

## Brooders and Incubators

### Start your chick's life out right with these tools of the trade

*By Susan Chamberlain*

Two key tools for any bird breeder are a brooder and an incubator. While a brooder may possibly be used to incubate eggs, an incubator is unsuitable for use as a brooder.

#### Incubators

An incubator holds and maintains eggs in a climate-controlled atmosphere until they hatch. The ideal incubator, of course, is the hen. Her body temperature is perfected by nature for her eggs. Artificial incubation may be necessary if parent birds break or neglect the eggs. When my Senegals were first getting started, the hen laid her eggs while perched on a swing. Breeders often elect to remove the eggs from the nest and place them in incubators. This is done to guarantee the safety of the eggs and sometimes to stimulate further laying in order to increase the number of babies produced.

Sometimes eggs may be fostered under a different hen, but because each species has unique requirements for humidity and temperature, a hen of the same species is preferable. This is important upon hatching as well, because a hen might not accept a chick of another species.

Humidity levels play a crucial role in incubation as well. According to Brinsea Incubation Specialists' literature, 35- to 45-percent humidity is required for parrot species. When my Senegal parrots were incubating their eggs, the female would occasionally emerge from the nest box, wet her breast feathers and return to the eggs. Movement is essential, too. The eggs must be tended and turned in order to keep them viable, so you'll often hear the birds moving the eggs about inside the nest box.

There are incubators available to suit every level of breeding. Many feature temperature, turning, humidity and ventilation controls. There are three-egg models designed for educational purposes, tabletop units for small-scale or hobby breeders and large capacity incubators for commercial breeding facilities, zoological parks and farms.

Automatic egg turners are optional on some models, standard on others. Eggs are turned in several different ways, including manually, in tilting trays, on rollers or on moving conveyors. Temperature controls may be manual, electronic solid state or digital, and some can be calibrated for fractions of a degree. Some units feature back-up thermostats and alarms for overheating or cooling.

#### Brooders

A brooder provides a climate-controlled environment for baby birds, which need sufficient heat in order to survive. Without proper warmth, the chicks will not eat or digest their food properly.

After the chicks are removed from the nest, usually at several weeks of age, they are placed in a brooder to be hand-raised. Younger birds may be housed in brooders if their parents reject them or if the breeder wants to begin hand-feeding them at an earlier stage.

Brooders and incubators have come a long way from the light bulb in a cardboard box and the heating pad under a layer of newspaper in a fish tank. Although many breeders and pet owners were successful with these and other makeshift methods, difficulties in regulating the heat made it hard to maintain a constant, comfortable temperature for the birds inside.

Today, there are state-of-the-art brooders developed especially for use with exotic birds; some of these have even been adapted for use as hospital and nebulizer units for sick birds and as portable, climate-regulated avian travel containers that can be plugged into power outlets in automobiles or campers. Digital controls, Celsius and Fahrenheit readings, humidity controls, displays and even security codes so that settings cannot be accidentally changed have been incorporated into some of today's brooders.

Janelle Crandell of Avitech Exotic Birds breeds birds and markets products for other breeders and pet bird hobbyists. Crandell has several pointers for choosing a brooder. "Make sure the brooder has an electronic temperature control or thermostat," she said. "Most units on the market now are easy to clean and disinfect, and that's important. A vent for fresh air allows air circulation and prevents overheating. Go for simplicity: no nooks, crannies or crevices where bacteria or fungus can hide."

Brenda Piper, who breeds dark-eyed green, blue, pallid and pallid-blue quaker parakeets at her home in Massachusetts advised, “Get recommendations from breeders you know and trust, especially those who breed the same species you want to use the brooder for. If you are specializing in a certain species, get the appropriate size and type of brooder for that species. For instance, you wouldn’t want a small brooder for baby macaws.”

Joe Freed of Petiatric.com has been making and selling avian pediatric supplies since 1986, and he too recommends shopping around. “Go to the nearest bird club or avian veterinarian, and ask what products they’re using,” Freed said. “Some products are designed to sell but simply don’t work. Look for something that cools or shuts off upon failure instead of heating to the maximum. Word of mouth is the best reference.

“Ask about service after the purchase; look for a company that backs up its warranty. Almost every brooder works when it comes out of the box; it’s year after year that you have to concern yourself with. Anyone who has had a brooder or incubator for any period of time will know if they can rely on the unit and the company.”