

## HOW TO HANDLE EARLY MOLTERS

BY GEORGE A. PHILLIPS.

Few hens lay while they are going through a complete molt, and as it is not desirable to have hens stop laying in July or early August to take on a coat of new feathers which will not be needed for protection before November or December, let us see whether there is anything that can be done about the early-molting hen.

Since modern culling methods have come into vogue, considerable attention has been given to the time of molting as an index to the laying ability of a hen. Unfortunately for the peace of mind of poultry keepers in general, contradictory conclusions have been published by different investigators.

Most of the experimental data show that early molting indicates an inferior laying record. Folks are beginning to see, though, that early molting, particularly where most hens in the flock molt early, is often caused by mismanagement, and is not necessarily a sign of poor laying ability. In talking of early molters, we must distinguish between partial molt and complete molt.

The degree of molt can usually be determined by examining the primary feathers in the wing. These feathers drop out one at a time, or at least only a few at a time, and several weeks' time is required for all the wing feathers to be molted. As a rule, when a wing feather is dropped it is replaced by the new feather coming in.

Normally, from seven to fourteen days elapse from the time one primary feather is dropped until the next one goes, with an average of probably ten days. Approximately four weeks are required for a wing feather to get its full growth, and a fairly definite idea of how long a hen has been molting, and what per cent of her feathers have been changed, can be had by studying the wings.

Careful observation will show that many of the hens which show new feathers over the back and neck have molted only two or three wing fea-

thers. This means that they are out of laying condition for possibly three or four weeks, and have undergone a partial molt. If conditions are favorable, these hens are likely to lay well during most of the fall, but will, in most cases, undergo a complete molt before winter.

Hens that have brooded chicks will undergo a partial molt before starting to lay, but if properly handled will lay well in the fall.

On many farms the feed is reduced for the fowls after the grass comes; after laying heavily for a few weeks a majority of the birds grow thin in flesh, stop laying, and begin to molt. Then, when harvest comes, if the birds have access to the grain-fields or stacks, they commonly pick up on flesh, the molt will be stopped, and the hens will begin to lay.

Long periods of excessively hot weather, severe attacks of lice or mites, carelessness in allowing broody hens to stay on nest too long before they are broken up—these are causes of partial molts which make hens quit laying for several weeks during the middle of the summer.

The above causes explain why some hens that apparently molt early are fairly good layers if given a good chance. But there are hens which are poor layers by inheritance, and which begin to molt in July and prolong the process until about November. These hens lay few if any fall or winter eggs, and these are the hens the poultry keeper should be on the lookout for; there are enough of these in most flocks to make it worth while to suspect early molters.

A good rule in culling, to get rid of the early molters, is to give the entire flock at least four weeks of regular and liberal feeding on a ration consisting of grain and laying mash; then sell the ones that do not show by the redness of their combs, the flexibility of the abdomen, and the spread of the pin-bones, that they are laying, or are about ready to start laying. A loafing hen puts no money in your pocket.

### The Advantage of Thinning.

The harvest season is a good time to check up on many things particularly on the results of thinning.

One important aspect of the question which is seldom heard discussed and which is difficult, perhaps impossible, to estimate accurately, is the time the grower saves in picking and packing a crop of thinned fruit as against that required for an equal volume of fruit from unthinned trees.

In many discussions of the practice of thinning fruit, and certainly in the minds of most fruit growers, the charge is made and should be charged with the total cost of the job. Though, as a matter of fact, it is probable that we get back in the increased speed which is possible with thinned fruit more than the cost of thinning.

This greater speed is due to two different factors. First, the smaller number of fruits per bushel, owing to the greater average size of the individual fruits; and second, to the fact that a very large percentage of the imperfect specimens have been removed in thinning and there is much less probability of poor stuff getting by the operator when he speeds up.

The Experiment Station which has done the best work on this question of thinning apples, has this to say on the phase of the question here under discussion:

"It has been found in this thinning work, that if trees were heavily loaded, the cost of thinning could not fairly be charged against the thinned trees.

"Different factors, such as the following, offset this charge in such cases: In the first place, the fruit taken off at thinning time would have to be picked at picking time anyway, and it would cost as much to remove it then as it would at thinning time. This was the case with the Ben Davis in 1914 when the thinned trees had from 1,000 to 1,600 more apples per tree to be picked. Even with this additional fruit there was then less than half as great a total marketable yield as there was from the thinned trees bearing the smaller number of apples.

"Second, it cost considerably more in sorting to remove the large number of culls from the unthinned trees and after the sorting these culls were then not saleable. Thus in this case no charge could be made for thinning. Even in the case of thinning young nine-year-old Baldwin, it cost 35 per cent more to pick the unthinned trees. Here again the sorting cost was increased with more unsalable apples from the unthinned trees.

