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G81-538-A

NebGuide

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Brooding and Rearing the Home Meat Flock

This NebGuide discusses raising chickens for meat.

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- Housing and Equipment
- Breed Selection
- Pre-Brooding Management
- Brooding Management
- Alternate Meat Classes

The objective of owning and raising a home flock should be to satisfy needs other than income production. For example, many people prefer fryer-type chickens of heavier weights to the lighter weight ranges available in many stores. Product freshness is the objective of some home flock owners; others are interested in the small flock in much the same way that some people are interested in a garden. A well-managed home flock can be a good source of fresh poultry meat. However, home flock producers should not plan to raise more birds than their family, friends or neighbors can use either live or dressed.

Economically, commercial broiler production in the southeastern United States is tough competition for the home flock owner in Nebraska. There is no commercial production in the state, and consequently no organized live market for broilers. Commercial producers can ship in dressed birds at a price difficult to match with a home flock.

Housing and Equipment

NebGuide *G80-530, Brooder Houses and Equipment for the Home Flock*, provides more detail on this subject. Ask your county agent for a copy. Almost any small building with enough floor space for the size of flock desired can be used (*Table I*). Housing and equipment requirements for raising poultry can be minimal for late spring through early fall. Winter flocks require much better housing and equipment. A small number of chicks can even be brooded in a corner of the garage in the late spring. Poultry meat birds are most efficiently raised in total confinement.

Brooding, feeding and watering equipment are available from feed and farm supply stores or mail order

houses. Much of it can be home built, however. Sizes and heights of feeders should be changed as birds grow so they can eat easily without wasting feed. Hanging tube-type feeders that are adjustable in height can be used. Place a platform under water fountains to avoid wet litter. Automatic waterers save labor even with small flocks.

Table I. Space requirements for the home flock.			
Floor Space Per Bird			
Age (Weeks)		***Sq Ft***	
0-4		1/2	
4-8		1*	
8-12		2	
12 or older		3	
Feeder Space Per 100 Chicks**			
Total Linear Space		***Number of Feeders and Length***	
Age (Weeks)	*Ft*	*No.*	*Ft*
0-4	12	2	3
4-8	20	2	5
8-12	30	3	5
12 or older	40	4	5
Waterer Space Per 100 Chicks***			
Total Linear Space		***Number of Waterers and Volume***	
Age (Weeks)	*In*	*No.*	*Gal*
0-4	40	6	1/4
4-8	50	2	2
8 or older	100	2	5

* A 10' x 10' brooder house is adequate for 100 chicks until 8 weeks of age.
** Always keep feeder lip at the height of the birds' back. When round hanging feeders are used, the linear space required can be reduced by 30 percent.
*** Automatic waterers may be used after the first week.

Breed Selection

Buy chicks from a reputable hatchery. Take advantage of buying from a local source if they provide quality chicks, information and service to their customers.

The most economical meat production comes from the commercial meat strains developed from breeds such as the Cornish, Plymouth Rock and New Hampshire. These crosses and hybrids have been bred for the most efficient conversion of feed to meat. They feather rapidly and mature early. Some purebreed birds are used for home flock meat production, but they generally don't grow as rapidly as the crosses or hybrids, and take more feed. Leghorn males make very poor and costly meat, even when they are

obtained free. Meat-type chicks are usually purchased on a straight-run (males and females mixed) basis.

Various classes of meat birds can be raised from the same commercial strains. The broiler or fryer is normally slaughtered at seven to nine weeks when it weighs 3 to 4 pounds and will dress 2 to 3 pounds. The same birds slaughtered at five or six weeks can be used as Cornish game hens. They can be grown to 12 to 14 weeks or longer to make roasters. The males can be caponized at four to five weeks and grown to 18 to 21 weeks as capons.

Pre-Brooding Management

The house and equipment should be thoroughly cleaned and disinfected before starting new chicks. Use scrapers, brooms and water to remove old litter and adhering dirt from the building and equipment. Clean and disinfect the ceiling, walls and floor of the house. Let it dry thoroughly before putting down new litter. Clean and disinfect all equipment, including feeders, waterers and brooders.

Repair windows, doors, ventilators or any part of the brooder house needing attention. Eliminate any drafts, especially those caused by cracks in the walls or poorly fitting doors and windows. Cover the floors with 3 to 4 inches of dry litter. Use wood shavings, chopped corn cobs, chopped oat straw, sawdust, or any other material that is readily available, economical and has good moisture absorbency.

A chick guard (a circular fence 12 to 18 inches high) should be used to confine birds near the brooder. Some people cover the litter for the first few days of brooding. Rough, crinkled paper should be used for this purpose as smooth paper causes chicks to slip and develop spraddled legs. Molds will develop if the paper is left on the litter for more than three or four days. The chick guard can be removed after seven to 10 days.

Check all equipment to see that it is working properly. Operate brooder stoves for at least 24 hours before the chicks arrive. This will warm and dry the house and let you check the accuracy of brooder controls. Feed and water can be put out a few hours before the chicks arrive.

