interdependent trends which should be considered in a study of any depth. These are: the declining rural population; increasing mechanization and automation; increasing size of farms; increasing output; and the increasing land under cultivation.

While the prairies contribute the largest proportion of Canada's farm income of any major region, they contribute somewhat less than their vast area might lead one to suppose. However, as the domestic and international demand for food rises, the continuing importance of prairie agriculture seems insured.



Suggested Activities and Topics

- To what soil zone does the short grass prairie correspond? To what soil zone does the long grass prairie correspond? Indicate the average amount of rainfall in each zone.
- Debate the proposition: "Wheat farming should be forbidden by law in the dry belt."
- Prepare maps to indicate the soil zones, vegetation belts and agricultural regions of the prairies.
- Prepare a report on an average year for a wheat farm on the Regina Plains.
- Outline the experimental work leading up to the development of Marquis wheat.
- Discuss the effectiveness of the co-operatives.
- Examine progress made in the field of parasite control.
- What are the dangers of the single staple crop?
- Discuss the effects of mechanization on western wheat farming.
- What is the role of the Canadian Wheat Marketing Board? What do you consider to have been its most outstanding achievements?

THE PROBLEM OF CONSERVATION

Aims To understand the basic factors affecting soil conservation.

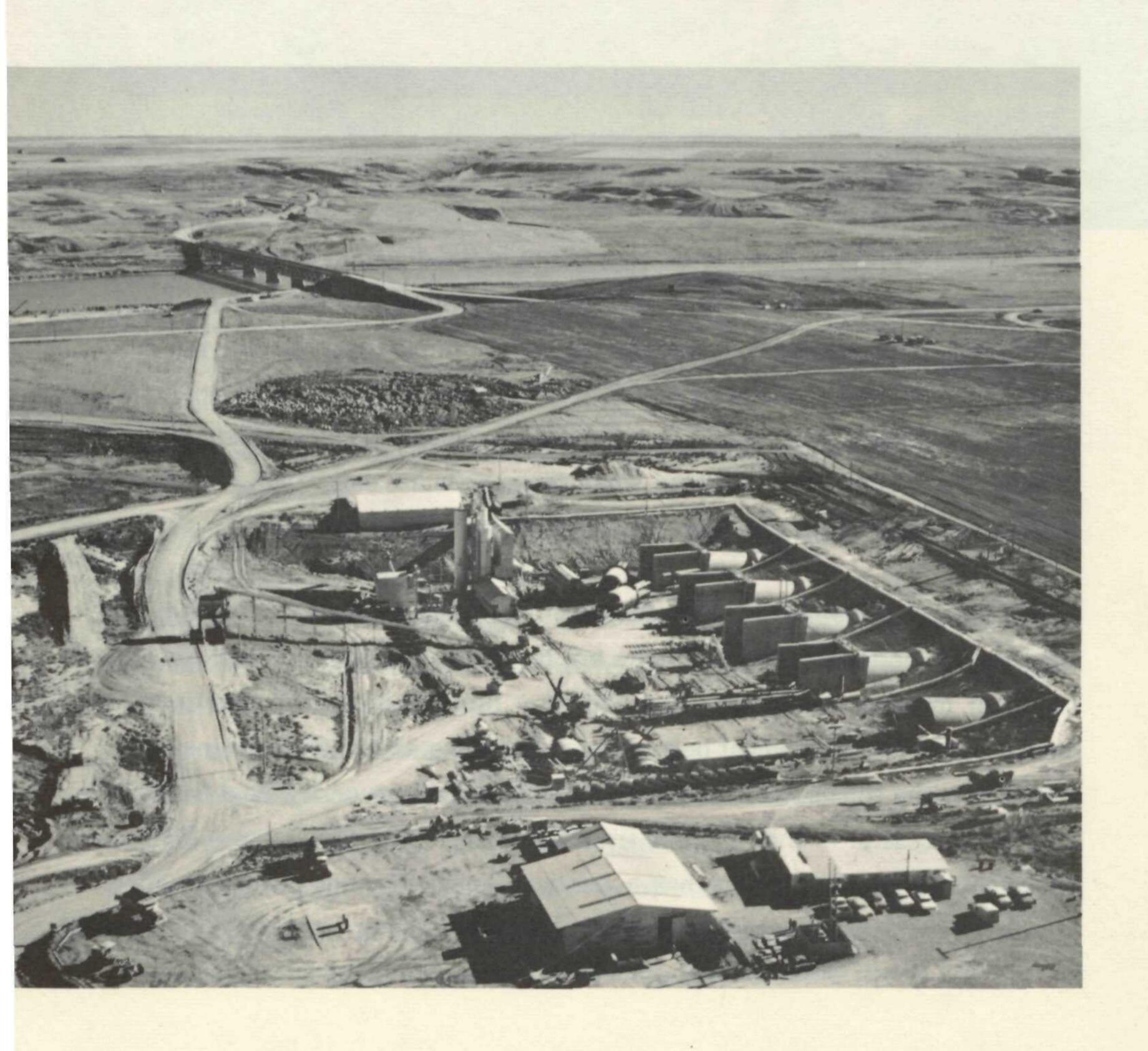
- To appreciate the individual and corporate responsibilities when wheat farming is undertaken on the short-grass prairie.
- To develop an awareness of present conservation and irrigation projects, as well as those which soon will come into operation.
- To understand the effect of these present and future schemes on the character of farming in the dry belt.