"In most cases where thinning is necessary, only a small part, if any, of the cost of thinning can be charged against the thinned trees."

### The Septic Tank.

The septic tank is doing its part to increase the average life of man. Have you built yours yet, or have you other sanitary means of sewage disposal? August is a good month in which to do this work. Bulletin and working plan "blue print" supplied by Dept. of Physics, O.A.C., Guelph, to anyone desiring to build a septic tank.

Have a compost heap and keep it growing day by day.

### House Early, Pullets Fly.

We are approaching the season when early-hatched pullets should be put again in their early laying quarters.

Now is a good time to feed these early-maturing pullets all of the grain they will eat, and if mash is given them see that it has a lot of corn meal in it, for a couple of weeks at least—possibly 15 per cent of yellow corn meal. The idea is to put as much flesh on them as possible to enable them to carry through the rigorous production period just beginning. When put in the laying house see that each one is treated with blue ointment or sodium fluoride for body lice.

Also be sure that the perches and perch supports, nests and drooping boards are painted with a good oil, wood-penetrating, mit-killing paint, for during August the mites are troublesome and the best practice is to make the house absolutely immune from them.

### Watch for Bumblefoot.

Bumblefoot is a quite common and frequently serious menace to the health and behavior of chickens. As the name indicates, it consists of a swelling of the foot, caused by bruises or injury and resulting in a pus pocket forming under the bottom of the foot which, if not treated properly, will develop rapidly, until lameness and possible permanent injury result. Bumblefoot is especially prevalent in the hot, dry weather of mid-summer, when birds are allowed any run on gravelly, bare ground.

If the poultry yards can be seeded down to a permanent sod, there will be fewer injuries from this trouble. During the hot days of midsummer, if the yards are bare, plowing them once every other week or cultivating them once every other week, will go a long way toward keeping them in a better sanitary condition and reducing the danger of injury to the birds' feet.

### Who Was the Joke On?

A farmer had just built a big barn. One day as he was setting off for town he told his two boys to cut a small hole in one of the sides so that the cat could get in or out at will. The boys cut a hole just beside the big barn door, but when the farmer returned and saw it he was much displeased.

"Why can't I depend on you boys to do a single thing right?" he exclaimed angrily. "Don't you know that hole is in the wrong place?"

"Why?" asked the boys. The farmer fairly snorted. Leaping from the buggy, he seized the barn door and swung it open and, of course, it covered the aperture. "Now where is your cat hole?" he shouted. "How in the name of sense can the cat get into the barn when the door's open?"

### Protect Machinery.

Note repairs needed on farm equipment when through using tools. Clean, oil and store machines out of the weather. This practice lengthens the life of a machine and prevents delays when it is to be used.



Allan Falconer, champion Canadian rider. With the title, he got the saddle, a loving cup and \$1,000.

## CAN GIRLS RAISE PIGS?

BY VERA M. DEAN.

When I was nine years of age I was a very sick little girl. I had to stay home from school a great deal, until the doctor told me to spend as much time as possible in the open.

Dad got me interested in helping him on our 240-acre farm. There were all kinds of chores to do—calves, pigs, horses and cows to take care of, besides berries and bees.

However, pigs were my choice. The pig is one of the cleanest and most intelligent animals on the farm if it's given a chance. Besides, pigs increase faster and make quicker profits and work more other projects in club work and am deeply interested in all of them, but pigs make my biggest profits and help increase my bank account.

When I wasn't much older than eleven an old bearded friend of my father's was over to see us. I told him about my interest in pigs, but he only smiled. I think I have raised enough of them now not to be far wrong when I say that girls can be more successful than boys in the raising of hogs. Girls usually take more pains and time in keeping hogs and their quarters more sanitary, and look after the minor ailments with closer attention.

One morning my father found one of his best Berkshire sows dead after farrowing eleven little pigs. Five of them were still alive. He gave them to me and I took them to the house and fed them warm milk with a teaspoon.

In a few days they learn to eat from a shallow pan. They were kept in an old washbowl near the stove at night and were carried out into the open and sun in the daytime.

They grew fast and a grass lot was provided for them. Their main ration was milk with ground oats, and weeds from the garden. I gave them a clean place to sleep and washed them with disinfectant to keep them free from lice and their skin clean.

When fall time came, I exhibited three of them at our County Fair and won two firsts and one second, selling two of the male pigs at \$85 and \$75 each. Since then I have won many

ribbons and cash prizes to the amount of \$1,803.25, besides many other trophies and free trips.

But showing alone was not the height of my ambition. I wanted to make a real business out of it. I did, most important thing to make one successful in the pig business. Here is my summary of how to do it:

Skin-milk and whey, with plenty of green pasture—alfalfa, sweet clover, red clover, blue-grass and fresh-pulled weeds of all kinds. Greens cut the feeding cost in two and make better pork and breeding animals. For concentrates feed ground oats and standard middings with a little oilmeal, salt and wood-ashes added. Feed sparingly and regularly four times a day. My experience is that any other animal care more than that.

