

FOR FARMERS, STOCK BREEDERS AND GARDENERS

NEWSY NOTES

BY AGROLOGA

THE ORDERS OF INSECTS (3)

The order Hymenoptera includes the bees, wasps, ants, gall-flies, cicadas, flies, horn-tails and saw-flies, among other insects and it is with reason placed at the head of the orders since it contains the "rainiest" and most intelligent of all the winged tribes, not excepting the-hermites of the order Isoptera. Volumes have been written about the intelligence of the honey-bee (Apis mellifera) without exhausting the subject; fresh facts are brought to light yearly. With a remarkable social organization of a single Queen (a perfect female, capable of laying fertilized eggs), a number of drones or males, and a vast army of workers or undeveloped females, numbering perhaps 30,000 in a single colony, the busy insects have from very ancient times attracted the notice both of the scientist and the philosopher. The wastage of life in a single hive is enormous, for the life of the worker bee lasts only about six weeks, and it is the sole function of the queen to lay the prodigious number of eggs necessary to replace the loss. In a very exact sense the queen is the parent of the hive, and it is a singular fact that the marital union which takes place but once in the lifetime of the queen (during the "conjugial flight") is sufficient to fertilize every egg which she afterward lays, even if she lives to be five years old! This is one of the two insects which men have domesticated, the other being the silk-worm.

We have two species of bumble-bees, both of the genus Brevus, which do not store up honey in quantity like the "bumble" bee. The cells of the comb are relatively large, but very few in comparison. These insects make their homes underground, a situation which renders them only too open to the attacks of the field mice, and thus keeps them from becoming as numerous as they should be. Bumble-bees it may be said, have an important duty to perform in pollinating clover, orchard and other crops. Some years ago I trapped a colony of "Brevus" in the following manner.

Taking a cardboard box I cut a small hole in the bottom, and fitted a piece of fly-screen over the top as a lid. Looming a nest in an earthen embankment, I placed the hole in the box over the entrance to the nest. This was done at night when all the "bumblers" had gone to rest. On examining the box next morning, it was found to contain all the bees in the colony, who were flying about seeking to find an opening through the screen. A wooden box like a small hive had been provided, some hay placed in the bottom, and the comb was carefully dug up and placed on the hay. The box with the bee was now emptied into the hive and all the openings were at once closed. The hive was kept sealed for most of the day till the bees had become accustomed to their nest in its strange surroundings, and had in a sense taken their bearings. The "door" of the hive was opened an hour or so before sundown and the bees made a short flight. The hive was left just over the hole where the nest had been. After a day or two the hive was moved a yard or two, towards the house, and the removal was always done at night. Clever as these insects are, if the hive was removed too far (though it was very conspicuous with white paint) they would go to the old position and fly restlessly round and round. By slow degrees they were manoeuvred to the lawn, where the next stage of the experiment was carried out. A wand about 12 feet long was procured and employed to gently tap the hive. The bees at first, came out with a roar and a rush, intent on mischief, but finding everything quiet and apparently nobody to chastise, they soon quit troubling about the mysterious knocks. As soon as this happened I soon stole quietly to the

Spinning and Weaving

Send me in your work to be spun into Yarn and wove into Blankets. The charges are: single yarn 25 cents doubled 30 cents per pound. Blankets \$2.00, and if unlined \$1.25; it takes five lbs. of wool per blanket. Wool must be well washed and all dirt and burrs picked out. The size of single yarn is medium, and double yarn fine, medium, coarse and hooking yarn. Put shipper's name on all parcels and owner's name, address and instructions inside. Send by mail or freight. Freight will be paid on 100 lb. lots.

WM. LANDEGAN, 45 Queen Street, Charlottetown.

Winning Drivers In 1933

(By W. H. Gocher)

As the sukies have been hung on the peg, it is time to locate the drivers that won the most of the races in 1933. Farahall and Clukey are again at the top but a number of changes have been made below the second step. The dash races at Rockingham Park assisted materially in making the score. Farahall won twenty-three at that meeting, White thirteen, Stokes nine and Berry nine.

The following are the leading winning drivers in 1933 and the number of races won by each of them.

Farahall, 65; Clukey, 48; Pitman, 35; Stokes, 35; Brust, H. 28; Chapell, 25; Dill, 25; White, 23; Fitzpatrick, 23; Hodson, 22; Fleming, 21; Blackwell, 20; Toole, 19; McMillen, 18; Berry, 17; Brusie, L. 17; M'bey, 17; Walton, 16; Brittenfield, 15; Payne, 15; Vallery, 14; Goddard, 13; Smith, L. 12; Egan, 11; Potter, 11; Bull, 11; D'Kerson, 10; Sturgeon 10; Hagler, 10.

