

FOR FARMERS' STOCK BREEDERS AND GARDENERS

Canadian Oats Check World Decline

Like the world area in wheat and barley the world area in oats has steadily declined since 1929. In the British Empire, however, the trend has been in the opposite direction, the area under oats now standing higher than at any time during the period 1928-35. This is chiefly due to the Imperial Economic Committee's reports on Grain Crops, to the continuous increase in Canada since 1931.

Of the 18,890,000 acres sown to oats in the British Empire in 1934, Canada had 13,730,000 acres. The area sown in foreign countries was 117,270,000 acres, making a world total of 136,160,000 acres, and showing a decline in the world area sown to oats of 10,060,000 acres, compared with 1928. The progressive acreage in Canada is shown by the following figures—12,840,000 in 1928, 13,500,000 in 1929, 13,830,000 in 1930, 13,730,000 in 1931, 14,096,200 in 1932, 14,150,000 (provisional estimate) in 1936.

World production in oats has fallen below the level of 1928-30. The United States is the largest of the world producers of oats, has been replaced by Russia. In Empire trade Canada retains her place as principal producer and exporter of oats. Indeed, in Empire trade, the Canadian exports of oats and the United Kingdom imports are the principal features of that trade. Normally, the United Kingdom is the largest world importer of oats, but she lost that place in 1934 to Switzerland and Italy for the time being. As already stated, Canada continues to be the chief Empire supply of oats, almost the only supply, it might be said, because the Irish Free state, once an important factor, now sends only very small quantities.

Spraying Celery

(Experimental Farms Note)

While leaf and stalk blights may be responsible for greater losses than any other factor in the culture of celery, these diseases can be controlled with comparatively little effort and a minimum of expense if prescribed recommendations are followed. If the disease is to be controlled, steps should be taken before the disease has appeared in the field.

For the control of blights the procedure followed is just as important as the material used, because even the best and most effective fungicide can be ineffective if improperly applied. Regardless of the spray or dust to be used, applications of fungicide should be made as frequently as possible—intervals throughout the growing season, to keep the foliage covered by the protective film, which necessitates spraying or dusting every week or ten days, from the time growth commences until the plants are harvested. If applications are made less frequently, the unfolding tissue is not sufficiently protected, with the result that it may become diseased and once infection has taken place the damage is done. The fungicide should be applied with adequate pressure to entirely cover the foliage and force the chemical well down into the hearts of the plants. Spraying is a preventive, not a curative practice.

Experiments have been conducted at the Dominion Laboratory of Plant Pathology, St. Catharines, Ontario, during the past five years, in an effort to determine the most efficient fungicides for controlling celery blights. In addition to the large number of materials that were employed, their concentration and the optimum interval between applications were also tested. It was found that the best control was obtained by spraying with Burgundy mixture, 4-5-40, which is prepared in the same way as Bordeaux mixture, but using sodium carbonate (as soda) instead of lime. Satisfactory results were also obtained by the use of Bordeaux spray, 4-4-40, or copper-lime dust, 20-80, but with these the amount of disease was invariably slightly greater.

J. K. Richardson, Dominion Laboratory of Plant Pathology, St. Catharines, Ont.

BINDER TWINE

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BRINGING UP FATHER



Lamb Feeding Project Success

The Dominion Lamb Feeding Project under which Western range lambs are brought to Eastern Canada for winter feeding was just completed its third and most successful year, with good returns to both ranchers and feeders. The scheme is made possible through the triple co-operation of the Dominion Department of Agriculture which initiated the system, the sheep ranchers of Western Canada, and of the farmers in Eastern Canada, with particular mention of the Southern Saskatchewan Wool Growers' Association and the farmers of Ontario.

