

Brooding Poultry Hatchlings

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To ensure that your new flocks gets off to a good start it is important to have the appropriate equipment and knowledge of the needs of young birds.

Equipment

- **Shelter:** It is important to provide a clean, dry area for your hatchlings that will protect them from predators, cold and rain, and hot sun. Almost any small building that meets the floor-space requirement for the size of the flock can be used. It is even possible to raise a small number of hatchlings in the corner of a garage.
- **Bedding Material:** Provide **bedding material**, or litter, for your hatchlings that will absorb moisture from the manure and keep the brooding area clean. A variety of materials can be used as bedding material, including wood shavings (most effective), ground corn cobs, peanut and rice hulls, and hay or straw that has been chopped into smaller pieces. Note that unchopped hay or straw is ineffective as a bedding material. Never place hatchlings on a slick surface such as cardboard, plastic, or newspaper; smooth surfaces can lead to leg problems.
 - For more information about bedding material, refer to the article "[Litter Material for Small and Backyard Poultry Flocks](#)."
- **Heat Source:** You must provide your hatchlings with a heat source, typically a **brooder** or a heat lamp, because hatchlings are not able to regulate their own body temperature for the first few weeks of life. There are many different heat sources that can be adapted for use in small flocks.
 - Standard **hover brooders** can be used for a flock of up to 1,000 chicks.
 - For smaller flocks an **infrared heat lamp** is more practical. Suspend the lamp with a chain or wire (do not use the electrical cord) so that the lamp is at least 18 in. above the bedding material. In winter, it is important to make sure the space where you keep your hatchlings is insulated so that heat lamps can keep the area sufficiently warm. A two-lamp unit provides a backup in case one lamp burns out during cold weather. Before installing a heat lamp, make sure that you have porcelain sockets approved for these lamps, and be sure that the lamp cannot fall to the ground, where it could become a fire hazard.
- **Brooder Guard:** For the first seven to ten days after hatching, use a circular barrier called a **brooder guard** to confine hatchlings. The brooder guard should be about 15 to 16 in. high. Most brooder guards are made of cardboard. The brooder guard prevents the hatchlings from wandering too far from the heat source and reduces drafts of cold air. The area surrounded by the brooder guard should be large enough for hatchlings to move toward or away from the heat source to find their temperature comfort zone. When the hatchlings are seven days old, the brooder guard can be removed.

- **Feeding and Watering Equipment:** Young poultry require feeding and watering equipment designed to accommodate their small size.
 - Hatchlings do not have an innate ability to recognize food. They will peck at small particles, nutritious or not. When hatchlings are raised with their mothers, their attention is directed towards nutritious items as they follow their mothers. Especially when raising hatchlings without their mothers, you must have feed readily available for young birds. For the first day or two after the hatchlings' arrival, put feed in a shallow pan or egg carton without a lid, which will make it easy for the hatchlings to find the food. As the hatchlings get older, provide bigger feeders.
 - Chick **waterers** (also called **drinkers**) are available commercially and typically consist of a gallon or quart jar that you fill and then invert and screw onto a special base, which the hatchlings drink from. Consider the size of the young when selecting waterer bases. Small Bantam chicks and Bantam ducklings will be less likely to become soaked and chilled if waterer bases are the the appropriate size for Bantams. The height of the waterers should be 2 in. shorter than the back height of the hatchlings. Make sure the hatchlings have continuous access to clean water.
 - Most feeders and waterers designed for chickens can be used for ducks, as long as the size of the duck's bill is taken into consideration.

Preparation

Take the following actions to prepare the brooding area for hatchlings:

- Clean and disinfect the poultry house or brooding area, feeders, and waterers at least two weeks before hatchlings are due to arrive.
- Repair windows, doors, ventilators, or any part of the poultry house or brooding area that needs attention.
 - Eliminate any drafts, especially those caused by cracks in the walls or poorly fitting doors and windows.
- Put down the bedding material two days before hatchlings are due to arrive.
- Turn on the heat lamp or brooder the day before hatchlings are due to arrive. This will give the brooding area time to warm up.