Can a girl who is successful in the Pig Club Project be successful in canning? Why not? Last year while I was in the show-ring showing some of my dandy prize-winning pigs, I was challenged by my competitors, that a girl who could be successful at raising and showing hogs could not be successful in canning and sewing. Upon hearing this remark, I decided I would show them that a girl can work the two projects together successfully.

On March 1, I signed up in the canning project, my motto being, "Can all you can, show them you can," and at the end of the contest, I had canned 1,269 pints of fruit, meat and vegetables, and no doubt would have canned more but I divided my time with my three other projects, demonstration team and county leadership.

In sewing I completed 29 articles and garments inside of three months. Not knowing anything about sewing when I started, I feel that it has taught me a lot.

So in conclusion, when any one asks me, "Can girls and women be successful in raising hogs?" I point to my rack of ribbons and other prizes and say, "I certainly believe they can!"

### Forcing the Molt.

The only reason for forcing a flock of hens to molt early would be the expectation of getting the flock back into production while egg prices are high in the early winter.

The theory is fine, but it is difficult to work out in practice. It is a simple matter to force the molt at almost any time that may be desired, but it is by no means easy to bring the flock so handled back into high production during cold weather.

It is, of course, more or less unnatural for hens to lay during the winter months. It is only by providing comfortable quarters, stimulating feeds and an environment that to some extent approaches spring conditions that one is able to get high

winter egg production. In general, the problem is made more difficult rather than simplified when an early molt of all females is induced.

Unless one is able to use artificial light, so as to give the hens a winter working day thirteen or fourteen hours long, the chances are not very good for increasing the total yearly income by means of a forced early molt. It is usually more profitable to carry a sufficiently high percentage of pullets in the flock to furnish the necessary winter egg yield.

Real Realism. Artist—"This is my latest picture. Builders at Work. It's very realistic."

Friend—"But they are not at work!" Artist—"Yes, that's realistic!"

## A QUESTION OF CLOTHES

BY L. W. KING.

My friend from down East is having a wonderful journey; it is her first vacation in many years and she is enjoying it to the utmost. From every city she visits she sends me enthusiastic post cards, so that I can follow and enjoy with her all of the novel sights and good times. On her way my friend stopped with me for a day and a night, and we had one of those delightful visits that only two women who have known each other for years can experience.

I was so pleased to help her unpack her pretty dresses and hang them away, to listen to her newsworthy chatter about other good friends, to set our supper table out under the trees at the edge of the garden, and later to sit there in the moonlight gossiping long after all the windows in my neighbors' houses were dark.

We exchanged views on every subject under the sun, from politics to recipes, and of course the question of clothes was given not a little consideration.

"I thought at one time I was not going to be able to make this trip," said my friend. "I felt that I could not afford both the journey and the new clothes I would need for it, and so I became discouraged, and almost decided to stay at home."

"But you managed the new clothes in some way, didn't you?" I replied; for no woman could ask for a more suitable wardrobe.

"Yes, I managed, but not with new clothes; just furnished up my old things and made them do."

"Of course I wanted to know all about it and, as we are old friends, she told me.

"First of all," she began, "I laid out all the clothes I possessed and looked them over and made a list of them. Then I made up my mind which could be made presentable, and decided to concentrate on them. I discovered all sorts of ways in which they could be freshened up; new and attractive collars and cuffs did it for some of them, a change in the waistline made a wonderful difference in others, some of the skirts I shortened to conform to the latest mode and then I managed an ensemble costume from an old tailored suit that I feel is quite an achievement."

"I remodeled the sleeves in several good but unfashionable dresses and brought them up to date in other ways. And do you know I had almost as much fun fixing over my old things as though I were planning a whole new wardrobe?"

"While I worked I discovered many things that are going to prove very valuable to me in the future. One is that it is very foolish to let the question of clothes interfere with one's chances for a good time, and another that it isn't necessary to follow all of fashion's whims in order to be well dressed. Becoming lines and colors, distinctive little trimming details and simplicity now seem to me the very foundation stones to a well-bred, smart appearance."

And when I saw my friend off at the train the next morning, garbed in her cleverly remodeled dress, with its crisp, becoming collar and cuffs, her simple hat and neat shoes, I knew that she was right. Becomingness is the most important quality a woman's clothes can possess.

### The Horse in Hot Weather.

Water often when the heat is intense, a little at a time if horse is warm; don't water too soon after feeding, and always at night after horse has eaten his supper.

When the sun is hot let horse breathe once in a while in the shade of some house or tree. Anything upon the head, to keep off the sun, is bad for the horse unless it is kept wet, or unless the air can circulate freely underneath it.

