

Potash

Potash is an essential fertilizer, and Saskatchewan has over forty per cent of the world's recoverable supply. It has ten producing mines, and the Potash Corporation of Saskatchewan, a crown corporation, owns three and has an interest in two others. It is estimated that the province could supply the world market for well over 1,000 years.

In 1979 it shipped \$695 million worth, mostly to Illinois, Iowa and Indiana. It also sells to Japan, Brazil, India and South Korea, and the world market is expanding rapidly.

The mines are all highly mechanized, and because of the regularity and thickness of the ore production, costs are lower than the industry average.

Coal and Electrical Energy

The government of Saskatchewan generates about seventy per cent of the province's electrical energy by burning low-grade brown lignite coal. Lignite is low in sulphur and relatively non-polluting.

The Interprovincial Pipe and Steel Company Ltd., which is owned in part by the governments of Saskatchewan and Alberta, is considering using lignite in the direct ore reduction process in making steel.

The province has about 7,620 million tons of lignite, a supply for roughly 1,000 years at today's rate of consumption.

Forests

The province has 58,000 square miles of commercial forest containing 17,000 million cubic feet of saleable lumber. The Prince Albert Pulp Co., Ltd., in which the government has an interest, is engaged in a \$40 million modernization program. The gross value of timber production in 1979 was \$200 million.

How Saskatchewan Got Its Oil, Its Potash and Its Deep Fertile Soil

(The first 600,000,000 years were the hardest.)

Saskatchewan began as a bowl of Precambrian rock, 6,000 feet below its present surface. There was no soil. North America sank slowly and the sea flowed north from the Gulf of Mexico up the Mississippi trench, filling the bowl with warm, salt, shallow water. In time the weathering of the rock produced sediment that sank to the bottom of the sea, burying endless generations of tiny sea creatures. As the eons passed, the sea retreated and returned, retreated and returned.

Billions of fish evolved and died, and their bones were buried. Along the muddy shore the first land plants evolved from seaweed took root. The sea evaporated slowly, leaving thick new layers of potassium chloride mixed with sodium chloride, the future potash. The greatest forests of



all time grew in the marsh. There were dragonflies with thirty-inch wingspans and eight hundred species of cockroach, some four inches long. Trees with great pulpy trunks rose sixty feet or more, toppled into the brackish marsh and slowly decomposed into layers of peat. The peat was compressed by the weight of more rotting vegetation into lignite coal. Dinosaurs evolved and were followed by birds.

Some 70,000,000 years ago North America changed drastically. The earth's crust heaved and folded, forming the Rocky Mountains and blocking the flow of warm air inland. The Rockies channeled cold winds down from the north. The sea withdrew and Saskatchewan's climate changed from tropical to temperate. The flying reptiles, the dinosaurs and the giant forests of ferns and sequoias disappeared. Dust storms blew for centuries, piling up crumbled rock, sand and clay hundreds of feet deep. Flowering plants and hardwood trees flourished. The mammals arrived.

For almost a million years a succession of glaciers came and went. The last, thousands of feet high, covered the Canadian Shield and the prairies some 15,000 years ago. When it retreated it left Lake Agassiz behind, covering the eastern prairie. As the lake drained off into Hudson Bay, Saskatchewan became a semi-arid prairie with hills in the middle and lakes in the north, much as it is today. After many a spring the first human beings arrived, some 8,000 years ago.

The Nature of the Prairie

Below is an excerpt from *The Colour of Canada*, by Hugh MacLennan.

"Often when you drive along a prairie road, running straight to the horizon, you have the illusion that something is the matter with your car—that it has become stationary. When you fly across it after dark it seems dotted with fireflies—lights from barns and windows of farmhouses with occasionally a blaze of light that is a city or town. This is a land that can best be described in music, but the music to describe it has yet to be written."