Approximately 30,000 range lambs were fed on Ontario farms last winter, the bulk of the lambs being purchased outright by feeders, but all receiving assistance under either the Feeder Purchase Policy or the Dominion Feeding Project. The Dominion Department of Agriculture, A. A. MacMillan, of the Field Service, Live Stock Branch, Dominion Department of Agriculture, seems to be diversification in live stock feeding. Many farmers, who fed cattle and lambs, are now feeding both steers and lambs. The general opinion is that, if cattle markets are not so good, the prices of lambs may be better. On the other hand, if lamb prices are average, cattle prices may be good.

Lamb feeding has a number of advantages which appeal to farmers. Firstly, lambs go into the feed lot late in October or early in November, and are all marketed before the rush of the spring work on the farm starts again. Also, the returns begin to come in hand early in the winter, as the lambs are marketed from time to time in groups as they finish. Still another advantage is that with three or four marketings during the winter the risk of having to sell all lambs on a low market is obviated and as a rule a better average price is obtained.

Balsam Woolly Aphid in Canada

(Experimental Farms Note)

From the Dominion Parasite Laboratory at Belleville, Ont., the new buildings which were officially opened on June 24th, predatory insects have been dispatched to the Maritime Provinces to prey on the Balsam woolly aphid which is causing damage to the balsam fir trees. The balsam fir is one of the most important supplies of pulp. It is more than 40 years since introduced into North America, and ten years ago it became destructive to fir trees in Canada, throughout Nova Scotia, as well as in southern New Brunswick. The pest seems to be working westward.

In addition to the parasites as a means of control, all sprays, applied in the early spring before development commences, have been shown to be effective and will be particularly useful after a severe winter has reduced the infestation to the bases of the trees which are covered with snow. According to R. E. Zisk of the Dominion Entomological Laboratory at Fredericton, New Brunswick, there are two types of injury likely to attract attention. One is the heavy attack on the stem, which more or less results in covering the bark with a white woolly secretion from the insect. Trees thus affected die and turn a bright rusty-red which can be seen clearly in the distance. At first the trees affected are in small groups; later, these groups enlarge and may involve most of the stand.

NOTES FROM THE GARDEN

(Experimental Farms Note)

The Horn Poppy (*Glaucium flavum* Crantl.) has an odd look just now. The foot-long seed capsules, about the thickness of a lead pencil at the base, are curved and pointing in all directions. This plant has got a foothold on the American continent and grows wild as far north as New England now. The foot-long seed capsules, about the thickness of a lead pencil at the base, are curved and pointing in all directions. This plant has got a foothold on the American continent and grows wild as far north as New England now.

This week I have been lifting the tulips, and find that the botrytis disease is present on some of the bulbs. These I stripped of their brown coats, which were covered with the fungus, and exposed them to the sun for part of the day. After two days exposure in the shade, I replanted them in the garden, relegating all the smaller bulbs to a "nursery row."

The foxgloves are thriving wonderfully this year, and a patch near the "creek" is even better than that in the garden. This plant is one of the few herbs which the physician as it was two hundred years ago, for its sedative properties. Withering, an old botanist, tells how it was used in his day, to reduce the energy of the heart. The thin part of the leaves was dried and reduced to a beautiful green powder, the dose of which was from one to four grains in the course of the day. "Digitals," however, should never be used except under doctor's orders, since in large doses it is a powerful narcotic poison.

A neighbor has the Digitalis purpurea, variety monstrosa, which has the spike crowned by a large saucer-shaped flower, tinged and marbled in a striking fashion.

The English Iris (*I. anglica xiphoides*) is, I find, more suitable to our conditions than the Spanish Iris. I have the "Princess Juliana" variety, with a large deep blue flower with a white center.