Background Basic to all agriculture is the question of soil conservation. Wise use of soil resources is essential to all prairie farming, and nowhere is this fact more true than in the dry belt where disturbance of the vital soil cover can lead very quickly to destructive erosion. Here on the short-grass prairie, the brown soils, which appear light in colour, include sandy loams. Organic substances are exhausted when these soils are cultivated, permitting drifting and the subsequent loss of the lighter materials.

If this land is to be given to wheat, and if the tragic drought and dust-bowl conditions experienced by the Greers are to be avoided, certain steps should be taken in order to preserve the soil. Dry farming procedures are fundamental. As in the main wheat belt, summer fallowing and trash cover methods are basic to the conservation of precious moisture. Moreover, if wheat farming is to be successful in the dry belt, irrigation must be more extensive. While Saskatchewan at the moment has a relatively small amount of land "under the ditch", considerable headway has been made farther west. Fortunately, in 1958 the South Saskatchewan River Project was launched by the signing

of an agreement between provincial and federal governments. It is expected that about 500,000 acres of land, most of it lying between Swift Current and Saskatoon, will be irrigated when the scheme is fully developed. Indications are that 50,000 farms will be affected and that 1,500 new farms will be established. In line with practices in prairie areas where irrigation projects are already in operation, greater crop variety will be possible and the resultant diversification will do much to eliminate the dangers of the single staple crop. Ancillary benefits will include the availablity of considerable quantities of hydro-electric power and the splendid recreational resource of a 135-mile-long lake created by the damming of the South Saskatchewan River.

By careful planning and wise use of available natural resources, it seems unlikely that prairie farmers will ever again need to face the soul-destroying experiences of the drought-stricken Thirties.



Suggested Activities and Topics

- What is meant by "land mining"?
- Compare "dust bowl" problems in Canada and the United States.
- Outline summer fallowing procedures and explain their importance.
- What is meant by "trash cover"?
- Investigate conservation measures practised in similar dry-farming areas in other parts of the world.
- Report on the effects of the St. Mary's River Dam southwest of Lethbridge, Alberta.
- Describe the various methods being used to convey the stored water to the crops. Illustrate these methods by suitable sketches.
- What effect does irrigation have on the size of farms? Why?
- Locate all available information material on the South Saskatchewan River Project and indicate how this project will benefit the economy of Saskatchewan.
- Prepare a map of the prairies and on it indicate the main irrigated areas.

DRYLANDERS

starring

FRANCES HYLAND • JAMES DOUGLAS

MARY SAVAGE and DON FRANCKS

Produced by Peter Jones Directed by Donald Haldane
Screen play by M. Charles Cohen
Original music by Eldon Rathburn
A NATIONAL FILM BOARD production
distributed by COLUMBIA PICTURES

SUGGESTED READING

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