

'What Mr. Mackay says is applicable in every detail to Southern Alberta. If every homesteader settling here could have the importance of the advice given so impressed on him that he would follow it implicitly, the annual production of grain in this part of the province would be increased by many thousands of bushels. I cannot see that there are any conditions peculiar to this part of the Province of Alberta that demand treatment other than such as Mr. Mackay has outlined for Saskatchewan, with the possible exception of the following details:—

Prairie sod in Southern Alberta should be broken shallow and backset later on in the same season as recommended, but, if for any reason the land is to be broken deep, care must be exercised to see that the furrow slice or sod is not so thick as to prevent it being turned completely over and lying flat. For, if it is allowed to lap on the previous furrow, an air space will be left under part of each furrow slice, with the result that it will dry out rapidly and the process of rotting will be stopped. It is a help to roll or flatten down all breaking as fast as it is done.

In the district of the Chinook winds special emphasis should be laid on the importance of harrowing land as fast as it is ploughed, in fact, of the advisability of attaching a section of the harrow to the plough. Special attention should also be called to the mistake so often made of ploughing in the fall when the soil is in a lumpy, dry condition. In regard to the depth of seeding, it is well for a farmer to force the seed down till it is in contact with the moisture, even if it is over two inches below the surface.'

#### NORTHERN ALBERTA.

Mr. G. H. Hutton, Superintendent of the Experimental Station at Lacombe, Alta., gives some valuable points as to the breaking and later treatment of brush land.

'Generally speaking, the Experimental Station at Lacombe covers conditions in all territory north of Township 24 west of the 5th Meridian, and all territory north of Township 30. In those districts in Central Alberta which are strictly prairie country, the general recommendations outlined elsewhere in this bulletin will apply. In those districts which are not strictly prairie, but which are commonly designated as brush country, i.e. country in which there is a fair proportion of prairie and also patches of willow brush or timber, slightly different recommendations may be made.

*'Brush Country Methods.*—In brush country, deep breaking is the only practical method. By breaking to a depth of five or six inches, the breaking plough gets under the roots and it is not so easily thrown from the ground. When plenty of power is used, as a five or six-horse team, or a heavy four-ox team, a furrow eighteen to twenty inches wide and five or six inches deep may be turned. Such an outfit, where the coulter is kept in condition, will pass through remarkably heavy brush, cutting the roots clean and turning the furrow over flat. The ploughs most favoured by the writer for breaking brush land are the 'Van Slyke' and the 'John Deere Wisconsin Grubber.' With good power, one man can break and prepare for crop one hundred acres of heavy brush land in one season. After being broken, the land should be packed or, if a packer is not available, it should be given a discing. The packing or discing firms the freshly-turned furrow and hastens the rotting of the sod. A second crop without backsetting is advised where land has been heavily covered with brush and the job of breaking has been well done. Thorough discing will prepare such land for a second crop.

'Summer-fallow is not advised for the brush country, the objection being that the first crop after summer-fallow grows too rank, almost invariably lodging and fails to fill as well or ripen as early as a crop on land not summer-fallowed. Stubble