Farahall won sixty-five races with twenty horses. Of that number Hal Abbe won nine, J. E. Vonlan and Lord Jim each seven, Lee Storm and Mac Hanover each six, and Morley Frisco four. Billy Strathmore was the leader in the

there are too many why buy them? The price seems to be no easier to the consumer, whether production is high or low.

The price of Canadian hogs on Nov. 9th was from \$4.25 (sows) to \$5.90 select. Which is to say that the best price per lb. one could get was under 6 cents. Thirty years ago that was about the price the farmer realized, when his overhead costs were a fraction of what they are today. To meet the overhead costs of today the price ought to be from 7 to 10 cents per lb.

Says another "farmer are asked to keep more sows to get a share of that 700,000,000 B. British quack. Well, we've tried this and the result has been lower prices, while we've had to feed the sows at a loss."

Sorry to have to say it but there is not enough inducement offered in this particular line. Who's to blame?

JUST A FEW WORDS

Boudicca, the name of a British queen--of the Iceni--is latinized from Boudica, a Celtic word for victory; it is the same as the modern name Victoria.

Bluebell: The blue Delphinium or larkspur is often wrongly called the bluebell. The true "bluebell of Scotland" is a species of Campanula, while the English bluebell is a kind of wild hyacinth called a Scilla.

Hetted: Towards the end of Chapter 27 of Kingsley's "Hypatia" occur the words, "He was baffled, hetted; there was a spell upon him." The Standard Dictionary gives "het" as an obsolete or dialect English word derived from "heat," and the word still appears in rustic parlance on this continent. The phrase means he was heated or excited.

Balm of Gilead: A Canadian name for a poplar (Populus balsamifera or variety). The real B. of G. is a small ornamental evergreen, the Amur's glaucous, whose turpentine like balsam had formerly a great reputation as a medicine--see Scriptural references.

Billion: We are "accustomed to think in billions" now; that is in thousands of millions. But once upon a time, a billion was a million millions, according to English ideas.

Booy: A common error is to pronounce this as boo-ee. It is sounded just like the word "boy." A floating mark to show a channel, etc.

A SCHOOL SONG

We are getting a real old-fashioned winter, so here is an appropriate school song for the boys and girls. It is an old German folksong.

Cold the blast may blow, - Heaping high the snow, Winds may loudly roar; Trees all brown and bare, Sad may waver in air, Decked with leaves no more, Decked with leaves no more!

When in school we meet, Looks of welcome greet; Each from smiling eyes; When our teachers dear, Give us words of cheer, What are words of cheer? Come, then, rain or hail, Come, then, storm or gale! Glad to school we'll go, Brooms, firm and bold, Shrink not from the cold, Fear not ice or snow, Fear not ice or snow! -at their own price of course. If

The Prevention Of Frost Injury To Potatoes

EXPERIMENTAL FARM NOTE

From investigations conducted at the Laboratory it has been observed that potatoes affected by the frosts are more subject to three main kinds of injury, namely, frost necrosis, freezing solid, and turning sweet. Frost necrosis occurs in tubers which have been exposed to low temperatures for a period of time sufficient to permit the formation of ice crystals in the tissue, and upon cutting into such tubers three types are recognized as follows:

1. Ring necrosis as shown by the brown ring in the vicinity of the vascular ring. Necrosis of this nature is an indication of slight injury due to short exposure at low temperatures.

2. Net necrosis, caused by the darkening of the fine threads composed of vascular cells and scattered through the tuber to form an irregular net-like pattern.

3. Blochings, known from the presence of discolorations produced by small or large irregular patches ranging in colour from brown to black. Potatoes showing advanced stages of blotching are severely injured and quite useless for any purpose. Tubers freeze solid when exposed to a temperature below the freezing point of potato tissue. Such potatoes, upon thawing, cease sap and are changed to a slimy mass which rapidly decays.

Frost injury to seed potatoes is an important problem, particularly in Prince Edward Island where storage facilities are limited and conditions necessitate the movement of potatoes during cold weather. Experiments conducted in 1933 demonstrated that tubers were unaffected when exposed for periods from five to sixty minutes at a temperature of 28 deg. F.

