

## FEEDING HENS FOR EGG PRODUCTION

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Success in the farm poultry business depends largely upon the egg production. Every successful poultryman strives to increase the egg production of his flock, because experience has taught that the high-producing hens are the profitable ones. There are several factors that tend to control production; the most important one in Ohio is feeding. The Department of Poultry Husbandry of the Ohio State University has been collecting data from Ohio farms for four years. These data give the feed cost and the kind of feed consumed by the poultry flocks on several hundred farms. The records clearly show that the poultry income or profit is in direct proportion to the egg production; they show also that the high-producing, profitable flocks are all being fed a balanced ration, and that the low-producing, unprofitable flocks are being fed a poorly balanced ration or one containing only grain.

The following rations are recommended as meeting all the requirements for egg production:

### THE OHIO STATE RATIONS FOR LAYING HENS

#### No. 1

<i>Scratch</i>	<i>Mash</i>
200 lbs. shelled or cracked corn	100 lbs. cornmeal
100 lbs. wheat or heavy oats	100 lbs. ground oats (heavy oats)
	100 lbs. wheat middlings
	100 lbs. wheat bran
	100 lbs. meat scraps or tankage

#### No. 2

100 lbs. shelled or cracked corn	200 lbs. cornmeal
100 lbs. wheat	100 lbs. ground wheat
100 lbs. oats	100 lbs. ground oats (heavy oats)
(If oats is light, substitute corn or wheat)	100 lbs. meat scraps or tankage

In the scratch feed the oats may be eliminated when quality is poor, and either corn or wheat substituted. Ten percent of the scratch may be composed of barley, if available.

In mash formula No. 1 the ground oats may be eliminated if of poor quality, and an equal amount of cornmeal substituted. In mash No. 2, equal quantities of bran and middlings may be substituted for the ground oats, when they are poor in quality.

Milk is the best food available for keeping the hens in condition. If 4 gallons milk per day is available for each 100 hens the meat scraps or tankage in the mash may be reduced. If only a limited amount of milk is available, it is not advisable to reduce the meat scraps or tankage.

## METHOD OF FEEDING

**Grain Feed.**—The grain should be fed morning and evening. It should be scattered by hand in a deep litter of straw during the winter time to induce exercise; this is not important during the spring and summer months when the hens are on range.

**Mash Feed.**—The mash should be fed in self-feeders or open boxes in order that the hens may have access to it at all times. There should be approximately 2 inches of space allowed for each hen at the mash boxes. The lack of feeding space often limits the consumption of mash and this reduces the egg production. Wet mashes may be fed as a means of increasing the consumption of feed and is advised to hasten the development of late pullets, or to keep up summer production. It should be moistened with milk or water until crumbly and fed in the middle of the day. Care should be taken not to overfeed of this wet mash—usually what will be cleaned up in from 10 to 15 minutes is enough.

## AMOUNT OF FEED REQUIRED

The amount of feed varies with every flock and varies from day to day even with the same flock. The grain feeding should be light in the morning. If any grain remains in the litter after 9 or 10 o'clock it indicates that too much was fed. The night feeding of grain should be fed as late as the hens can see to eat and they should be given every grain they will eat. "Send them to roost with a full crop" is a statement often heard and is good advice.

The amount of mash consumed varies with the production and the season. In general the hens should consume as much mash as grain. If too much grain is fed in the morning the hens will not consume a large amount of mash. It is often necessary to force the hens to eat the mash by eliminating or reducing the morning feeding of grain; this is especially true of the heavier breeds, and is recommended for all breeds from July to September as a means of keeping up summer production.

## SEASONAL FEEDING

During the winter months more corn can be fed than in the spring and summer. This increase or decrease of corn in the ration is easily managed by observing the hens eat. If they pick all the wheat or oats out of the scratch and leave the corn, more wheat or oats should be fed. It is not necessary or advisable to change the mash. The scratch feed can be changed at any time just so the consumption is kept up. Experiments conducted at the Ohio Experiment Station show that changing the scratch feed increased the production, and no bad effects were noticed where this change was abrupt, rather than by degrees, as has been common practice.

## ESSENTIALS IN THE RATION

**Green Feed.**—Green feed is an aid to egg production at all seasons of the year, and should be supplied in the winter time to the breeding flock. This is absolutely essential in order to secure high fertility and good hatches. Sprouted oats, cabbage, and beets may be used.

**Water.**—This is one of the most essential parts of the poultry ration and should be kept before the hens at all times unless milk is used as the sole source of animal protein. A hen consumes over 100 pounds of water in a year. One dozen eggs contain about 1 pint of water.

**Oyster Shell.**—The shell of an egg must come from material the hen eats. Oyster shell is recommended for this part of the feed. It should be kept before the hens at all times.

**Grit.**—Clean gravel or limestone grit should be kept before the hens at all times.