When Hatchlings Arrive

- The first thing that the birds will need when they arrive is water. Dip the beaks of the birds into the water source to teach them where the water is. This is particularly important for turkey poults.
- Fill the feeders to overflowing for the first two days after the hatchlings arrive. To prevent feed waste, reduce the level of feed as the birds get older.
- To give the birds time to find feeders and waterers, provide hatchlings with light around the clock for the first week after their arrival. After the first week, provide the number of hours of light per day that is appropriate for the type of bird you are raising. A 15 watt light bulb should be sufficient for each 200 sq. ft. of floor area.

Temperature

Provide supplemental heat until the hatchlings are well feathered. Birds are more likely to develop respiratory problems if heat is removed too early. In winter, heat should be continued for the first six weeks after birds arrive, even if the birds are fully feathered, to prevent waterfowl from freezing. During summer brooding, take steps to keep the temperature below 95°F for hatchlings.

- When using a brooder, set the initial temperature at 90°F to 95°F, measuring the temperature 2 in. above the floor, under the edge of the hover. Reduce the temperature by 5°F each week until supplemental heat is no longer required. The hatchlings themselves are the best indicators of their comfort. If the hatchlings crowd together under the brooder, they are cold, and you should increase the heat. If the hatchlings try to get as far away from the brooder as possible, the heat needs to be reduced.
- When you use an infrared lamp, the chicks will tell you whether the temperature is appropriate by moving toward or away from the heat source. Because radiation from an infrared lamp does not warm the air but only the objects at which it is directed, measuring air temperature is not a good indication of bird comfort. If hatchlings require more warmth, increase the heat by lowering the lamp (no lower than 15 in. from the bedding material) or use additional lamps or lamps with higher wattages. To reduce the heat, turn off the lamp, use a smaller lamp, or raise the lamp to a maximum height of about 24 in. above the bedding material. Each week, decrease supplemental heat by raising the heat lamp 2 in. until it reaches a maximum height of 24 in.

Issues Specific to Waterfowl

Waterfowl can be brooded much like chickens, with a few special precautions:

- Although no hatchlings should be placed on slippery bedding material, having appropriate bedding material is particularly important for waterfowl. Slippery surfaces can result in **spraddled legs**. Paper towels, cloth, or burlap provides the best traction.
- Do not raise waterfowl on mesh wire. Small waterfowl can get their **hocks** stuck in the mesh wire when they sit down to rest.
- Do not let young waterfowl swim or become excessively wet for the first four weeks of life. Young birds that become wet chill easily, and when chilled, they tend to crowd together and flip onto their backs, resulting in death.
- Do not feed medicated chicken feed or feeds for other poultry to young waterfowl. Waterfowl can have adverse reactions to some poultry medications. If possible, use a starter feed that has been formulated for waterfowl. Pelleted feeds are usually best as waterfowl tend to waste feed, especially when it is finely ground into mash.
- Ducklings do not require as high a brooding temperature as chicks. At hatch ducklings require a temperature of about 86°F. The temperature can be reduced by 5°F each week until it reaches 55°F. High temperatures may result in slow feathering and reduced growth. By four weeks of age, ducklings should be fully feathered.

For More Information

[Managing a Family Chicken Flock](#). Jesse Lyons, University of Missouri

[Brooding and Rearing the Home Meat Flock](#). Earl Gleaves, University of Nebraska

[Rearing Chicks and Pullets for the Small Laying Flock](#). Melvin Hamre, University of Minnesota

[Management Requirements for Waterfowl](#). Phillip Clauer, Virginia Tech

How to Keep a Small Poultry Flock. Ron Parker, New Mexico State University

Guide to raising healthy chickens (English; Spanish). Adam Hady and Ron Kean, University of Wisconsin.