Sprouting habits, however, were influenced by similar exposures to lower temperatures. Furthermore, definite relationships were noted with respect to duration of exposures and length of sprouts. In general, sprout growth was stimulated by the shortest exposures, whereas the longer exposures were detrimental. It was noted likewise that exterior evidence of frost injury coincided with heavy ring necrosis and blotching, two well known forms of frost injury to potatoes.

In order to prevent the losses due to low temperatures it is necessary to adopt three very important measures as follows: First--for seed potatoes store the crop where the temperature is not lower than 35 deg. F., and between 35 deg. and 38 deg. F., for table stock. Second--Potatoes transported during the cold months should be provided at all times with protection against frost. They should be carried in heated cars and loaded in a manner permitting the free circulation of air. Third--Avoid handling potatoes during cold snaps, and when in doubt of the matter seek the advice of the District Potato Inspector who is always well informed on the subject.

Live Stock Numbers

The returns just issued from the annual June survey of live stock numbers in 1933 as compared with 1932 show that in Quebec, Ontario and Manitoba all classes of live stock, with the exception of cattle and sheep in Manitoba, had a downward trend. In Quebec the decrease was: Horses 8.9 percent; cattle 6.2 percent; swine 27.8 percent; and sheep 11.3 percent. In Ontario the decrease was: horses 0.9 percent; cattle 0.3 percent; swine 8.8 percent and sheep 5.8 percent. In Manitoba the decrease was: horses 10.1 percent and swine 22.4 percent cattle showing an increase of 9.7 percent and sheep an increase of 6.9 percent.

Soft Bacon

The further expansion of our bacon trade with Great Britain depends to a large extent upon quality improvement. Recent advice from the British market committee supplies on the score of underfinishing in a large percentage of bacon sides, as indicated by softness and flatness. This soft flabby bacon is most likely the product of underfinishing hogs, of which there are considerable numbers being marketed at yards and plants in Canada at the present time. The remedy quite interesting, especially when I lie with the producer in holding would go to the opposite side of the back unfinished hogs. In most cases, when from where I usually fed them, another week or so on feed and tap the tin. This makes me think of the Irishman who was asked the question "Do fish sleep?" He replied, "I never caught any that were dead."

As any rate the little ducks got to be as they wanted to eat, for they grew like mushrooms. I took a day off for no other reason than to go to the British to buy sheet aluminum. Every hog raiser is asked and when these four ducks had their growth, each was presented with a legband

Jack Miner And The Birds

By Jack Miner Himself--A History of This Notable Bird Lover's Life

CHAPTER XVI DO BIRDS RETURN TO THEIR SAME HOMES?

Do birds return to their same homes, year after year? This is a question that has been put to me more than any one along the bird line, and it is usually followed by: "How do you know?" Then I have had to take father's advice, "drop it," and talk about the weather or some other side line. For while I was sure of this in my own mind, yet I had no proof.

On August 5th, 1909, a wild black duck lit with my ducks in the north pond. I started cooing a round her, not by letting her come closer to me. Finally she was eating out of the long-handled spoon that I had previously used for throwing little feed over her. The spoon, of course, was on the ground, gradually being drawn towards me until it came over my left hand that was lying flat on the ground, and on September 10th of the same year this duck actually ate out of my hand. We named her Katie. In a few months Katie got so tame she would follow us in the barn where we went after the feed. So I scurried around in my hunting case drawer and found a piece of sheet aluminum about three-quarters of an inch wide and one and a half inches long; I then took my sweetheart's best pair of scissors, and with the pointed blade I managed to scratch my post office address on it. Then I caught Katie and wrapped it around one of her hind legs. She disappeared on December 10th, and in January I received the following letter:

Anderson, South Carolina January 17th, 1910

Box 48, Kingsville, Ontario.

Dear Sir:-

On Friday evening, January 16th, I was hunting on Rocky River, near this city. I killed a wild duck with a band on his leg, marked Box 48, Kingsville, Ontario. I suppose whoever sent him out wanted to hear from him, so I am writing to let you know where he came to his end. He was a very fine specimen. I must commend him for his judgment for he came to the best County in the best State in America. If you will let me hear from you I will return the band I took from his leg. So hoping you will send me his pedigree I will close until I hear from you. Send me your address in full.

