

on the quality of the calves, but improper rearing may offset anything gained by breeding. It is not uncommon to see well-bred calves that are stunted due to lack of proper care at the right time. If a profitable herd is to be built up attention must be given to rearing the calves as well as to breeding and selection.

## POULTRY.

### A Successful Poultryman's Advice and Experience.

EDITOR "THE FARMER'S ADVOCATE":

Poultry-raising, though a profitable asset to the operations of the farm, is a branch of agriculture that receives scant attention on many farms which no doubt is due to lack of interest. There are three graces in poultry culture—love, faith and work. If a man has love for his work he will be more apt to rightly manage it and more apt to notice all the details of the business. If he has faith he will not become discouraged, but will stick to it through thick and thin. What can we do with any business if our heart is not in it? To do things mechanically will never accomplish good results. We must be in the mood to see pleasure in our work, and not slight our attention. We may have all the love imaginable and we may have the greatest of faith, but if we do not get right down to hard work we will accomplish nothing. Poultry is not hard, muscular work so much as it is close application. Laboring for love with the belief that the reward will come later on, is always delightful work, but work without pay, and without prospect of pay, is what harasses the mind and gives one that "hope-begone" feeling. Remember if one has love for the work, has faith in the work, and will work, there is as much chance of an honest livelihood with poultry as with any other stock, or any other branch of farming.

To make a proper start in poultry as a side issue, the farmer should first of all purchase a pen of pure-breds of whatever breed best suits his taste and objects. If eggs alone are the object of the breeder I would recommend any of the lighter breeds such as—Leghorns, Minorcas, Anconas, etc. But if chickens for market as well as eggs are the object, as they should be, the heavier breeds will be found more profitable. Of these the most popular are—Plymouth Rocks, Wyandottes, R. I. Reds, and Orpingtons. Having selected your breed, remember that strain is even more important than breed. By strain we mean simply a family line of any breed of fowls that have been bred for some special purpose for a number of years, hence having their good qualities so developed that they will be transmitted to the offspring. There are bred-to-day strains of the general-purpose breeds, and these will be found to be most profitable for the average farm. The farmer should by all means secure the best stock obtainable and endeavor to improve through selection of the egg-laying qualities of the fowls of his flock.

Our next question is how shall we mate to get the best results? We read and hear much more about the introduction of fresh blood than we do about the quality of blood to be introduced; simply because it is new does not mean that it is any better. The quality is what we must look to. Many poultry-raisers look at the matter as a necessity to change blood in their flocks every year, and with some of them it makes very little difference about the kind of stock they are getting as long as it is new. I am quite in favor of using new blood once in a while, or when I see it is necessary to do so, but if the breeder handles and mates his stock as he should there will be no necessity of introducing new blood each year. Line-breeding can be carried on most successfully by experts, but should never be practiced to a large extent by amateurs. To the amateur poultry-raiser and the average farmer I would say better purchase new blood every two or three years, than to attempt line-breeding. And when you do buy birds for breeding purposes be sure that you obtain them from a flock that does not need new blood more than your own. Careless mating cannot be too strongly condemned. A strong, vigorous male bird is half the pen. And to obtain the best results both sexes must be in perfect health. I am a firm believer in size for both male and female. I do not mean extra large, but well-grown and well-developed. Development means strength, and strength in both male and female means strong healthy chicks. Selecting and mating breeding stock is a piece of work that requires experience and much study.

The subject of feeding both young and old stock demands the most careful attention on the part of the poultry keeper. The season of the year, quarters, feeds available and cost, all have an important bearing. But generally speaking a variety of feeds have given best results with us. Our method is to give them a drink of buttermilk when about twenty-four hours old, then for the first feed give a hard boiled egg, after this we change with dry bread crumbs or curds made from sour milk, giving what is best obtainable, a little chick grit should always be fed with the other feed, and buttermilk and fresh water should always be kept before them. When the chicks are about two weeks old they are gradually started on chick feed, which can be bought at any feed store. I prefer mixing my own chick feed which consists of 4 parts cracked wheat, 2 parts of cracked corn, 2 parts crushed oats with hulls removed, 1 part chick grit, a small amount of charcoal is also added. These parts are taken by measure not by weight. The chick feed is scattered in a litter of cut straw hence

