OUR FARM PAGE: *ITEMS OF INTEREST TO EVERY FARMER*

WAY TO SUPPLY BEES FOOD NEXT WINTER

One of the most important problems of the Canadian beekeeper is that of providing his bees with an adequate supply of wholesome food for the winter. It is true that many beekeepers in favoured districts have solved this problem by simply killing their bees in the fall and replacing them with package bees the following spring. This policy, however, is not suitable for the greater part of Canada because of the small crops of honey produced by package bees, as compared with overwintered colonies.

Sugar syrup has always been considered a safe food for wintering bees and large quantities of it are used. During the past few years, however, more and more honey has been substituted for sugar because of the narrow price range between the two commodities, says C. B. Gooderham, Dominion Apiarist. The present upward trend of honey prices may tempt many beekeepers to market their honey and return to sugar feeding, provided, of course, the price of sugar does not keep abreast with that of honey.

During times of peace the beekeeper has little or no difficulty in securing all the sugar he requires, but in times of war sugar is apparently one of the first commodities to be affected. Shortly after the outbreak of war in September 1939 it was found necessary to place certain restrictions upon the sale of sugar and beekeepers were unable to secure sufficient for their needs, except by special permit from the Wartimes Prices and Trade Board. Sugar rationing is in effect in the United Kingdom, therefore, it is logical to assume that definite restrictions will remain in force in Canada. Although no actual shortage of sugar is anticipated at the moment, such a possibility should not be overlooked, and the beekeeper would be well advised to adopt precautionary measures by saving from his main crop one deep super of well-filled combs for every colony he intends to put away for next winter. Should it later develop that sufficient supplies of sugar are available and the price differential between sugar and honey justifies it, this honey can later be extracted and sold.

It is realized of course that the feeding of honey is dangerous in an apiary where disease is present, but the danger is minimized if care is taken to save a super from every colony and then to give it back to the colony that produced it, or better still not to remove it from the colony at all.

In considering the foregoing advice the marketing situation should be kept in mind. In the fall of 1939 the export market was suddenly cut off and beekeepers became anxious over the possibility of the home market absorbing the crop. Fortunately, the export restrictions were later removed and with the removal came an improvement in the honey trade. Unfortunately, however, there is no assurance that the export market will not again be temporarily closed. As a matter of fact, the Prime Minister of Great Britain issued a warning some time ago that the purchase and importation of goods that could be done without might be stopped. As the United Kingdom is practically the only export market for Canadian honey, any restrictions will have a serious effect on the Canadian producer. At the commencement of the war, honey was classified as a luxury food; hence the restrictions that were placed upon it. It is quite possible that honey may again be classed as such. This, of course, is only speculation, but, should it occur and the crop of 1940 equal that of 1938, the home market would become flooded. Under these circumstances, where could a better place be found for the surplus than leaving it with the bees as their food supply next winter.

How to Take Soil Samples

The amount of soil used by an analyst when using the rapid soil testing method is about one teaspoonful representing about one two hundred millionth of an acre. If the purpose of the soil testing is to reveal average conditions existing in a field or plot, the sample should be a composite one, that is, a mixture of soil taken systematically from ten or more points over the field. If the test is used to account for an abnormal condition, the sampling should be confined to this area, and another sample collected from the normal area. Likewise if the texture of the soil in the field varies markedly, a composite sample representing each soil type should be obtained.

To take a composite sample, the area should be treated in a systematic manner. Conditions such as knolls, hollows, poor drainage, places where wood had been burned or where straw or manure had been piled should be avoided or a separate sample taken from these areas. A clean spade or shovel, a large knife, a clean bucket or piece of cloth or heavy paper about four feet square and the required number of absolutely clean containers holding about a pint are required. At the chosen points, the debris on top of the soil should be removed and a small trench dug about eight inches deep and about a foot long. A vertical slice of soil about one inch thick and to the depth of cultivation is then removed. The spade with the slice is laid on the ground and trimmed with the knife until there remains a narrow piece of soil two inches wide and one inch thick. This sample of soil is placed in the pail or other container and the sampling over the field (usually at between ten or fifteen chosen points) repeated. The samples taken are thoroughly mixed, and from this composite sample one of the containers is filled. The containers then should be carefully numbered to indicate the area from which the soil was taken.

