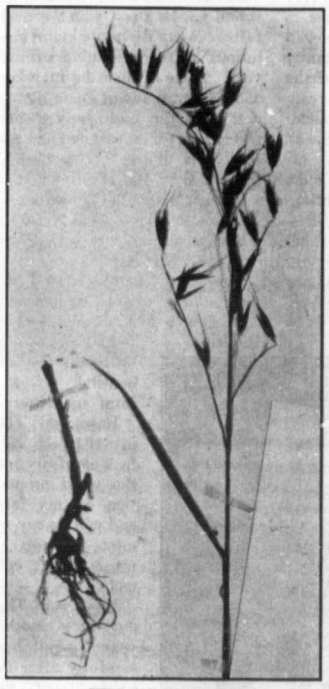
FARM WEEDS

The annual losses due to the occurrence of pernicious weeds upon farm lands, although acknowledged in a general way, are far greater than is realized. These losses can be appreciably lessened, however, by treatment based upon an accurate knowledge of the nature of each weed.



WILD OAT—(Avena Fatua.)
Annual. The stems are smooth and erect, while the head forms a loose panicle with nodding and spreading branchlets. Wild Oats have a thick hairy chaff and long bent awn, covered with brown hairs, which distinguish them from the cultivated oat.
Time of seeding, July and August. An average plant produces 800 seeds.

Most farmers give little critical attention to the weeds growing among their crops. Some think that, because many of these plants are unfamiliar, the exact recognition of all of them is impossible. This, however, is not the case, and, as the different kinds vary greatly in their power of robbing the farmer, it is certainly advisable that more attention should be given to weed pests. Although several hundred kinds of plants grow wild in almost every locality, and many of these may appear among cultivated crops, comparatively few give serious trouble—not more than there are different kinds of crops grown—and every cultivator of the soil knows the difference between wheat, barley, oats, rye, peas, turnips, beets, etc. It is no more difficult to learn the names, nature and appearance of Stink-weed, Hare's-ear, Mustard, False Flax, Canada Thistle, Field Sow Thistle, Sweet Grass, Quack, etc., than to recognize the familiar cultivated plants.

In the official bulletins which have been widely distributed during recent years the weeds have been named uniformly, though many of them have other local names. It is therefore clearly important that those for whose benefit the bulletins have been prepared should know the plants by the names officially recognized, so that they may be able to make the fullest use of the information.

The prevalence of some species in certain parts of the Dominion must be viewed with gravest alarm, for thtey have taken such possession of the land as to seriously affect profitable farming. Such aggressive enemies are: Wild Mustard, Quack Grass and Canada Thistle in parts of almost every province; Ox-eye Daisy in the Maritime Provinces; Field Sow Thistle in the Maritime Provinces, Quebec, Ontario, and the Red River Valley in Manitoba; and Stinkweed or Penny Cress, Ball Mustard and Hare's-ear Mustard in all the Prairie Provinces.

The increase of weeds is frequently due to the fact that through ignorance of their noxious nature and power to spread, farmers have neglected them.

Many of our farmers have only a limited knowledge of weeds and in many cases do not recognize those that are dangerous on their first appearance. Hence we have 'One year's seeding, seven years' weeding.' There are some weeds so noxious that if farmers knew their real character and recognized the plants on their first appearance, they would postpone all other business until they were destroyed . . . Self-interest should be a sufficient incentive to farmers to destroy weeds if it is clearly shown that it will pay them to do so,"—H. Mackellar.

What Is A Weed?

There are many definitions of the word, but perhaps from a farmer's standpoint the best one is, "Any injurious, troublesome or unsightly plant that is at the same time useless or comparatively so." As a general statement, it may be said that our most troublesome weeds have been introduced into Canada from other countries; but it is also true that, under special circumstances, some of our wild native plants may increase and become noxious weeds."

CANADA THISTLE (Cnicus arvensis).
Perennial. Very hardy weed, with running root stalks, which bear a large number of shoots. Common in fields, grain and pastures. Seeds July to September. An average plant produces 3,500 seeds.

Losses Due To Weeds.

It is impossible to determine accurately the losses to the individual farmer, or to an agricultural district or country as a whole, from weeds growing upon cultivated land. In various ways they lower the yield, depreciate the quality and value of the crops, and add to the cost of production.

1. Weeds rob the soil of plant food and of moisture, thus increasing the effects of drought by taking up water from the soil and wasting it by evaporation.

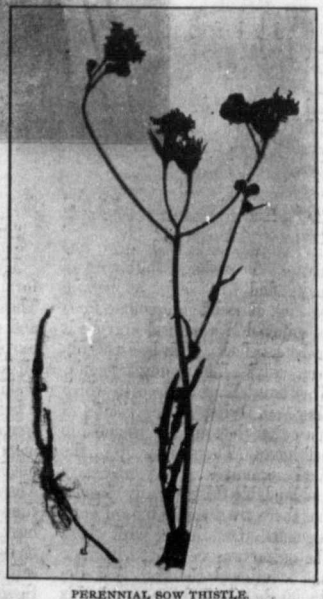
2. Weeds crowd out more useful plants, being hardier and, as a rule, more prolific.

3. Weeds are a source of expense. From the time farmers begin to prepare their land for a crop, these enemies increase the cost of every operation—of plowing, harrowing, seeding, cultivating, cutting, binding, carrying and threshing as well as in cleaning, freighting and marketing the produce. Direct losses are the larger consumption of binder twine necessary when weedy crops are harvested, the extra wear and tear on machinery due to coarse-growing weeds, and the depreciation in the market value of the crops because of the presence of weeds in hay or of weed seeds in grain.

4. The eradication of the worst weeds is costly in labor, time and machinery, and frequently prevents a farmer from following the best crop rotation, or even compels him to grow crops which are less advantageous.

5. Many weeds are conspicuous and all are unsightly on farm lands. They thus, in a varying degree, according to their several natures, depreciate the value of land.

6. Some weeds are harmful to stock, being poisonous, as Water Hemlock; others are injurious to their products, as burs in wool, or Wild Garlic and Stinkweed,



PERENNIAL SOW THISTLE.
(Sonchus arvensis.)
Perennial, with vigorous underground root stalks, and of milky-white juice. Seeds June to August. An average plant produces 2000 seeds.