Friday, September 25, 1908



WITH THE POULTRYMAN THE MOULTING OF FOWLS



LL adult fowls moult once a year, at any time between June and November. The exact time at which it occurs is governed by many things, such as the age of the fowl, the way in which it is housed, the food it receives, and

its state of health. As a general rule, fowls which are under two years old, healthy and well fed, begin to moult in June, but when a year older the process is frequently leferred until August or September, and hens which are four or five years old frequently run into October and November before they cast their feathers. Late moulting is undesirable, because hens will not lay steadily during the period of moulting, and if they lay at all during that time it is exceptional; and it has also been observed that hens which start to moult late in the season are in bad or indifferent health, and the process with them is tedious and difficult, and, moreover, they do not produce any eggs during the winter months. Early moulting, on the other hand, is distinctly advantageous, because, if hens can get rid of their old feathers during the warm weather of July and August, they assume their new garb with great rapidity, and are in excellent condition for the following winter's laying

The duration of the moult varies greatly with different fowls, but it is in all cases a trying process, and poultry-keepers should study ways and means of getting it over as rapidly as possible, and with the minimum inconvenience to the fowls. Hens which are young and in good health will cast some of their feathers, perhaps, in June or July, but in the early stages of the moult they will not cease laying; it is not until the new feathers are growing profusely that the strain on the system is sufficient to cause cessation of egg production. With hens of this class the actual moult may take something over two months from the dropping of the first feathers until all the new coat has been assumed, yet laying may be continued all the time until the moult has been practically completed, and it is only then that a rest is taken.

Hens of three or four years old will, on the other hand, cease laying when they drop their first feathers, and will not resume for a month or more after the last new feather has grown to its full length. This means that too long a part of each year is spent in complete idleness. by the older birds of a flock, and that at a period when eggs are in greatest demand, and are fetching high prices. Consequently, the wisdom of getting rid of the old hens at a certain time every year and replacing them with pullets, will commend itself to all who keep farm poultry for profitable egg production .--Ex.

SEASONABLE HINTS

Don't think because you have a pure breed you have reached the limit. There is more difference very often in the individuals of the same breed than there is between the breeds. During six months of last year one half of our whole flock (four breeds) laid over 13,000 eggs, while the other half laid 5,000; but ten hens out of one pen laid 1,400, while another ten hens in the same pen laid 140-that is one hen laid as many as ten. Which kind is the more profitable?

the poultry yard it is different. Prices go up and down almost as regularly as if they had been fixed to remain permanent, and the poultry keeper need not worry about supply and demand. He should give his whole attention and the process may take place to the economic phases of the work.

He should endeavor to feed so as to produce the greatest possible revenue from a given quantity of feed. He should study his fowls and use every endeavor to secure the largest number of eggs from each laying hen. It is characteristic of the business of producing eggs that a shortage in the summer or an overplus in the winter does not affect prices to any great degree. This is because the law of average applies. If one poultryman's hens lay well in winter the increased supply is not large enough to lower prices, while if one flock ceases to produce in early summer other flocks go right on producing the usual summer output. This gives the individual poultryman an opportunity to conduct his business so as to get the best results by producing the largest number of eggs at a time when the prices are highest. In the poultry keeping as in any other business it is ability to see ahead which makes for success .- Ex.

POULTRY NOTES

The ground over which fowls run, if the yard is a small one, should be plowed or spaded over each year. Many of the diseases af-

the quality produced. With the products of duce gains very nearly equal to those made on that an acre of rape has a feeding value for corn, and it makes a pork of good quality, that hogs equivalent to about 40 bushels of grain, I pound of water by I degree than I pound of is, the meat is firm and not too fat, differing in this respect from corn made bacon. Wheat bushel. It may be fed either in pasture, or cut makes lean pork, not lard. Frozen wheat at and given to the hogs in pens. Prof. Day, of the Montana station where some tests were the Guelph station, recommends cutting the made, proved equal in feeding value to a mixture of wheat, barley and peas. Opinions and results differ as to whether wheat should be fed ground or whole. If unground it should be thoroughly soaked before being fed, else a ture sows, considerable amount passes off undigested. As a general rule it is best to use this grain mixed with a number of others, preferably oats and barley. It makes a pretty strong concentrated feed used alone. When so mixed it is, of course, ground.