If horse stops sweating suddenly, or acts strangely, breathes short and quick, or if ears droop, get him into the shade at once, remove harness and bridle, wash out his mouth, sponge all over, shower legs, and give him two ounces of aromatic spirits of ammonia, or two ounces of sweet spirit of nitre in a pint of water, or a pint of warm coffee. Cool head at once, using cold water or if necessary chopped ice wrapped in a cloth.

A hot night in a narrow stall neither properly cleaned nor bedded, unfits the horse for work. Turning the hose on the horse is too risky a thing to do unless you are looking for a sick horse. Spraying the legs and feet when he is not too warm on a hot day will be agreeable to him.

Sponge out the eyes nose and dock when the horse comes in tired and dusty at night with clean cool water, and also sponge under the collar and saddle of the harness.



GIRLISH AND SIMPLE.

Juniors' frocks in bright prints and plain colors, for afternoon or play, are charming with short kimono sleeves and little boyish collars or low necks. A sash of contrasting-color ribbon is tucked beneath side plaits, which form a panel effect in the front, tying in a large bow at the back, and is the only trimming. The diagram pictures the simplicity of Pattern No. 1138, which is in sizes 4, 6, 8 and 10 years. Size 8 years requires 1 1/2 yards of 36-inch or 40-inch material. Price 20 cents.

Home sewing brings nice clothes within the reach of all, and to follow the mode is delightful when it can be done so easily and economically, by following the styles pictured in our new Fashion Book. A chart accompanying each pattern shows the material as it appears when cut out. Every detail is explained so that the inexperienced sewer can make without difficulty an attractive dress. Price of the book 10 cents the copy. Each copy includes one coupon good for five cents in the purchase of any pattern.

### HOW TO ORDER PATTERNS.

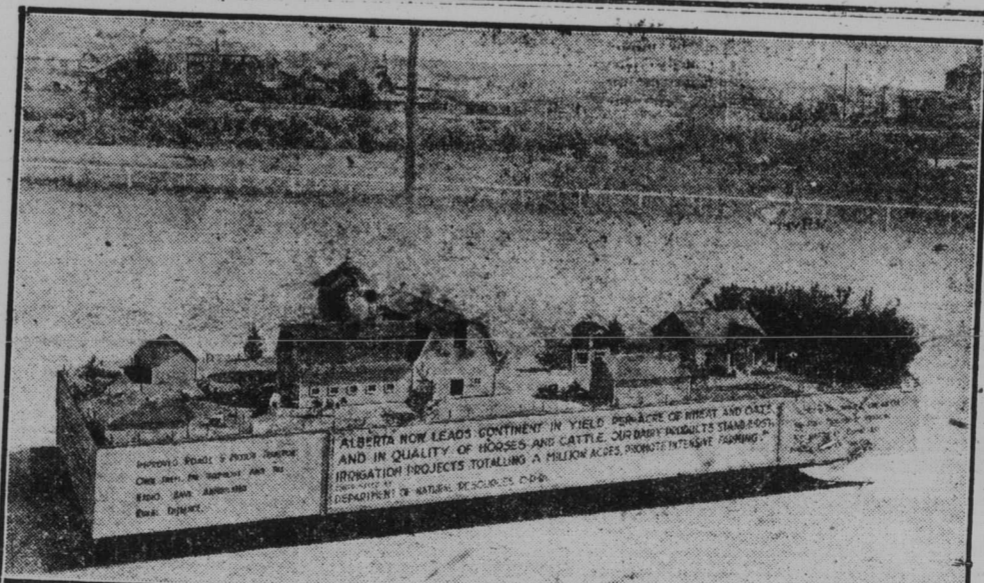
Write your name and address plainly, giving number and size of such patterns as you want. Enclose 20c in stamps or coin (coin preferred; wrap it carefully) for each number, and address your order to Pattern Dept., Wilson Publishing Co., 73 West Adelaide St., Toronto. Patterns sent by return mail.

### Polluted Well Water.

If doubtful of your farm water supply send a small sample to the Bacteriological Dept., O.A.C. for examination and advice. At this time of year, when wells are low, contamination is frequently found. Boiling doubtful water for drinking purposes is always good practice, so is also the treating of same with chloride of lime.

### What a Cynic!

Tired Business Man—"I'd like to go where I'd be entirely cut off from the world." Friend—"Why don't you try a tele- phone booth, old man?"



A FARM WHICH WALKED DOWN MAIN STREET

Above is one of the Canadian Pacific floats which took part recently in a procession at the Calgary stampede and was regarded as the most unique feature of the parade. It is a complete model of a farm and besides the usual buildings, and livestock, shows such details as a radio aerial stretching from the barn to the farm-house, an automobile entering a garage, farm implements and all the paraphernalia customarily associated with modern farm yards. The float was prepared and contributed by the Department of Natural Resources of the Canadian Pacific Ry.