ODDS AND ENDS

Five cents a box: Last Friday (July 3rd), one could buy strawberries for five cents a box in the City, they tell me. That is a cut-throat price, and the traders might as well have "gone the second mile" and given the berries away. Strawberries grower is entitled to a livelihood from his product, and all statistics show that from 7 cts. to 10 cts. is the value of the box: the former price in an abundant year, and the latter when the fruit is scarce. Very few people who put berries on the market, have any idea of the cost of their production, I imagine: and I have think up some of the expenses that come against this crop. First, there is the interest on the land which is occupied for two years. The grower may be the owner of the land but that doesn't alter the fact that interest must be accounted for. Then the labor: preparing the soil, which may need fertilizer in some cases—planting, and weeding (cultivating); and at the end, picking. The boxes must not be overlooked: some of the expenses for boxes that I have read of, meant a considerable percentage deducted from the revenue of the crop. Then there is the labor, worry and expense of marketing: and finally, one gets 5 cts. a box! And I've heard of 4 cts.!

I had forgotten the cost of the plants, which is variously given as \$28 to \$40 per acre.

Unusual Insect: On July 8th I noticed an insect walking across the concrete floor of the verandah; it looked rather like a grasshopper, I thought, but not the kind with which I was familiar. I captured it and put it in a "lethal chamber." Then I looked up Dr. Harry Piers' "Orthoptera of Nova Scotia" and found that I had a Camel Cricket, *Cephalophis tenerris* Scudder. The insect had either been in a fight or an accident, for half of one antenna was missing, and maybe this explains its easy capture. The Camel Cricket has the hind-legs strongly developed for leaping, but the body is ungainly, with the back arched, and the legs large and "bent down" in an obsequious manner between the front legs (Piers). At the time Dr. Piers published his book (1917) there had only been three specimens of *C. tenerris* taken in Nova Scotia. A male and a female were captured at Truro in Aug. 1913, and a male at the same place July 1915. "There are no specimens in the Agricultural College collection," says Dr. Piers. The insect is nocturnal in habits, and as it has no wings it cannot "chirp," all of which make it a very elusive creature, not easily recognized.

How not to prune: The other day I saw some frog that had been planted into this spring as shade plants in the garden. The one who planted them had made a good job of it, (aided by the rainy weather at the time) for all were living. But in the matter of pruning he went all astray, for he took off all the larger branches and left the main stem (which was in general about five feet high) bare as a stick. The frog, however, is a good specimen of its length. Such close pruning is almost a physical "shock" to the tree, which cannot begin to form a vigorous root-system with the few leaves remaining; and it will probably take four or five years to come back to normal.

The proper season, when pruning a transplanted tree, is to immediately shorten all branches about one-third, leaving the tree somewhat pyramidal and shapely. In succeeding years remove the two lowest branches annually, taking care to prune close to the trunk, and to leave no stubs. By this method a strong stout trunk, supporting from the base up, will be produced. The wounds produced by the pruning should at once be painted (with a good oil paint) to protect the heartwood from moisture, fungus and insects.

Mucilage: Here is a recipe for a really good home-made mucilage, which may be used for many household purposes. Take half cup of flour and mix with a little cold water to a "cream." Dissolve a teaspoonful of powdered alum in a pint of water, bring to a boil, and add the "cream." Now "cook" twenty minutes, stirring the while. While stirring add ten drops of all-capsaic acid, if this is not available, the same amount of carbolic acid. Strain and transfer to jar or other vessel for use.

The two chemicals are not indispensable, but the alum is added to make the mucilage keep its color, white, instead of turning yellow as it dries. The oil of cloves, and the carbolic acid, both have the property of retarding the growth of moulds and bacteria, which are certain to attack preparations containing flour. The oil of cloves is preferred as having a fragrance agreeable to most people. The mucilage keeps better in a covered jar, and a cool place. In years gone by I used a lot of this for pasting cuttings into scrap albums.

Snakes of F. E. Island: These humble reptiles are in the spotlight again, I see. Three or four years ago I made out a list of the four or five species which were once found on the Island and sent it to Dr. Piers who was then Cur-

Disease Resistance In Plants

(Experimental Farms Note)

Disease resistance in plants offers to Canadian farmers great possibilities towards reducing the loss and inconvenience due to destructive plant diseases; nor is this interesting subject of recent origin, for one authority in 1884 states that improvement in the quality of potatoes with respect to disease resistance, might be accomplished by a process of plant breeding.

