Do You Know?

Hawaii held its *sugar* output at near normal levels during the war.

A railroad car *axle unit,* including the two attached wheels, weighs over a ton.

Dried herbs hold their flavor better if freed of stems and stored in air-tight containers.

A *jet engine* that burns wood, apparently compressed sawdust, is described in a captured German document, it is reported.

One species of *rattlesnake* in the jungles of the American tropics is apparently losing its rattle, as this structure is reduced in size and is frequently not sounded.

Pure manganese, produced electrolytically from low-grade domestic ores, has advantages as a substitute for low-carbon ferromanganese in making stainless steel, the U. S. Bureau of Mines says.

Food storage technicians from several countries of the Western Hemisphere are conducting experiments in Venezuela to fit methods developed in the United States for use in the warmer countries.

Perlite, a glassy volcanic rock common in the Southwest, expands up to ten times its volume when heated in a rotary kiln at 2,000 degrees Fahrenheit, forming a cheap, fire-resistant insulation material.

With increased American acreage in *soybeans,* the discovery of a brand-new soybean disease in Illinois is important; it is called brown stem rot because the interior of the lowest part of the stem is usually colored brown.

BOTANY

NATURE RAMBLINGS by Frank Thone

Taking Cover

➤ SOME OF our commonest weeds learned long ago the first hard lesson that has to be taught to every recruit during his basic training.

After the rookie has learned the difference between his right foot and his left, and had it hammered into him that he *must* keep the muzzle of his rifle out of the dirt, he may be given his first run over a simulated-combat course. The first thing he learns there is that at the first rattle of fire from the other side he must take cover—flatten himself down like a horned toad, until he can hide behind a clump of grass no higher than a hat. If he learns well to keep the head down (not to mention other parts of his anatomy) he will stand a good chance of survival if he ever has to face the hazards of battle; otherwise, woe betide him!

A great group of plants, vastly diverse in botanical kinships, have learned the lesson of taking cover in the face of the deadly fusillades of snow and sleet and cold, drying wind that winter aims at any living thing that lingers out-of-doors when the really severe storms begin. These are the so-called rosette plants—dandelion, mullein, wild lettuce, thistle, harebell, ladies'-tobacco, saxifrage, hawkweed, and dozens of others—recognized as belonging to the same ecologic company by the way they flatten their symmetrical circles of leaves against the soil. They can make a breastworks of the lowest stubble, hide under a few dead leaves. They make an ally of the snow itself: as soon as it is a half-inch deep they are well protected against further assaults of cold and winter drought.

The great majority of rosette plants are classified as biennials or short-lived perennials. They get their start from seed during late spring or summer and by the end of the growing season they have their whorl of leaves well formed, close pressed against the ground, ready for what winter may bring. When spring comes and the snow melts off, they do not have to bother about unfolding leaves from buds or striking roots from seeds. There they are, leaves all ready for business, full of chlorophyll and displayed at maximum spread to catch the first warm rays of the sun.

Most rosette plants, when they are ready to convert the reserve stocks of food in their thick taproots into the structures and energy needed for seed formation, send up tall leafy stalks. Mullein, thistle, wild lettuce, hawkweed, all do this. Dandelion is more conservative; it utilizes a minimum of material in sending up its naked flowerscapes and keeps all its foliage well marshalled in a persistent rosette. And (to the woe of the greens committee and the lawn owner) it lives to fight another day.

Science News Letter, January 19, 1946

If *leaf rust* destroys all wheat leaves at blossoming time the crop loss is approximately 34%, it is estimated.

Wood flour is finely ground sawdust; in addition to other uses it is employed as an absorbent in the manufacture of dynamite, permitting the explosive to be transported and handled with a minimum of danger.