the chicks get plenty of exercise scratching for their feed. Of course this is not so necessary when the weather is warm enough for the chicks to be outside. When about eight weeks old the chicks are given absolute free range, and when possible moved out in small, portable houses to the corn field or some other convenient place, and hopped fed. It is certainly surprising to notice the rapid growth when given free range. It is very necessary to get the pullets into their winter quarters early in the fall. Experience shows that winter egg production depends largely on the management of the pullets in the fall of the year. If they are left out too long and not fed properly they will go down in condition, and as a result there will be but few eggs until milder weather comes in the early spring. Our method of feeding laying stock has been to give a feed of 2 parts wheat 1 part corn and 1 part oats in the morning. This is buried in a deep litter, hence keeping the hens occupied most of the time which is very necessary for laying stock. Lack of exercise results in the hens becoming too fat which decreases egg production. At noon a green feed is given which varies. Cabbage, mangels, boiled potatoes, steamed alfalfa or clover leaves are preferred for the noon feed. In the evening a feed of 2 parts of corn and 2 of wheat is scattered on top of the litter but not buried. Poultry grit, oyster shell and charcoal are kept in a hopper before the hens all the time. For drink, fresh water and sour milk or buttermilk when available.

To make a success of the business the poultry-keeper must also give the housing problem due consideration. Our experience has been the smaller the flock the better will be the returns, but there are many different styles of houses recommended. The main points to consider in the construction of poultry houses are: firstly, have plenty of windows on the south side to let in the sunlight. Secondly, it must be well ventilated, but free from direct drafts. This is easily done by having three tight sides and ventilating by means of cotton screens on the south side or front of the house. Thirdly, it must be free from dampness. This is overcome by proper ventilation. Many farmers are of the opinion that hen houses should be warm. This is not necessary, usually hens in a well-ventilated house will lay more eggs than hens in a warm house because they are in a healthier condition. Over-crowding should also be avoided as hens will never do well when crowded. A safe rule to follow is to allow four square feet of floor space for each hen, or for example a house 10 by 12 feet should accommodate thirty hens.

Poultry work is clean work, and parents should encourage the boys and girls of the farm to have a little business of their own. For this nothing will be more interesting than a pen of pure-bred poultry. It is safe to start with a small pen; follow accepted practices of successful men; test untried theories in a small way; adopt the breed best suited to your own taste and to the market you wish to supply and stick to it. Study the business and stay with it and in a short time difficulties will be replaced by much pleasure and profit.

Waterloo Co., Ont. CLAYTON D. MILLER.

### Cheaper Poultry Feed.

On account of the scarcity and high price of feed the poultry industry of this country is threatened by the prospect of the wholesale slaughter of laying stock and a serious falling off in the number of pullets to be matured.

The necessity for retaining for milling every possible bushel of wheat suitable for that purpose need not be emphasized. To provide poultrymen with feed for rearing their young stock without unnecessarily lowering the supplies of milling wheat, the federal Department of Agriculture has requested millers throughout Canada to put on the market the cracked and shrunken wheat removed from grain before it is milled.

In addition to small and broken wheat these cleanings consist chiefly of the seeds of wild buckwheat, a near relative of the cultivated buckwheat. The Poultry Division of the Central Experimental Farm has used wild buckwheat in feeding experiments and reports it to be a highly satisfactory poultry feed and has ordered two cars of buckwheat screenings for the Central and Branch Experimental Farms from Canadian Government Elevators at Fort William. Fowls used to good grain do not take to it at first but when they become accustomed to it they eat it readily and do well on it.

The mill cleanings from local flour mills also contain traces of many other weed seeds, including several kinds of mustards. These, however, would not as a rule amount to more than two or three per cent. of the cleanings in the case of the standard grades of Western wheat. This material is specially recommended for backyard, suburban and professional poultrymen. On farms the cleanings from yards and poultryhouses where it had been fed would have to be disposed of so as not to disseminate noxious weeds in grain fields.

Those interested in obtaining this class of feed should immediately arrange with local mills or feed dealers for a supply. The mills cannot be expected to keep this material for poultry unless it is demanded for that purpose and that rests with the poultrymen themselves. —Dominion Dept. of Agriculture.

### Keeping Up.

EDITOR "THE FARMER'S ADVOCATE":

Tuesdays' mails are always welcome, for "The Farmer's Advocate" is still keeping up its material to an unusually high degree for a technical paper, and I read it with increasing interest each year.

B. C.

WALTER M. WRIGHT.