Oats Oats are an excellent hog food, particularly are they valuable for sows and growing stock. Oats are easily digested and when ground up fine, give satisfactory results. They are used to best advantage, though, in mixture. Fed alone they have rather too large a percentage of hull and a hog's stomach during the early part of its life is not adapted for the consumption of large quantities of bulky foods. Next to bran, this grain is most commonly used for feeding sows and breeding stock. Mixed with barley, wheat and shorts, oats make meat of excellent quality and at reasonably low cost. Unground oats are not very satisfactory. Too

estimating grain at about 60 pounds to the any other substance in the soil. Thus the same rape and feeding it in small outside pens. More economical gains are made in this manner than from letting the hogs run and eat it off. Rape makes an excellent pasture for ma-

Alfalfa, Pasture and Hay

Hogs turned into a pasture of alfalfa and red clover will eat off the alfalfa first. It is almost ideal as a pasture for swine, but care must be taken not to over-stock an alfalfa plot, as the plant will not stand close cropping. Experiments show that this clover used as either pasture or hay in conjunction , with a grain ration will produce cheaper gains than any other fodder or hay crop grown. Hogs at the Oklahoma station pastured on alfalfa and fed grain required 2.2 pounds of grain to produce a pound of gain. It is equally valuable if cured and fed as hay. At the Kansas station swine fed on alfalfa hay and corn gained at the rate of 10.88 pounds per bushel of grain, while another lot, fed on corn alone, gained at the rate of 7.48 pounds per bushel of grain consumed. Alfalfa possesses a feeding value beyond the actual nutrients it contains. It large a percentage is undigested and lost. stimulates the appetite, aids digestion and Some feeders recommend scattering whole oats keeps the animal in a healthy, thrifty condithinly on the floor for breeding sows when tion.

It is more difficult to raise the temperature of amount of heat would raise the temperature of dry sand 10 degrees, dry clay 7 degrees, dry loam 7 degrees, dry muck or humus 5 degrees. and the same weight of water only I degree. A half-saturated soil is in about the best condition for tillage, for germination, and for plant germination, and, from a temperature standpoint, it is essential that the soil should not be too wet. Of the more common cereals. wheat seems to have the lowest germinating temperature at about 70 degrees, barley, oats and peas, probably in the order named, at about 80 degrees. Tests conducted over severa! years have shown that the order in which these grains should be sown is :-- 1st, wheat; 2nd, barley; 3rd, oats; and lastly, peas; and in testing six different dates of seeding at intervals of one week, it has been found that for wheat and barley the first sowing is the best, but for oats and peas the second.

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Another factor in crop production is the proper supply of air. Whether the roots actually breathe this air as the leaves do has never been decided, but the fact remains that they can no more do without it than the leaves can. But absolute exclusion of fresh air occurs only when the soil is filled with water. Soils in good state of cultivation permit sufficient change of air for all our crops but the legumes. This point has been tasted both last year and this year, and that is the conclusion arrived at. Peas, beans, clover, cow peas, vetches, etc., would all be benefited by more air than reaches the roots under ordinary conditions. This may explain why peas do so well on sod; the soil is open in texture, and allows much interchange of air.





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Her children are in this respect by was very delabout sixteen who was born med Jaime Leo-Enrique Alberto blo Maria.

Arrange for early green feed for the poultry. Winter rye makes the earliest. Sow it any time from now to the middle of Septem-

ber; the earlier it is sowed the more late pasture will there be available. Prepare the land as for wheat and sow one bushel to the acre.

If you have a piece of root ground, that is clean, and it is near the poultry plant, or can be turned into it, try some alfalfa next spring. repare it well as for grain, and sow 25 or 30 bs. of good seed an acre. What the hens do not eat can be cut and saved for winter use.

The hen that does not lay during the winter will not be profitable. The pullet that lays during September will moult before New Years, and not start to lay till March or April. The mature pullet that starts to lay the middle of November or December will probably lay all winter.

ADVANTAGES OF POULTRY KEEPING

cotton, farm produce of any kind, is likely to

wing through a wide arc in consecutive years,

prices being made on demand or according to

The poultry keeper above all other business men has the advantage of having for sale a product which is saleable every day in the year in any part of the country. There is no own so small, no village so remote that poultry and eggs are not in demand at all times, and in many instances the more remote the own the better the prices. The poultry keeper has also the advantage of being able to oretell within a narrow range what price he will obtain for his produce. He knows that at certain times he will be able to get high prices and at other times prices are very likely to fall. He knows that year after year certain price curves will be found in the market quotations and these will not vary widely in any series of years. The price of beef, mutton, pork, wool,

fecting poultry are carried over from year to maintenance and not rapid growth is desired, year in the soil.

AROUND THE FARM THE FEEDING VALUE OF CERTAIN GRAINS AND FODDER FOR HOGS

Barley F the grains ordinarily used in hog feeding barley is the most common. This cereal is one of the best pork making foods available in this country. In the matter of making gains it is rather less valuable than corn, but since corn has not yet

become a staple grain crop on the Canadian prairies, nor yet produced pork equal in quality to that made from barley mixed with certain other grains, its use need not be considered. Barley makes a well balanced feed for growing hogs. It contains the elements essential to animal growth in very nearly the proper proportion. It gives good results in hogs after they have attained some growth, but it should be fed very sparingly to sows suckling pigs, and used only in small quantities until the pigs are three months of age or better. It is the better for being finely ground and well soaked before feeding. Experiments conducted at Ottawa show that when barley is fed unground 12.5 per cent passes through the animal undigested and is, of course, practically lost.