Samples may be more easily collected in the open season and when the soil is fairly moist.

In order that soil diagnosis and the subsequent recommendations may be as complete as possible, information covering previous fertilizer applications, liming, crops grown, and any difficulties encountered, as well as the crop to be grown, should be submitted or should accompany the samples. Only when this information is available can reasonable recommendations be given by the analyst from an interpretation of the soil tests conducted.

Sloth makes all things difficult, but industry all things sweet.

Summer Feeding Tips For Milking Herd

Ontario Feed Board Tells How Milk Production can be Kept at Fairly High Level.

The feeding and management of the milking herd during the summer is just as important as during the winter, points out the Ontario Feed Board of the Ont. Dept. of Agriculture. Supplies and kinds of feed are fairly constant during the winter but pasturage during the summer varies from immature grass to ripened hay.

No hard and fast rules can be given for summer feeding but by directing attention to certain details milk production can be kept at a fairly high level throughout the season.

1. Rotational grazing of pastures on well fertilized land lengthens the pasture season and ensures a greater quantity of young growing grass throughout the season.

2. Use of silage, emergency pasture crops, aftermath or green crops to supplement the regular pasture, particularly during the latter part of the summer.

3. Feeding meal mixtures according to yield of milk and kind of pasture. Young growing grass provides sufficient protein and a meal mixture made up of home grown grains will be satisfactory. When the grass matures the protein content of the meal mixture should be increased to approximately 16 per cent. Cows on good pasture should produce from 20 to 30 lbs. of milk per day without meal. Feed approximately one pound of meal for each three pounds of milk produced above this amount.

4. Provide water, salt, mineral mixture, shade and protection against flies.

BRITAIN TO BUY CANADIAN CHEESE

Under an agreement just concluded, the British Ministry of Food will buy 35,000 long tons (2,240 lb. to the ton) or 78,400,000 lb. of Canadian cheese manufactured up to November 30, 1940, announced Hon. James G. Gardiner, Minister of Agriculture, today. The price to be paid is on the basis of 14 cents per pound for first grade cheese f.o.b. ocean steamer or rail at Montreal. The cheese is to be white and unwaxed. It will be bought on grading certificates of the Dominion Department of Agriculture, which shall be accepted as evidence of quality.

The arrangements in connection with the purchase of the cheese and its export for the British Ministry of Food will be looked after by a Dairy Products Board, which has been appointed by Order in Council. The members of the Board are:—

Joseph F. Desmarais, Montreal; John Freeman, Montreal, and John F. Singleton, Ottawa, Associate Director, Marketing Service, Dairy Products, Dominion Department of Agriculture, who will act as chairman. The Board will consult with an Advisory Committee, the members of which will be representative of the dairy industry.

FLOWERING ANNUALS

Plants usually classified as flowering annuals are those of which the seed is sown and the plants, flowers, and seeds are produced with the eventual death of the plant after one continuous period of growth, states J. M. Scatterty, Dominion Experimental Station, Harrow. This description, of course, applies only to plants grown outdoors, as many greenhouse plants are grown continuously for extended periods before producing flowers. For the purpose of discussion, annual flowers may be divided into two groups—hardy and half-hardy.

Hardy annuals, which include hundreds of most satisfactory varieties from all corners of the world, should be sown as early in spring as the soil can be worked properly.

Most annuals are very easily handled, and any moderately rich garden soil should be entirely satisfactory. A soil too well supplied with manure is liable to produce rich vegetable growth at the expense of bloom, and it would be well to apply manure in small quantities annually and preferably in the fall. Even though the soil was dug the previous fall, it is necessary to loosen the seed-bed to a depth of three or four inches just previous to sowing the seeds. The surface should be raked evenly and smoothly so that no depressions are left for water to settle in or high spots which would dry out quickly. Seeds should be sown thinly and covered according to size. Fine seeds require only raking in and light tamping while larger seeds will need a covering of soil equal to their diameter. Some hardy annuals are transplanted with difficulty; therefore, these are sown directly in their flowering quarters. The most notable of this type are all the annual poppies, baby's breath, lupines, lover-in-a-mist, and godetia.