Very respectfully, W. E. BRAY

I at once wrote Mr. Bray and he kindly returned the tag, which is the centre one in the photograph of my collection of tags. Mr. Bray made two distinct mistakes; one was when he called Katie "him" and another, equally as big, was when he stated that the duck came to the best spot in America, for the fact is that Essex County, Ontario, this duck's summer home, is the best spot on this beautiful earth; this, of course, will include all of North America.

In 1910 and 1911 I was so busy I didn't take the pleasure of tagging any more, but in the spring of 1912 I hatched four young mallard. No. 1 didn't hatch them; I stole the eggs from a black duck that had been laid off with a gray, green-headed mallard drake and set them under a domestic fowl; a few days after they were hatched they accepted me as their step-father, and this old hen and I succeeded in raising four. I always fed them in one spot on the brick wall that surrounded the pond. The fish got so they came regularly for the bits that the ducks pushed overboard; as I would tap the tin to call the ducks, I also called the fishes. I was compelled to believe this, for before I would drop a bit of food, the fishes would be right there. They were what we call bull-heads, a little miniature catfish, about six inches long. To see them with their whiskers up above the water all along the wall was quite an interesting sight when I lie with the producer in holding would go to the opposite side of the back unfinished hogs. In most cases, when from where I usually fed them, another week or so on feed and tap the tin. This makes me think of the Irishman who was asked the question "Do fish sleep?" He replied, "I never caught any that were dead."

As any rate the little ducks got to be as they wanted to eat, for they grew like mushrooms. I took a day off for no other reason than to go to the British to buy sheet aluminum. Every hog raiser is asked and when these four ducks had their growth, each was presented with a legband

High Speed Germination

The Agence Agricole Internationale of Rome announces that cattle feeding methods may be revolutionized if the claims for a new system of intensive continuous plant fodder cropping are sustained.

Tests are to be applied at once at the National Dairy Institute, near Reading, England. Two metal cabinets have been installed at the Institute farm, each fitted with five trays to serve as a trial ground. A solution of special mineral salts in tanks above each tray is to be sprayed every two hours over a seed bed of maize or oats thickly sown. Germination is speeded up in an amazing degree, it is stated, and it is claimed that a harvest may be produced every ten days, and that 40 of these cabinets will yield about 4,336 tons of fodder a year, enough for 1,300 head of cattle.

Well, I looked to hear from the other three, all winter. But to my delight, on March 10th, 1913, Polly came home, and on the 18th, Della came; and although badly crippled in the wing and leg, Susan came squawking down out of the heavens on March 30th. I caught each one and examined their tags; and for the next three months I did all I could to induce people to ask me how I knew that birds returned to their same homes, for I had double proof: First, these ducks were mute; they had a black duck's breast and a grey duck's wings. But the climax was the tag that I put on their legs.

That summer, 1913, Polly and Della each raised a family, but Susan remained in the hospital nearly all summer. That fall they all three migrated again, and Noah Smith of Paris, Kentucky, shot Susan, February 27th, 1914.

On March 14th, Polly came home. On March 21st Della came; she was accompanied by a Yankee sweetheart and this spot seemed so good to be real for him. When Della would come to me, he would scour the heavens above, but finally he believed what she said and he, too, came to me for food.

That summer Della raised her family, but Polly came home May 20th without any, and both ducks migrated again that fall.

On March 18th, 1915, Della came home, and on the 19th Polly came, but Polly had had a narrow escape, as part of her beak was shot off. The sight was pitiful. With a fragment of her beak hanging down she could hardly eat, so I mixed up some corn-meal and put it in piles for her. Finally I reached out and grabbed the opportunity, then with the scissors in the other hand I clipped the dead fragment of her beak off, and in a few days she appeared to eat quite naturally. Later on I caught the two sisters, put them in a twine sack, took them to town, stood them on a table and stroked them until they became quite contented; then I stepped back and the photographer took their photograph.

My boy said Polly got her beak a little too far ahead. At any rate she appeared to think that was a close enough call for her, and the next winter she did not migrate, but stayed here with our domestic fowls, and she was shot by a wild goose hunter in April, 1916. But Della continued to migrate and returned for the sixth time on March 25th, 1918. That summer she raised a family of twelve, which is, by the way, the largest family of mallards I have ever known to grow to maturity. The last I have any positive proof of seeing her was in September, 1918. During the six years she brought to my home five families, two eight, two nine, and a twelve. In 1917 she came home without a family.

Providing all of her descendants multiply as she did, how many ducks have you got in six years? Surely this is worth thinking over, and when we see that it runs up into the thousands we cannot help but

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