

light are rapidly gaining strength, while heavy colonies in the spring are now in excellent condition for a big season's work...

At the demonstrations, information is given relative to the best means of examining a hive for brood, queen cells, disease, etc. Particular attention is paid to American and European foul brood which have been the means of practically destroying many colonies. Once the bee-keeper becomes familiar with these diseases he can detect them when examining the frames and prepare to prevent the disease spreading to other colonies. A demonstration also gives bee-keepers an opportunity to exchange ideas, and in this way the amateur in particular is greatly helped.

On June 6 Mr. Pettit held a demonstration in the apiary of D. Anguish & Sons, Lambeth, at which about sixty bee-keepers gathered to discuss problems pertaining to their business. By use of a colony the speaker demonstrated the way to go about opening a hive and removing the frames when examining for disease or queen cells. Those present had an opportunity to see a mature queen bee and to see the various stages of development of workers in the cells. The speaker advised those present to endeavor to do their work in the apiary as quickly as possible. By so doing the number of colonies could be increased and this would tend to increase production. Amateurs were advised to start with a few colonies and learn to manage them efficiently before going into the business too strongly. The problem of swarming has proved a bugbear to some bee-keepers, but, by paying close attention and examining the colonies regularly this can be reduced to a minimum. The idea is to look through the brood chamber and destroy queen cells, which are not needed. A close lookout must be kept for diseases, of which American foul brood is possibly the most prevalent. This disease is caused by bacteria and reaches healthy young larvae by means of infected food. As a rule the larvae die when nearly ready to seal up. Consequently most of the cells containing infected larvae are capped. The dead larvae soften and go into a shapeless mass which is white or yellow at first, but changes to coffee color and brown. It then becomes glutinous and if pricked with a toothpick the contents will string out a half-inch or more when the pick is withdrawn. Very often the bees will commence filling up these cells with honey, which soon becomes infected and is the medium of spreading disease to healthy larvae, especially if robbing goes on. Once infection enters an apiary, drastic measures must be taken to prevent spread of the disease. All infected brood, comb and honey must be taken away and healthy food given. Care must be taken to prevent robbing and to prevent a colony from scattering and carrying infection. For this reason the operation should be performed in the evening and during a good honey flow. If doubtful regarding the presence of disease in a colony it is advisable to communicate with the Provincial Apiarist at Guelph, who will render every aid possible in stamping out the disease should it exist. In a bulletin on bee diseases in Ontario, Mr. Pettit gives the following method of treatment: "When there is a good honey flow on go to the colony in the evening remove it from its stand and set in its place a clean disinfected hive containing clean frames, with small foundation starters, and, if convenient, a division-board feeder with thin sugar-syrup. The entrance of this hive must be covered with queen-excluding metal. Now, shake the bees from the comb of the old hive into the new, but if any fresh nectar flies out in shaking it will be necessary to brush instead of shake. Get these combs immediately under cover and clean up very carefully any honey that may be around so that robbers from healthy colonies cannot carry home disease. When diseased colonies are weak, the bees of two or three should be put together into the clean hive. In doing this colonies must be united with their next-door neighbor and not carried to another part of the apiary. This has made an artificial swarm in the colony and it must be given the conditions the new swarm likes or it will leave and carry its disease to parts unknown. A new swarm likes plenty of ventilation and shade, also clustering room. To satisfy this natural desire it is sometimes necessary to place an empty hive under the one containing the starters for a few days. This precaution will generally prevent the swarming out which so often happens in treating foul brood. As an extra precaution it is best to use the excluder at the entrance as well. All combs from the supers as well as from the brood chambers of the diseased colonies must be either burned or melted and boiled thoroughly before the wax is fit to use again. The honey that is removed is entirely unfit for bee feed. This method of treatment has proven successful, but it is necessary to examine the brood again in about three weeks and again the following season. If the brood is perfectly healthy on the second examination, combs containing too much drone can be replaced by frames of foundation or clean worker combs". By systematic inspection of the colonies and an educational campaign, disease is gradually being reduced. The bee demonstrations held in various parts of the Province have done much to enlighten bee-keepers regarding identification of and treatment for this scourge of the apiary.

Last year's crop of honey is entirely cleaned out and Mr. Pettit believes that with the most favorable conditions it will be impossible to supply the demand this year, and prophesies that there will be a substantial increase in price over that of the past few years. The home demand for honey is gradually increasing and the Allies are now asking for large consignments. Last season the price of honey was not raised above that of the previous year, but, owing to the high price of bee supplies, it is necessary to raise the price of honey this year.

