

**EARLY SPRING CULTIVATION.**—The land should be drag harrowed in the spring to conserve the moisture and germinate the Wild Oats and other weed seeds.

**PLOWING.**—The second plowing must be done sometime during the month of June. The earlier it can be done, the better the results will be. The depth of plowing should be about four to six inches. The plowing is done shallow to allow the duck feet of the cultivator to run on the bottom of the furrow. This is necessary because the cultivator feet will not clean in the loose, sticky soil.

**HARROWING.**—The soil should be harrowed with a drag harrow immediately after the plow and harrowed again crosswise about one week later. This compacts the soil and forms a mulch, and thus prevents evaporation. This operation will, therefore, conserve the moisture and start the weed seeds to germinate.

**CULTIVATING.**—From then until freeze-up the duck-foot cultivator should be used every week or ten days to prevent the weeds appearing above the ground. This will starve out the roots of the perennials. If this method is promptly and thoroughly followed, it will eradicate all kinds of thistles, and at the same time assure profitable yields of grain.

## South-Western District

The South-western District shall include all land west of the Eastern District and south of the Main Line of the G.T.P.

### SOIL AND CLIMATIC CONDITIONS.

The soil in this district is variable, it may generally be classed as sandy loams and clay loams. The rainfall is so light that a summer-fallow every third or fourth year is necessary to produce profitable crops. The fall frosts do not usually come early enough to damage the grain crops. The weeds that are causing the greatest loss in this district are Wild Oats and Russian Thistles. Some Perennial Sow Thistles and Canada Thistles are found, but usually only in small patches.

### METHOD RECOMMENDED FOR SOUTH-WESTERN DISTRICT

Where the perennial weeds are found, the small patches should be treated by a method similar to that outlined for the Eastern District, excepting that the land could be plowed deeper and packed, which would allow the cultivator to work almost equally as well as on the shallow plowing. Where the weeds consist only of annuals, a less expensive method, as outlined below, may be practiced:—

**FALL CULTIVATION.**—The land should be double disked or skim plowed about two to three inches deep. This will cover the weed seeds that are on the surface and cause them to germinate either in the fall or following spring. It also forms a mulch on the surface and reduces evaporation before the regular cultivation begins.

**SPRING CULTIVATION.**—The land should be harrowed in the spring to stir up the seeds that did not germinate in the fall and remove the mulch on the surface.