By disease resistance is meant the ability of plants to resist attacks of disease producing organisms such as fungi and bacteria. This quality may be complete, partial or absent. Complete resistance implies true immunity as illustrated in the case of Irish Cobbler and Green Mountain potatoes which are immune to the disease known as wilt or canker. Partial resistance is illustrated by the ability of certain varieties of potatoes to produce leaves and stems resistant to blight while the tubers may be extremely susceptible to this disease. Still more striking is the case of the Katahdin potato variety known to be immune to mild mosaic yet it may contract other forms of mosaic as well as leaf roll and spindle tuber.

Apparent immunity, or an escape from disease, may be confused with what is termed true immunity, for plants may avoid infection because of factors related to climate or seasonal conditions unfavourable to the parasite. For instance, in certain sections of Eastern Canada, particularly in Prince Edward Island, where frequently escapes the ravages of rust simply because the crop is harvested before the occurrence of conditions necessary for rust development.

Farmers and gardeners will learn with great satisfaction that definite progress has been made in the production of a number of economic crop plants resistant to important diseases. One cannot refer to this matter without mentioning the recent advances towards securing wheat varieties resistant to rust, an accomplishment credited to the personnel of the Rust Research Laboratory, St. Catharines, Ontario. Further advances have been made in securing turnip varieties resistant to club root, as demonstrated by recent tests revealing that certain strains of the Wilhelmshagen variety may be grown with safety in land contaminated with the club root organism—*R. R. Hurst, Laboratory of Plant Pathology, Charlottetown, P. E. I.*

NEW SY NOTES

(Experimental Farms Note)

For several generations the tsetse fly of southern Africa has provided material for travellers' tales. This fly is closely allied to the common horn fly, but is a carrier of microparasites (called trypanosomes) which being introduced into the blood of domestic animals by the bite of the fly, prove fatal in the majority of cases. The cattle disease produced by the trypanosomes is called "Nagana" by the natives; and in some parts is so dire that attempts to keep domestic animals have been abandoned. Nagana also affects certain wild animals but with less fatal results, according to Winton, who is an authority on the Dipthera. When it became necessary to take a horse across the tsetse belt, it could only be done by completely enclosing the animal in a suit properly designed as protection against the fly.

At last, however, the Minister of Agriculture in Cape Town reports that "the war against nagana is coming to a successful conclusion." Mr. R. H. Harris, research officer in charge of the tsetse fly investigation in the Umfolozi Game Reserve, after a series of experiments, made the curious discovery that the fly is guided by one sense alone—sight in its search for food. (Anyone who has noted the actions of our flies will agree with the present writer that they are guided more by scent than by sight!) Mr. Harris then devised a trap—we are not told of what it consists—which has proved wonderfully effective. In September 1931, a section with 134 traps caught 292,024 flies and in January 1934, (midsummer) the catch in the same locality had dwindled to 336 flies. At another section with 51 traps the September 1931 "bag" was 216,980 flies; 109 traps in the same section in 1934 yielded only 255 flies. So striking have been the results that the South African Government have added another 14,000 pounds to the 6,000 pounds already allocated for the extermination of the nagana disease.

SMITHFIELD MARKET

(May 28, 1936)

Origin	Price per lb. dressed beef
Scotch Short Sides	\$1.29
Scotch Long Sides	1.21
English Long Sides	1.00
English Hinds, Fore rib & Flank	1.16
Canadian Sides	1.08
Can. Fore rib & flank	1.21
Argentine Hinds, chilled	87
Argentine Fore, chilled	50
Converted at \$5.00 to the cwt.	

