

will continue appearing for several years as fresh seeds are brought up to the surface by cultivation. Wild Mustard and Wild Oats have been known to germinate after lying deep in the ground for twenty years.

*Biennials* must be either ploughed up or cut down before they flower. Mowing at short intervals will kill them; but a single mowing will only induce them to send out later branches, which, if not cut, will mature many seeds. Where ploughing is impracticable, this class of plants should be cut off below the crown of the root. For this purpose a spud or a large chisel in the end of a long handle (to obviate the necessity of stooping) is as convenient a tool as can be used.

*Perennials* are by far the most troublesome of all weeds and require very thorough treatment, in some instances, the cultivation of special crops, to ensure their eradication. Imperfect treatment, such as a single ploughing, frequently does more harm than good, by breaking up the underground stems and stimulating growth.

*There is no weed known which cannot be eradicated by constant attention, if only the nature of its growth be understood.* Farmers should be constantly on the alert to prevent new weeds from becoming established on their farms. There are some general rules which all should remember:—

1. Weeds do great harm by robbing the soil of the plant food intended for the crop and also of its moisture.

2. Weeds crowd out and take the place of more useful plants, being hardier and, as a rule, more prolific.

3. Weeds are a source of great loss to farmers as they require much labor and time to eradicate, and frequently compel them to change the best rotation of their crops, or even perhaps to grow crops which are not the most advantageous.

4. All weeds bearing mature seeds should be burnt, and under no circumstances should they be ploughed under.

5. *Weeds of all kinds can be eradicated by constant attention and by adopting methods in accordance with their nature and habits of growth.* Therefore,

- (a.)—Never allow them to seed;

- (b.)—Cultivate frequently, particularly early in the season, so as to destroy seedlings while of weak growth;

- (c.)—For shallow-rooted perennials, either trench the land deeply or plough so lightly that the roots are exposed to the sun and dry up; for deep-rooted perennials, the only means of destroying them is to prevent them from forming leaves and thus storing up nourishment in their root-stocks, to sustain future growth. This can be done by constant cultivation.

All weeds can be destroyed by the use of the ordinary implements of the farm, the plough, the cultivator, the spud and the hoe; but some experience is necessary to know what is the best time to work certain soils or to deal with special weeds. No general rules can be given, as the necessary treatment will vary in different districts on different soils and under different climatic conditions. What may be the proper treatment in one place may fail in another. Perennial plants, if allowed to develop flower stems and then ploughed down (or first mowed and then ploughed under), will by the production of the flower stems, have so far reduced the nourishment stored up in the rootstocks that they are much weakened and can afterwards be easily dealt with. On the other hand, it is found in the West, that all the weeds and other plants decay readily if prairie land or meadows be broken in May or early June. Land so