Light. A 15-watt bulb for each 200 square feet of floor area should be kept on at night for the first week. After this time, the lighting system to use depends on the type of building and the amount of natural light that is available. Growing birds do best with 14 to 16 hours of constant light. Either morning or evening lights can be used.

Roosts. Roosts are not necessary for growing meat birds.

Brooding Management

In the 24 hours before the chicks arrive, adjust the brooder stove to 90 to 95 °F, 2 inches above the litter at the edge of the hover. Maintain this temperature for the first week. At the end of the first week and each week thereafter, drop the temperature five degrees until 70°F is reached. Watch the chicks as a guide to their comfort. If they crowd together under the brooder, increase the heat. If they move away from the heat source, lower the temperature.

If infrared lamps are used, raise the lamps when the chicks appear to be warm and lower them when they appear to be cool. Normally, lamps should be set 18 inches high the first week and then raised 3 inches per week. Lamps should never be closer than 15 inches to the litter. Suspend lamps with a chain or wire, not the electric cord. The use of more than one lamp is recommended so that the chicks will not be without heat if a lamp burns out.

Provide plenty of fresh air for the chicks. Do not close the house tightly to keep it warm. The warm area under the brooder is all the chicks need, if it is adjusted as recommended. Chicks need fresh air for oxygen and to carry moisture out of the house. The floor will be drier and the chicks healthier when ventilation without drafts is provided.

Keep the litter dry. This is important to help prevent diseases and to keep the birds growing. Stirring the litter frequently helps to keep it dry. Adding some hydrated lime just before stirring will also help. It is sometimes necessary to remove wet clumps that accumulate around the waterers and feeders and add clean litter.

Young chicks and growing birds should be protected and isolated from other animals and birds. Cats, rodents and numerous wild animals will kill young chicks. They also spread disease and parasites and can contaminate and consume large amounts of feed while being destructive to the building.

Feed and Water. Keep feed and water before the chicks at all times. Clean waterers frequently and keep the area around them dry. After the first few days, prevent feed wastage by filling the feeders no more than half full.

A complete feed is most convenient for the home flock. Farms that have adequate mixing facilities for other livestock can use a commercial concentrate mixed with home grains. Follow your feed supplier's directions for mixing the concentrate and grains. Chicks will not grow well if they are only fed a grain diet. They need vitamins, minerals and amino acids that must come from non-grain feed ingredients.

A starting mash containing approximately 22 percent protein is usually fed for the first six weeks. It is a good idea then to switch to an 18 to 20 percent broiler finisher until market time. The starter mash may contain an antibiotic for the first 10 days to help chicks get a good start. A coccidiostat (drug used to control coccidiosis) should be used in the ration continuously throughout the growing period.

Cannibalism and Disease Control. Birds are subject to cannibalism anytime they are confined, and often when they run free. If possible, buy chicks that have been debeaked at the hatchery. If they have not been debeaked, watch for early signs of feather picking. Debeak birds before cannibalism becomes an established habit by clipping off the tip of the upper beak with a dog's toenail clipper or an electric debeaking machine.

Always feed a coccidiostat in the ration throughout the growing period and keep the litter dry. Isolation from other birds and animals is also important. If different ages of chickens are present, separate the flocks as much as possible and care for the younger birds first. It is easier to control diseases and parasites if birds are kept confined and separated by ages. Adjust ventilation to avoid moisture and ammonia buildup in the house. Clean waterers daily and periodically wash them with a sanitizing solution.

Alternate Meat Classes

Birds raised under these feeding and management conditions can be slaughtered at five to six weeks for Cornish game hens. Seven to nine weeks will produce a broiler or fryer, depending on the weights desired. A few birds from the flock can be kept for heavier weights and used as roasters.

Meat-type cockerels can be caponized, which requires delicate surgery, at four to five weeks and raised to five or six months of age. Capons must be kept to this age to attain the extra weight and fatness desired over roasters. During the growing period (8 to 12 weeks), feed costs can be reduced with a lower

energy feed (about 16 to 17 percent protein) by replacing part or all of the corn with milo or oats. If these changes can't be made easily, a 16 percent protein pullet grower can be used. This allows the birds to develop more fully before reaching the heavier weights. Birds fed for rapid gain during this period may be more prone to leg weakness and breast blisters. After 13 weeks, capons can be switched back to higher energy feeds with 15 to 16 percent protein. They can now be pushed for maximum weight gain. Cracked corn can be supplied to capons and roasters in the afternoon after changing from the starter mash. Gradually increase the grain at 12 to 15 weeks until the birds are receiving equal amounts of corn and broiler finisher mash.

Breast blisters can be a problem in roaster and capon production. They are caused by an irritation of the keel bone from contact with wet litter and equipment. Maintaining good litter conditions, preventing overcrowding, using equipment that does not have sharp edges, and feeding to develop good body structures before heavy weights are reached can all help to reduce the incidence of breast blisters.

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