



GOVERNMENT OF THE PROVINCE OF SASKATCHEWAN
DEPARTMENT OF AGRICULTURE

FIELD HUSBANDRY CIRCULAR No. 8
THE TILLAGE OF PRAIRIE SOD

By JOHN BRACKEN, *Professor of Field Husbandry*
College of Agriculture, University of Saskatchewan

FUNCTION OF TILLING PRAIRIE SOD.

The function of tilling prairie sod in semi-arid climates is three-fold:

- (1) To kill the native vegetation,
- (2) To store moisture in the soil and conserve it there,
- (3) To prepare a suitable seed bed or "home" for the plant.

KILLING THE NATIVE PRAIRIE PLANTS.

The native vegetation consists of fibrous rooted grasses, creeping rooted grasses and various native shrubs such as rose bushes and wolf willow. To kill these ploughing is necessary.

Ploughing in the dry season is more effective in killing the native plants than at any other time. The following figures give the average monthly precipitation for many points in Saskatchewan for the ten years 1899-1908:

January	.70	May	2.10	September	1.65
February	.66	June	3.49	October	.69
March	1.03	July	2.28	November	.61
April	.72	August	2.41	December	.60
Average					16.94

Fibrous rooted grasses can be killed by once ploughing, even though it be in the rainy season, if followed by reasonable surface cultivation. They are, of course, more likely to be completely killed out if ploughed in a dry time.

Creeping rooted grasses, when ploughed early in the rainy season, are only partly killed. If ploughed in the dry time following our rainy season, more of them will be destroyed.

Native perennial shrubs are either fibrous or creeping rooted and each type may be controlled in much the same manner as the grasses of similar habit, with this exception, that land carrying a long or dense