FARM BULLETIN.

Areas and Condition of Crops.

The Census and Statistics Office issued on June 13 a preliminary estimate of the areas sown to grain crops this spring, with a report of their condition on May 31 as compiled from the returns of crop correspondents. The reports from the prairie provinces state that the spring there is very backward, and seeding is consequently late. At the end of May severe frosts cut down the growing wheat plant; but rapid recovery was anticipated. Rain was needed for the germination of the later sown crops and of wheat sown on stubble.

It is estimated from the reports of correspondents that the total area sown to wheat for 1917 is 13,450,250 acres, as compared with 14,897,000 acres, the area sown, and with 12,900,600 acres, the area harvested in 1916. Thus, the area sown this year, whilst nearly 10 per cent. less than the area sown for 1916, is about 4 per cent. more than the area harvested for 1916. In arriving at these figures revised returns of the Census of 1916 have been included for Manitoba; for Saskatchewan and Alberta similar revisions have not yet been completed. As compared with the areas sown for 1916, the returns this year indicate small increases under wheat in each of the Atlantic provinces and in British Columbia, and an increase of 25,000 acres in Quebec; but for each of the remaining provinces decreases are reported to the extent of 154,000 acres in Ontario, 254,000 acres in Manitoba, 927,000 acres in Saskatchewan and 158,000 acres in Alberta. Of the total area under wheat 809,250 acres were sown last fall and 12,641,000 acres were sown this spring. In the three prairie provinces the total area sown to wheat is estimated at 12,497,550 acres, comprising 2,476,850 acres in Manitoba, 7,605,700 acres in Saskatchewan and 2,415,000 acres in Alberta.

The average condition on May 31 in per cent. of the standard representing a full crop is for all wheat for Canada 84 per cent. as compared with 90 per cent. on May 31 last year and with 91 per cent. the average condition on the corresponding date for the seven years ended 1916. In the prairie provinces the condition of wheat is 87 per cent. of the standard in Manitoba, 80 per cent. in Saskatchewan and 92 per cent. in Alberta. Converted into a standard of 100 as representing the average condition at the end of May of the past seven years 1910-16 the condition for the whole of Canada of fall wheat is 86, of spring wheat 94, and of all wheat 93 per cent. Thus, according to its reported condition on May 31, the anticipated yield per acre of wheat this year is 7 per cent. less than the average of the seven years 1910-16.

Area and Condition of Other Crops.

The decrease in the area sown to wheat this year is partly due to the curtailment of the seeding season by the lateness of the spring, and efforts were therefore apparently directed towards an increase in the areas sown to other crops. For oats, the acreage is 11,781,900 acres as compared with 11,376,346 acres, the area sown, and 9,875,346 acres, the area harvested last year. Barley is sown to 1,954,100 acres, as against 1,827,780 acres, the area sown, and 1,681,180 acres, the area harvested in 1916. Rye has a sown area of 159,470 acres, as compared with 147,170 acres in 1916; peas 152,465 acres, compared with 159,680 acres; mixed grains 558,250 acres, as compared with 410,726 acres; hay and clover 7,661,800 acres, against 7,892,932 acres; and alfalfa 84,900 acres, against 89,472 acres. The condition of these crops in per cent. of the standard representing a full crop is for oats 85 per cent. compared with 90 per cent. last year and 93 per cent., the average at the end of May for the seven years 1910-16; for barley 87 per cent. as against 89 per cent. last year and 92 per cent., the seven years' average; for rye 86 per cent. against 91 per cent. last year and 89 per cent., the average; for peas 88 per cent. compared with 90 per cent. last year and 91, the average; for mixed grains 89 per cent. both this year and last year and 92 per cent., the average; for hay and clover 80 per cent. compared with 98 per cent., the average.

A telegram from the Alberta Department of Agriculture, dated June 12, states that the general season is somewhat late, especially between Wetaskiwin and Crossfield. The weather is cool, but crops are doing well. No frost has been reported since June 5. All grain for threshing is sown, but there is 40 per cent. for green feed yet to sow. There is plenty of moisture in all parts.

Shorthorn Week at Chicago.

The Chicago series of Shorthorn sales, comprising four events, which ended on June 8, included in all 237 animals and they sold for \$265,615 or an average of \$1,120. Frank R. Edwards made an average of \$1,005 on the 45 lots he offered, while Thos. Stanton realized an average of \$1,212 on 23 lots. The famous Carpenter & Ross importation, made up of 107 head, sold for \$146,575 or an average \$1,370. The top price in this highly satisfactory vendue was \$7,000, which F. A. Gillespie & Sons paid for Caledonia by the Duthie bull, Proud Emblem. Brandsbys Jinny 19th, a noted English winning female went to the Bellows herd at an even \$3,000.