China asters, zinnias, sweet alyssum, portulaca, flowering tobacco, and numerous other sorts may be sown in one location and, if desired, can be transplanted later to cover spaces left vacant by early flowering perennials or to wherever the the need arises.

Half-hardy annuals such as snapdragon, lobelia, petunia, salvia, and verbena are usually started indoors in March and transplanted to their flowering quarters late in May. Although lacking the permanence of hardy perennials, annual flowers are invaluable for many purposes, particularly for cut flowers.

The Weed of the Week

YELLOW ROCKET

A weed may be observed in flower at this particular time of the year which resembles Wild Mustard and is often mistaken for it, says John D. MacLeod, Crops, Seeds and Weeds Branch, Ont. Dept. of Agriculture, Toronto. This is Yellow Rocket, a perennial weed which appears in new parts of the Province each year and which is apparently on the increase. It is usually found in low, damp parts of the fields.

Upon close examination Yellow Rocket will be found to resemble Mustard only in the colour of the flower. It may be easily distinguished from this weed by its dark green, smooth and shiny leaves, somewhat oval in outline. It is usually in flower from May to July, and matures seed during July and August.

Hand pulling of scattered plants, drainage and thorough cultivation in preparation for a spring crop will keep it under control.

The seed of Yellow Rocket is a common impurity in clover and alfalfa seed and has been listed as a secondary noxious seed in the Canada Seeds Act. This weed should not be permitted to mature seed, particularly in the clover seed producing areas.

Learn to distinguish Yellow Rocket and eradicate it before it becomes established, advises Mr. MacLeod.

Seeding Operations Nearing Completion
States Dominion Crop Report

RAINS IN ONTARIO HAVE HELD UP OPERATIONS CONSIDERABLY

The following crop report for the Dominion of Canada has just been released by the Bank of Montreal:—

General

Seeding operations are nearing completion in the Prairie Provinces. Early-sown wheat is well above the ground and is of even growth. Moderate to heavy rains have been beneficial in some areas but in the Central, East-Central and Northern districts of Saskatchewan and in Northwestern Manitoba, where moisture reserves are low, early and generous rains are needed to accelerate germination of late-sown grains and permit normal development of the crop. In Alberta moisture conditions are satisfactory for the present. Pastures are in good condition in areas where moisture supplies are plentiful. In all other provinces except British Columbia the season continues late, with much Spring work on the land still to be done. In Quebec seeding on high lands is under way, and should shortly be general. In Ontario seeding has not yet been completed, but Fall wheat and fodder crops are making good growth. In the Maritime Provinces potato planting is proceeding in many districts, but generally seeding awaits warmer weather. In British Columbia, where favourable weather has prevailed this Spring, good progress has been made to date by field, orchard and berry crops.

Prairie Provinces

Alberta—Wheat seeding is practically completed and the sowing of coarse grains is well advanced. Late seeding is being overcome by good growing weather and early sown wheat is well above the ground. Moisture conditions at present are satisfactory throughout the Province, but hot, drying winds in the Northeastern section have depleted reserves and rain will be required soon. No pest damage is reported. Pasturage and sugar beets are satisfactory. **Saskatchewan**—Seeding operations are nearing completion. In most districts early-sown grain is showing good, even growth. Present moisture conditions are satisfactory in the Southern and West-Central sections, but in other districts, particularly in the Northeastern area, early heavy rains are required to assist germination of late-sown grains. Grasshoppers are hatching in large numbers in the Southwestern district, but measures are being taken to combat them. **Manitoba**—Seeding of wheat and coarse grains is virtually finished. Germination has been satisfactory and early-sown wheat is showing well above the ground. Moisture conditions, except in the Northwestern district, are adequate for the present, but good general rains will be required throughout the season to ensure a continuance of good growth.