Canadian Beef in British Market

Statements of Canadian beef cattle to the United Kingdom market, while containing some animals of unsuitable weights and type, have been featured during recent weeks by many drafts of very choice quality. The sides from many of these cattle slaughtered at ports of landing, are shipped to the great Smithfield market at London, where they are sold in competition with beef from other sources of supply, including England and Scotland. Canadian fresh-killed beef sides have been making an exceptionally favourable showing, which indicates very clearly that quality is the dominating factor in competition.

The following table of prices, from the official list of the Smithfield market during the last week to May, shows Canadian sides and cuts in an unusually favorable position, being exceeded in price by Scotch sides only. It is interesting, as well, to note the spread in price between fresh-killed and chilled beef, the product of choice cattle also well butchered and excellently marketed, from the great pastoral countries of South America.

Field Crops in The Making

(Contributed by the Pioneer Jack Miner League)

The production of superior varieties or strains of field crops by breeding and selection has been an important function of the Experimental Farms Branch of the Dominion Department of Agriculture since the inception of the Farms system 50 years ago. Indeed, the progress made by the Cereal Division in the creating, testing, and final distribution of superior new varieties of cereals in Canada is an epic in the realm of scientific achievement. The names of such varieties as Marquis and Huron wheat, Laurel and Legacy wheat, Charlottetown 80 and Menary barley, Arthur and Chancellor Pease, and Novelty flax are not only household words in Canada but of world-wide recognition, while evidence of their distinct progress is contained in the recent titimation of a variety of wheat which is capable of withstanding the ravages of stem rust.

In recent years the advance work in the breeding of disease-resistant plants has been particularly remarkable. Not only have new rust-resistant and smut-resistant wheats been developed, but varieties of oats resistant to stem rust and smut have also been created. The progress in this particular, so far as the Cereals Division is concerned, has been due very largely to the policy of concentrating the work at strategic points under the direct charge of highly trained men. Thus, the problem of breeding disease-resistant types of wheat has been centralized at Dominion Rust Research Laboratory at Winnipeg in the very centre of one of the worst rust areas in the West.

While the breeding of rust-resistant wheats and oats have more or less held the public stage, other work of far-reaching importance has been quietly proceeding. There is promise of a successful conclusion to the development of varieties of oats which combine high strength of straw with disease-resistance and other desirable qualities; varieties of barley better adapted to different regions and more disease-resistant than the common flax capable of producing more and better oil per acre.

In addition to these activities, the Cereals Division by Act of Parliament is required to investigate and report upon the suitability of new varieties of cereals, seeking a license for sale in Canada. It also conducts verification tests of Elite Stocks and Registered Seed Stocks for the Canadian Seed Growers' Association, as an aid to maintain the high standard of purity and purity set for such stocks. The success attending the efforts of the Cereals Division has been made possible in no small measure by the existence throughout Canada of the Branch farms and stations at which means of the exacting work of testing and appraising varieties is conducted.

Strange Noises Of Birds

(Contributed by the Pioneer Jack Miner League)

How many times have we puzzled over strange noises in the woods, that we know are made by birds, but which we are many times unable to identify, because in many cases the bird is hard to locate, or else the noise occurs at night. Several years ago, a man whom I knew, told me he heard an owl yelping, handy his home, one other night. I smiled to myself, and said he undoubtedly meant he had heard an owl hooting. A short time later I repeated the conversation to a gentleman whom I knew, who was a keen student of nature, why he said that the owl was yelping. This convinced me that such was the case up to this time I had never heard of such an occurrence. Several years later I proved the truth of this statement to my own satisfaction.

In the month of October while roaming the woods one evening in search of partridge, I came across a pair of horned owls. They flew directly ahead of me for almost a mile, just keeping a short distance ahead of me, and hooting continually. Finally they flew out in an open space and the two owls sat on the top of the same tree. I continued to follow them along, and seemingly they became annoyed at my presence, and to my surprise they started to bark like a dog. Had I not been following them in close contact, I would undoubtedly have thought it was a small dog, barking up a tree at a squirrel. As it seemed identical to the same. Last March on several evenings I heard one barking, which I at first believed to be a dog, but which I now believe was an owl. I have heard with a few men who say they have heard owls make a strange noise, although it is not a common occurrence. Another noise which I had not seen the bird, itself I would never have proved to my satisfaction occurred about two months ago.

