



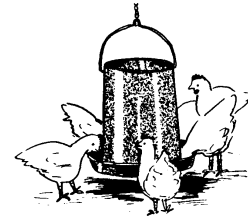
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BACKYARD FLOCK TIP . . .



BROODING BASICS FOR BACKYARD FLOCKS - TEMPERATURE

Backyard flocks can be comprised of several avian species which could include chickens, turkeys, quail and waterfowl. While the species listed differ in many ways, brooding methods are similar for many birds. These are that heat, feed, water and adequate ventilation must be provided. The hatchling needs extra attention for the first 2 to 4 weeks depending on the species. The importance of these early weeks cannot be stressed enough as some of the organ systems are still maturing during the first few weeks of life and disease resistance is being developed. Inadequate care during this period could stress the young bird, which might result in improper development and result in poor performance, or even death. Water should be provided at all times. A general rule of thumb is that birds will consume twice as much water as feed. For a review on feed refer to the September tip which mentions starter diets. The current article will focus on brooding temperature.

Brooding is the period of time when supplemental heat must be provided to hatchlings to help them maintain body temperature. Young birds are unable to maintain their body temperature during the first weeks of life and are dependent on environmental heat. Young birds are called *poikilothermic* because they can not maintain body temperature, which will fluctuate depending on the environmental temperature. Many species do not become *homeothermic* (able to maintain a constant body temperature independent of environmental temperature) until 2 to 4 weeks after hatching. Often the ability to maintain constant body temperature is associated with the growth of feathers that provide better insulation than the down that a hatchling is born with.

The new hatchlings should be kept inside a building where temperatures can be regulated. The temperature under the brooder (heat source) for the first week should be 85-90°F for chickens and quail, 100-105°F for turkeys and 90-92°F for water fowl. After the first week the temperature is dropped 5°F per week for chickens, quail and turkeys.

PUTTING KNOWLEDGE TO WORK

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For water fowl good success has been achieved by reducing the temperature 1°F every 2 days until reaching ambient temperature. Some birds become homeothermic sooner than others. Chickens and quail will become homeothermic in 2 to 3 weeks whereas turkeys take up to 4 weeks. It is important to allow adequate space around the brooder for the young bird to find its comfort zone. If it is too hot, a bird will move away from the brooder to a cooler area that fits its comfort zone (Figure 1).

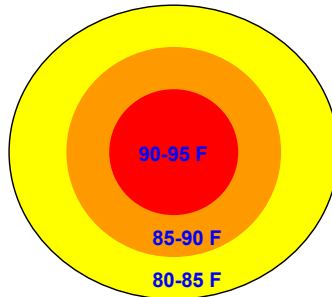


Figure 1. Demonstration of how a bird can find a comfort zone around a heat source.

A poultry owner should watch the birds closely during the first few weeks because the bird behavior will indicate the need for more or less heat (Figure 2). When most of the birds huddle under the brooder, it will indicate that more heat is needed. When they tend to stay at areas as far away from the brooder as possible, it may indicate that too much heat is being provided and the heat source thermostat should be reduced. In conditions where the temperature is just right one can see the birds remaining just outside the area of the brooder.

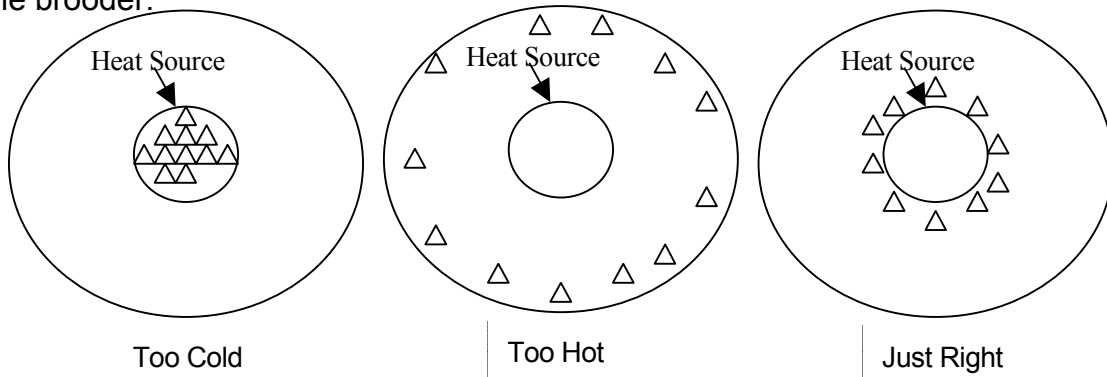


Figure 2. Illustrations of how birds can indicate whether the temperature is set right.

In summary, the provision of adequate water, feed and heat during the first few weeks after hatching is critical to getting a healthy, thriving flock off to a good start. Poultry owners that focus on these management basics during the first two weeks of age minimize stresses on the birds. This provides the best opportunity for the bird to mature to the point that it can maintain its own body temperature and grow into a healthy member of a backyard flock.

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