Province of Quebec

Eastern Townships and Ottawa Valley—The season is later than average and work on the land has been delayed. Seeding on high lands is under way but in many sections lowlying fields are still too wet to work. The soil is in good condition with ample moisture and, given favourable weather, growth should be rapid. Pastures are making good progress, there is little evidence of winter kill. Apple trees are coming into blossom and appear to have wintered well. **Lower St. Lawrence and Lake St. John District**—Unfavourable weather conditions have delayed farm work and the season generally is two weeks later than average. With higher temperatures now prevailing, seeding should shortly be general. Pastures appear to be in good condition but warmer weather is needed. Fruit trees appear to have wintered well.

Province of Quebec

Heavy rainfalls have retarded farm operations, and seeding not yet completed, is two weeks late. Early-sown grains have germinated satisfactorily. Fall wheat, clover and alfalfa experienced little winter killing and are making satisfactory growth. Pasturage is exceptionally good. Sowing of sugar beets is nearing completion, the contracted acreage is the largest on record. Planting of corn and roots has been delayed. Fruit trees wintered well and prospects are favourable, although adverse weather conditions have retarded blossom development. Tobacco plants have made good growth under glass and transplanting will be general in a few days. The acreage planted in flue cured and burley tobacco is expected to be reduced by 33 1-3 percent and 12½ percent, respectively.

Maritime Provinces

The season generally is from ten days to two weeks later than average and work on the land has been delayed in many sections. The soil is reported to be in good condition with ample moisture. Warm weather is required for seeding and germination. Potato planting is under way in many districts and an increase in acreage of seed stock is indicated. Orchards give promise of a good bloom. First spraying has been completed in the Annapolis Valley and insect pests are reported well under control. Pastures are in good condition.

Province of British Columbia

Favourable weather has continued throughout the Province and heavy rains in the interior have been beneficial to crops. Seeding in the Fraser Valley was delayed by rains but is now approximately 90% completed. Growth generally is satisfactory with damage from late frosts negligible. Hay is expected to yield good crops, the first cutting of alfalfa has commenced in some districts. Tomatoes and potatoes are making satisfactory growth on slightly increased acreage, other vegetables are doing well. A heavy bloom and set indicates a good tree fruit crop in the interior, while in the Lower Fraser Valley a light crop is anticipated due to a poor bloom set. The berry season is one of the earliest on record. A heavy crop of strawberries is expected, ripe berries are already moving in volume. Increased tonnage in loganberries is anticipated. Pasturage is plentiful with ample water for present irrigation purposes, but the reserve is below normal.

CARROT RUST FLY METHODS OF CONTROL

Carrot Rust flies emerge from the ground in spring and lay their eggs upon or in the soil immediately surrounding the carrot seedlings. The maggots, when they hatch, kill many of the small carrots or burrow into the roots of the larger ones. Tunnels are formed in the roots, causing much damage to the plants. There are two generations of carrot rust flies every year, the first one in late May and early June, the second one appearing in late August and early September. By delaying planting until the middle of June, injury from the first generation will be avoided because by that time the flies have mostly disappeared.

When carrots are planted early for the summer market, the rust fly can be controlled by watering the seedlings twice with corrosive sublimate, used in the strength of one ounce to 10 gallons of water. The first application should be made during the first week of June, and the second a week later, pouring the solution over the plants. Care should be taken to wet the plants thoroughly, as well as two or three inches of the soil around the seedlings. The corrosive sublimate should never be mixed or used in metal vessels as the sublimate quickly eats away the container and in so doing loses much of its strength. Wooden pails or graniteware containers should be used. Corrosive sublimate is a deadly poison and therefore should be handled very carefully. Carrots should be harvested as early as possible to escape damage from the maggots of the second generation which appear in late August.

The permanent establishment of cattle in Canada dates from about 1608 when Champlain brought a few head to the colony of Quebec. Cattle were placed in Acadia in 1632, and by 1671, according to the census of that year, had increased to 886.

Broom handles and tent poles required by the Services and Government of Great Britain, according to an economy order, are being made square for the duration of the war to eliminate loss of wood in the turning operations. The smaller section of wood needed gives the same strength required.