One evening I heard rather a peculiar squeal, which I had never before heard. I at once concluded that only one bird was responsible for such a noise, and that it must be a strange owl. I was very curious to find out, the cause when, to my delight the bird itself appeared in the shape of a great blue heron. It flew low almost over my head, emitting this strange sound, and no doubt the cause was some obstruction in the throat or wind pipe as the bird seemed annoyed and rather distressed. A similar noise is often made by a hen when she gets a barley, beard lodged in her throat.

The last strange noise to which we allude in this article I heard only the other day, and which sounded very much like some one calling (hello) several times in the woods. I soon found out the cause of this noise was made by a pair of ravens, trying to get their two young ones to leave the locality as they were very much pestered by a flock of grackles and crows. I am quite certain that I was not alone in hearing the raven as we have one or two pairs with us nearly all the time, but I have never heard them make such a noise before, you will find that these strange noises made by birds are nearly always caused by them being annoyed by some intruder whom they do not like and seek to get rid of its presence. So the next time you hear a noise with which you are not familiar, stop, look, and listen, and you will find much pleasure in finding out the exact cause, and once found you will never forget it. In a later issue we may again refer to noises made by birds.

Broiler Trade In Summer

(Contributed by the Pioneer Jack Miner League)

Probably no phase of the poultry industry is more over-supplied than the broiler trade during the summer months, say the Dominion Department of Agriculture Egg and Poultry Market Report. At one time broilers were scarce and prices paid for chickens of this weight were high. It is evident that this is a trade that can be quickly overloaded. Rarely does one hear of broilers being used in the home but almost exclusively in the hotel and restaurant trade. One large restaurant organization in Canada is now following the English practice of roasting all chickens over two pounds in weight and serving half the chicken thus prepared with dressing per person. Experience in this direction, continues the Report, is encouraging and one which

Bargains in Potato Sprayers

We are offering the following Potato Sprayers at greatly reduced prices. Look over this list and make your selection, you will save money by purchasing now.

- 1—Friend Fraction Potato Sprayer (new) 1934 model, regular price \$325. Sale price ————— \$225.00
- 1—Bean Potato Sprayer (new) 1934 model, regular price \$275.00. Sale price ————— \$200.00
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HOUSMAN'S HUMOR

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In the month of October while roaming the woods one evening in search of partridge, I came across a pair of horned owls. They flew directly ahead of me for almost a mile, just keeping a short distance ahead of me, and hooting continually. Finally they flew out in an open space and the two owls sat on the top of the same tree. I continued to follow them along, and seemingly they became annoyed at my presence, and to my surprise they started to bark like a dog. Had I not been following them in close contact, I would undoubtedly have thought it was a small dog, barking up a tree at a squirrel. As it seemed identical to the same. Last March on several evenings I heard one barking, which I at first believed to be a dog, but which I now believe was an owl. I have heard with a few men who say they have heard owls make a strange noise, although it is not a common occurrence. Another noise which I had not seen the bird, itself I would never have proved to my satisfaction occurred about two months ago.

One evening I heard rather a peculiar squeal, which I had never before heard. I at once concluded that only one bird was responsible for such a noise, and that it must be a strange owl. I was very curious to find out, the cause when, to my delight the bird itself appeared in the shape of a great blue heron. It flew low almost over my head, emitting this strange sound, and no doubt the cause was some obstruction in the throat or wind pipe as the bird seemed annoyed and rather distressed. A similar noise is often made by a hen when she gets a barley, beard lodged in her throat.

