

N. W. Sanborn, a well known writer on poultry diseases in the W. S. He says :

"So many birds pass through the moulting process with difficulty, if not disease, that it is well to call attention to it. Moulting is done during the late summer and fall months when the weather is warm. A moulting hen is easily fattened. Hence, at this time of the year, feed lightly of those foods which produces fat. Corn, cornmeal, middlings, potatoes, must be used sparingly. Increase the amount of green bone, bran and skim-milk. A run in a field of clover will be of help in moulting. Keep all males by themselves during the moulting season. If hens are not well fed at this period of their life they may learn the habit of feather pulling or egg eating. They should be housed so as to give them shelter from the hot sun or cold storms. Hens during moult lay few eggs. Birds should go into moult not fat, free from lice and with no red mites in the house."

From the foregoing quotation it will be seen that the laying stock during their moult require more attention than is usually bestowed upon them. In too many barn yards the sight may be seen of hens dragging through the late fall or early winter with few feathers on their bodies and the birds themselves very much out of condition. Hens in such a plight are not likely to be early winter layers, but are more likely to be non revenue producers during the winter months of high prices.

Shortening the moulting period.

To have hens begin to lay in late October, or beginning of winter and continue to do so during the season of high prices should be the aim of the farmer. And such can only be attained by *fowls which have moulted early and gone into winter quarters in perfect condition*, that is neither too fat nor too lean. By the month of November all the fowls should be over their moult and beginning to lay. Such a desirable result can only be arrived at by complying with certain conditions. What are they? We enumerate them as follows :

10. The hens must not be over two years of age.

20. They require a run in a field, or fields, where they can find grass, clover, insect life, etc.

30. Cut bone, cooked livers, beef heads (the latter broken up) etc. etc., should be fed at regular times. Where the laying stock are confined to

limited quarters it is imperative that they be supplied with meat in some shape.

At the Experimental Farm, for three or four years past, early moulting has been secured and in the year 1896 we had 943 eggs laid in November and 1466 in December from an estimated number of 120 hens, of proper age. We had 204 hens in all, but some were kept for breeding stock and reliable setters. We calculated that we had at the beginning of November 120 layers, consisting of early pullets, and one and two year old hens. All expert poultry keepers will at once realise that only fowls which had gone into winter quarters in proper condition could have laid the number of eggs mentioned in the months named.

How early moulting was brought about at the Experimental farm.

The treatment of the farm laying stock so as to secure an early moult, for some years past has been as follows :

10. At the beginning of July, the breeding hens were broken up and the male birds were removed to a separate building. The hens were then allowed to run promiscuously in small fields in rear of the poultry buildings.

20. During the month of July the hens were fed twice a day, with an occasional light feed at noon. Wheat was principally used. When buckwheat was fed it was mixed with oats.

30. During August a mash composed of ground grains and deodorized blood meal, the latter in the proportion of one ounce to every ten hens, was fed three mornings of the week, with a light feed at noon, and a more liberal grain ration for last meal. It should be stated that the blood meal was tried as an experiment and did not seem to be so satisfactory as cut bone. Occasionally a feed of cut bone was given. The mash was sometimes mixed with milk.

40. Towards the end of October the feeding of cut bone was resumed in the proportion of one pound to 15 hens, three times a week. Previous to this period the noon ration had been dropped, as the new feathers had fairly well grown and to prevent the hens from getting too fat.

5. In November a small quantity of cut bone was fed every day, principally in the morning. Vegetables or roots were always before the fowls. After the cut bone was fed in the morning, a few full hands of grain were thrown into the litter on the floor, so as to start the layers exercising in searching for it. Grain was fed at noon ration.