The Man Behind the Cow.

EDITOR "THE FARMER'S ADVOCATE":

During recent years, much scientific knowledge has been made available with the object of making the dairy cow a more profitable investment. Special emphasis has been placed on the various phases of breeding, selection, feeds and feeding thus involving the more or less complex operation of figuring balanced rations. Undoubtedly much good has accrued. Yet the application of this scientific knowledge in a sufficiently practical way to get results depends very largely on the man himself, who is personally engaged in the business. This point of contact between knowledge and application is too frequently overlooked. When the cow on test makes a record that startles the dairy world, we invariably think of the man behind that particular cow. What are his special characteristics? What does he know? What does he do?

If a careful analysis is made of the circumstances it will generally be found that his ability to do things from the standpoint of commonsense is of more importance than merely knowing how. Better returns would often be secured if we always practised the best that we knew. But no dairyman of ambition will want to stand still. He will keep his eyes open to new possibilities in his line. Here he will need to exercise a degree of discrimination. To be an idealist and dream of future successes is all right and quite commendable, but planning for the future must go hand in hand with good, honest hustling. Some, there are, who look askance on every new idea that crops up. The fact that it is not in their regular routine, causes them to be suspicious of its utility. This is going to the other extreme. The man behind the cow should possess openmindedness as one of his chief characteristics.

Of course dairying, as an occupation, has its obstacles to overcome. The greater the success the greater the difficulties in attaining it. The man who is in and out at the first excuse never gets anywhere. To be a winner he must possess stability. In a rural district an association of farmers had surrounded a local cemetery with a new fence and a handsome gate. To complete the job they sought a motto to place over the entrance. Not being able to agree to anything definite, an appeal was made to Pat, the man who had dug the post holes. "Sure, and the best one that I can think of," replied Pat, is "We're in it to stay". The man who adopts Pat's motto in the dairy business and lives up to it has in him at least one important element of success.

The successful dairyman must be a constant student of "cowology". Considerable knowledge may be obtained by a careful observation of the animals under his care. He must be sufficiently familiar with type and pedigree and know what degree of perfection is indicated. He must understand how to keep a cow in normal condition or provide a remedy when occasion demands it. A knowledge of sanitation is also essential if the herd is to be maintained constitutionally strong. While experience will teach much, the information thus obtained should be supplemented by the reading of good dairy literature. This will include the bulletins and reports from experiment stations, articles in the agricultural press, etc. Life is too short to depend entirely on personal investigation. The wise man seeks a knowledge of his business from every possible source then selects that which is best adapted to his needs. These enquiries afield cannot but add to his capacity as a dairyman.

Someone is responsible for saying, "The man who breeds scrub cows is a scrub; he who breeds grades is a grade, but the man who breeds pure-breds of high rank is a thoroughbred." Of course this statement needs modifying. Many a man who to-day stands high in the live-stock world started with scrubs, for financial reasons, and gradually worked his way to the top. With such a man behind the cow a general advance is not long in taking place. He knows his cows not so much as Jerseys, Holsteins or Ayrshires, but first as individuals. He does not try to produce a May Echo out of an ordinary cow because her name appears in the herd book. He weighs and tests the milk of each cow to ascertain her capacity. There is no guess work about it. Having this information at hand he is able to treat each animal according to her special requirements. Knowing what these are each cow gets the feed and care that will enable her to do her best, not some other cow's best. Such qualifications have developed many a splendid herd throughout the country, and here and there an animal with a magnificent record. To achieve this the man behind the cow may be rightly termed a thoroughbred and deserves to be ranked with the world's greatest.

Elgin Co., Ont.

J. HUGH MCKENNEY.

An Angus Triumph.

Aberdeen-Angus enthusiasm ran high on June 5 and 6 when the herds of Chas. Escher Jr., Botna, Ia., and Escher and Ryan, Irwin, Ia., were dispersed. The 123 head which made up the combined offering sold for \$95,285 or an average of \$774. Blackcup McHenry 87th sold for \$3,050 the top price of the two days' selling.

The United Farmers of Ontario will hold conventions at Brantford on June 27th, Ingersoll the 28th, Tilbury the 29th, a picnic at Forest on the 30th, Exeter on the afternoon of July 2nd, Seaforth in the evening of July 2nd, Listowel July 3rd, a picnic at Varney in the afternoon of July 4th, Durham, evening of July 4th.