### Poultry Feed and Egg Situation.

During the past week reports have been received from a wide range of points. The general consensus of opinion seems to be that plenty of feed is available but extremely high in price. One typical report from Nova Scotia reads: "Feed is high in price, but lots of it." Another from New Brunswick: "Feed is high and scarce. The tendency is to reduce flocks if eggs go lower and feed higher." Prince Edward Island reports feed moderately scarce. Eastern Ontario as a whole has plenty of feed but high in price. From reports it seems feed is scarcer in Western Ontario than in Eastern. New Ontario points have plenty of feed. British Columbia has feed, but very high in price, feed wheat retailing around \$4.00 per hundred. Considerable complaint has been raised as to the quality of the feed wheat obtainable in British Columbia. From samples submitted, it would seem to be better than that available in the East.

During the past week special inquiry has been made into the availability of poultry feed at Fort William. It has been learned that large quantities of screenings and other suitable poultry feed are being regularly separated by the elevators at that point. As a rule, however, very little of this is being utilized in Canada, practically all going to the United States. It is estimated that thousands of tons of this material are available each year. It is, for the most part sold on contract to large feed manufacturers. Canadians do not see the valuable by-products they are losing.

There are also other materials available at Fort William at times that would make excellent poultry feed, such as damaged grain of one kind and another. The value of this depends, of course, upon the nature and extent of the damage.

The firmer undertone for eggs on Eastern markets, first apparent about Friday before last, seems to have gathered more strength in Toronto than in Montreal, although as yet there has not been any material change in prices reported at country points. The situation reported from Montreal at the week end was not very encouraging. At least two additional cars of Western eggs had been received. These were being offered on the market at a low figure and it looked as if there would be a still further decline in prices offered for eggs last week. Last Tuesday, however, the situation looked better, the feature of the market being the improvement of prices in England, it being reported that at least one cable offer had been received which showed an advance of several cents a dozen over the prices offered last week.

Reports from various parts of the country indicate the flush of production is past and in consequence receipts are declining rapidly at consuming centres. Prices at country points last week showed quite a wide range, producers being obliged to take as low as 25 cents at some points, in others closer to large consuming centres, prices were better, ranging from 30 to 35 cents. Egg circles in Western Ontario last week sold their eggs for the most part from 31 to 33 cents, the last named price being on the delivered basis. Prices in Eastern Ontario were lower, some circles selling as low as 29 cents.

Storage space for eggs in Montreal is practically unavailable, at least in the public warehouses. The same applies in Toronto, although the situation there is not quite as acute as in Montreal. The United States market continues firm specially so for the best packs which have become scarce owing to the effect of warmer weather. There is less difficulty in securing loans on eggs going into storage than in the earlier part of last month. Some nervousness on the part of holders of high-priced spring eggs is reported in the larger United States centres. There is, however, no disposition to force sales as yet. The United States Government Report issued June 15th, covering the first half of the month did not help matters any, as a considerable increase in holdings was reported as compared with 1916.

Many of the trade, however, have full confidence in the situation. Foodstuffs as a whole continue at an unprecedented high level. Great Britain and her Allies are largely dependent upon this continent for food, and the larger operators in the trade anticipate that even at the high price at which eggs went into storage, the surplus will all be required for export before the end of the year.

The heavy stocks and unsatisfactory demand for storage poultry still hang heavily over the market and are affecting prices of live and fresh-killed birds arriving. Receipts of old fowl are increasing, most of it alive. Prices have declined fully 2 cents per lb. during the week. Broilers and spring ducks are coming more freely, many of which are not in very good condition. Prices for these are unchanged. Old cocks are now coming on the market in larger quantities, but so far there is no change in price from previous report. Some laying hens are coming with the old fowl which shows lack of good judgment on the part of producers.

Live and fresh-killed poultry in the U. S. A. markets remain fairly steady with slight fluctuations in prices. The storage situation, however, is very much depressed and prices are gradually coming down to lower levels without any appreciable effect on sales. It is said holders are now losing money. Consumption will have to improve considerably if stocks are to be cleared before the new season's pack commences.

No movement of Canadian eggs for export has been reported during the past two weeks although with the recent advance it is quite possible some business may develop earlier than expected. Both English and Irish production is falling off and it appears that the British dealers are already beginning to look elsewhere for supplies.—From Market Report of the Dominion Department of Agriculture.