Wheat

Wheat ordinarily is not used as a hog food. It is only when grain prices are unusually low or wheat unfit for milling is available, that this cereal is used much as hog feed. Around cleaning elevators wheat screenings may always be obtained and these, unless too large a portion of the stuff is weed seed, may be fed profitably. As a feed for hogs wheat will pro-

Peas Somehow or other the impression seems to

prevail all over the continent and in England, that the field pea is the staple hog food of Canada. Canadian pea fed bacon is frequently referred to, but as a matter of fact peas are used less than any other grain in hog feeding. In eastern Canada they are too uncertain a crop. Out here we have not yet the habit of growing them. They are rich in protein, containing something like 23 per cent., but are somewhat hard to digest. While they give good results used alone, peas are always the better for being mixed with some of the other lighter grains, such as barley or oats.

Sugar Beets and Mangels

Both these roots may be used in hog feeding, and with advantage too, as results at the Guelph, Ottawa, and certain American stations show. Hogs prefer beets to any other form of roots. Mangels have a rather lower feeding value than sugar beets but have practically the same effect on the hog and the quality of pork produced. As a general rule when roots are fed.at all, too large a proportion of the ration is made up of this material. They should be fed to growing stock in about equal parts by weight, roots and grain. For young pigs a smaller proportion of roots to meal will be found preferable. Older hogs, sows and boars, may be given five or six times the weight of roots as grain and will do very well.

Rape

Experiments show that this is an exceptionally valuable food for swine. At the Ontario agricultural college a bunch of hogs was given about two-thirds grain ration and all the rape they could eat. The results were highly satisfactory. Good gains were made and made more economically than on a full grain ration. At the Wisconsin station tests it was shown

SHIPPING VICTORIA FRUIT TO MANITOBA

Some idea of the growth of the fruit-growing and shipping industry may be gleaned from the illustration published on this page. It shows part of two carloads of fruit shipped in one day by the Victoria Fruit Growers' Association. The boxes, as seen in the picture, are piled on the street in front of the warehouse on Yates street, ready to be taken to the cars.

The shipment was composed of apples, pears, prunes and tomatoes, 1800 boxes in all. The illustration is characteristic of many. such days this season. The association is now shipping one car every two days of fruit grown in Victoria district, and its hold on the Northwest fruit market is now unmistakable.

Rapid progress is being made in the industry in this district. Packing-houses have now been established in all the fruit districts of the Island, and these have proven their value by making it possible for the fruit to be shipped away in excellent condition. Mr. Maxwell Smith, fruit inspector, recently congratulated the association on the quality of its fruit, commenting on the excellent way in which it was packed, both in boxes and in cars.

SOIL TEMPERATURE AND VENTILA-TION

This is an important soil factor. A wet soil is a cold soil, while a dry soil is a warm one. The seed bed of a well-drained, welltilled soil will be 5 to 15 degrees warmer than of a poorly-drained, poorly-tilled one. The reason for this is found in two facts, as explained by Mr. W. Day, Lecturer of Physics at Ontario Agricultural College. It rests on the behavior of different substances toward heat.

ned soil over the undrained. Proper tillage increases the efficiency of all these agencies of aeration.

FALL AND WINTER FEED FOR SHEEP

So long as there is a fair supply of grass, little else is needed for the flock, though some additional feed may be supplied with advantage as the pastures begin to fail. For the transition from pasture to winter feed, there should be in readiness some succulent crop on which the flock may be folded for a few hours daily until fully accustomed to the change, after which they may remain on the ground all the time. For this purpose, rape forms a re-liable crop. Care is necessary not to allow too free access at first, as when wet with dew or rain there is danger of bloating; but such troubles may be avoided by keeping the flock on a near-by pasture and turning into the rape patch for a few hours daily during the middle of the day, returning to the pasture in the evening. Later the sheep may be allowed to remain in the rape patch all the time, confining them during the night in the portion previously eaten off, and supplying a small feed of hay in racks.

Following rape, a patch of turnips, to be eaten off on the ground, with an allowance of hay, will put the flock in good condition for going into winter quarters. For the winter ration, as far as roughage goes, there is none better than good clover hay, though corn fodder, oat or barley straw may be used also with good results. In England, where the climatic conditions admit of wintering the flocks in the open, roots form the greater portion of the diet. These and clover hay will supply all needed nutriment, though the addition of grain such as oats, bran and corn, will benefit. Corn, however, should form but a small portion of the ration for breeding ewes.

Ensilage, though not generally fed to sheep, has been used with success by many in wintering their flocks, and no doubt by judicious use of this succulent food and even a small daily ration of roots, better results would be obtained than in feeding an entirely dry ra-tion. Wintering the flocks on straw and a little hay, without grain or roots of any kind, is certain to perpetuate a degenerated animal.