The last strange noise to which we allude in this article I heard only the other day, and which sounded very much like some one calling (hello) several times in the woods. I soon found out the cause of this noise was made by a pair of ravens, trying to get their two young ones to leave the locality as they were very much pestered by a flock of grackles and crows. I am quite certain that I was not alone in hearing the raven as we have one or two pairs with us nearly all the time, but I have never heard them make such a noise before, you will find that these strange noises made by birds are nearly always caused by them being annoyed by some intruder whom they do not like and seek to get rid of its presence. So the next time you hear a noise with which you are not familiar, stop, look, and listen, and you will find much pleasure in finding out the exact cause, and once found you will never forget it. In a later issue we may again refer to noises made by birds.

Broiler Trade In Summer

(Contributed by the Pioneer Jack Miner League)

Probably no phase of the poultry industry is more over-supplied than the broiler trade during the summer months, say the Dominion Department of Agriculture Egg and Poultry Market Report. At one time broilers were scarce and prices paid for chickens of this weight were high. It is evident that this is a trade that can be quickly overloaded. Rarely does one hear of broilers being used in the home but almost exclusively in the hotel and restaurant trade. One large restaurant organization in Canada is now following the English practice of roasting all chickens over two pounds in weight and serving half the chicken thus prepared with dressing per person. Experience in this direction, continues the Report, is encouraging and one which

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—By George McManus

Field Crops in The Making

(Contributed by the Pioneer Jack Miner League)

The production of superior varieties or strains of field crops by breeding and selection has been an important function of the Experimental Farms Branch of the Dominion Department of Agriculture since the inception of the Farms system 50 years ago. Indeed, the progress made by the Cereal Division in the creating, testing, and final distribution of superior new varieties of cereals in Canada is an epic in the realm of scientific achievement. The names of such varieties as Marquis and Huron wheat, Laurel and Legacy wheat, Charlottetown 80 and Menary barley, Arthur and Chancellor Pease, and Novelty flax are not only household words in Canada but of world-wide recognition, while evidence of their distinct progress is contained in the recent titimation of a variety of wheat which is capable of withstanding the ravages of stem rust.

In recent years the advance work in the breeding of disease-resistant plants has been particularly remarkable. Not only have new rust-resistant and smut-resistant wheats been developed, but varieties of oats resistant to stem rust and smut have also been created. The progress in this particular, so far as the Cereals Division is concerned, has been due very largely to the policy of concentrating the work at strategic points under the direct charge of highly trained men. Thus, the problem of breeding disease-resistant types of wheat has been centralized at Dominion Rust Research Laboratory at Winnipeg in the very centre of one of the worst rust areas in the West.

While the breeding of rust-resistant wheats and oats have more or less held the public stage, other work of far-reaching importance has been quietly proceeding. There is promise of a successful conclusion to the development of varieties of oats which combine high strength of straw with disease-resistance and other desirable qualities; varieties of barley better adapted to different regions and more disease-resistant than the common flax capable of producing more and better oil per acre.

In addition to these activities, the Cereals Division by Act of Parliament is required to investigate and report upon the suitability of new varieties of cereals, seeking a license for sale in Canada. It also conducts verification tests of Elite Stocks and Registered Seed Stocks for the Canadian Seed Growers' Association, as an aid to maintain the high standard of purity and purity set for such stocks. The success attending the efforts of the Cereals Division has been made possible in no small measure by the existence throughout Canada of the Branch farms and stations at which means of the exacting work of testing and appraising varieties is conducted.

Strange Noises Of Birds

(Contributed by the Pioneer Jack Miner League)

How many times have we puzzled over strange noises in the woods, that we know are made by birds, but which we are many times unable to identify, because in many cases the bird is hard to locate, or else the noise occurs at night. Several years ago, a man whom I knew, told me he heard an owl yelping, handy his home, one other night. I smiled to myself, and said he undoubtedly meant he had heard an owl hooting. A short time later I repeated the conversation to a gentleman whom I knew, who was a keen student of nature, why he said that the owl was yelping. This convinced me that such was the case up to this