

Assisting the Hatch

by Jenni Jackson
Loxahatchee, FL

Most of the time, we aviculturists are fortunate enough to have our breeder birds hatch their own chicks. Sometimes, though, they do not sit on their eggs for the full incubation period so artificial incubation is required. At those times, we may have to give Mother Nature a little help with the hatch.

There are many reasons for assisting hatches. I have experience with many of these problems, including thick membrane, hard shell, and drying out of the membrane. This article does not deal with malpositioned chicks, but rather chicks that are in normal position and hopefully can be saved.

There may be instances where the membrane is abnormally thick, collapses prematurely, and smothers the chick. Often, an egg has an abnormally hard shell, and the chick is unable to pip out, except for a tiny area. If a tiny area is pipped, there is often a drying out of the membrane, and the chick can pip no further. All of these situations require careful human intervention.

Assisting Mother Nature with hatching takes a very aggressive approach. This is not something to be taken lightly. It requires skill and a lot of patience. Sometimes it is the only way to save a fully developed and overdue chick still in the egg. It is important to keep in mind that the chick may not be "meant to be," but human intervention is often successful.

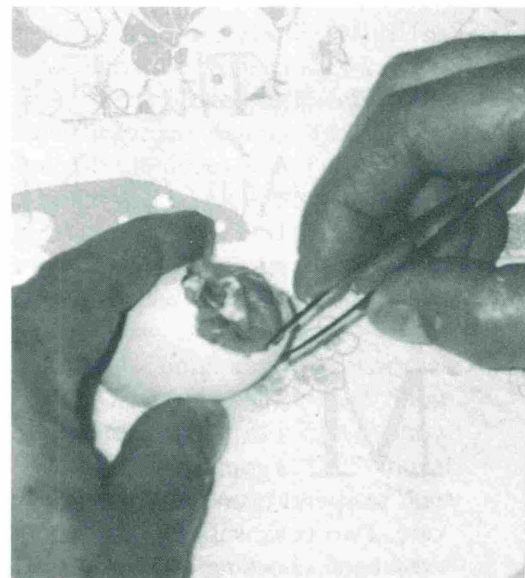
A good candling light will help to determine the need for human intervention in the hatch. Other articles necessary to be properly prepared for assisting the hatch include a heatlamp, tweezers, Q-tips, toothpicks, a small jar of warm sterile water, a sandwich-sized baggie, paper towels, a hatching

dish with a stabilizing medium to keep the egg from rocking. An eight-ounce deli cup is a good hatching dish because it is small enough to hold the egg and still fit inside the baggie. Tissues, paper towel, or commercial paper substrate will stabilize the egg.

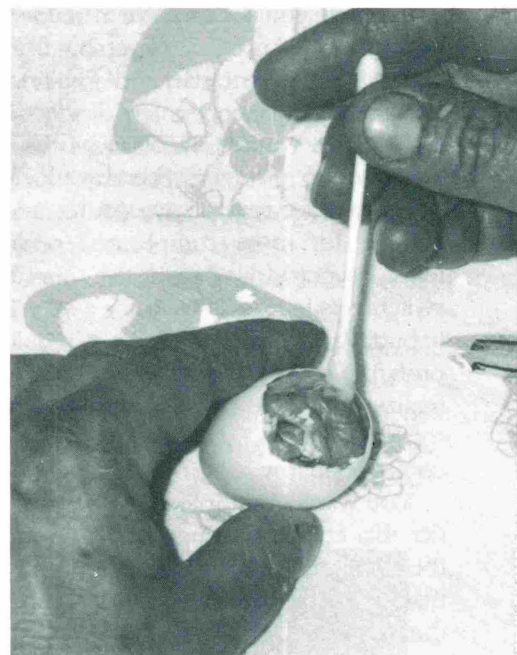
Preparation is of extreme importance. Before you even attempt to do anything with the egg, make sure that you have the work area ready. Have the heatlamp operational on the work area. Have the tweezers sterilized and the Q-tips and toothpicks accessible. The small jar of warm, sterile water should be readily available, as well as the baggie and a paper towel. It is a good idea to have a magnifying glass available, too, especially if you do not use reading glasses but should.

By this time, you should have determined if indeed the chick is in need of assistance in hatching. Are you sure of the date the egg was laid and the due date? Once you start the process of assisting the hatch, there is no turning back. If you are absolutely certain that the egg is overdue, and you are able to see movement within the shell and hear chirping, you need to intervene.

The following procedures should be performed under a heatlamp to prevent the egg from chilling. Determine the position of the air cell by candling. With the tweezers, make a small hole in the shell over the top end of the air cell. Hopefully you will hear a sudden chirp. You can then slowly peel off the shell over the air cell until you are able to observe a portion of the chick's body. The chick will most likely be encased in white membrane. With a Q-tip dipped in warm, sterile water, dab the membrane to moisten it enough to make it transpar-



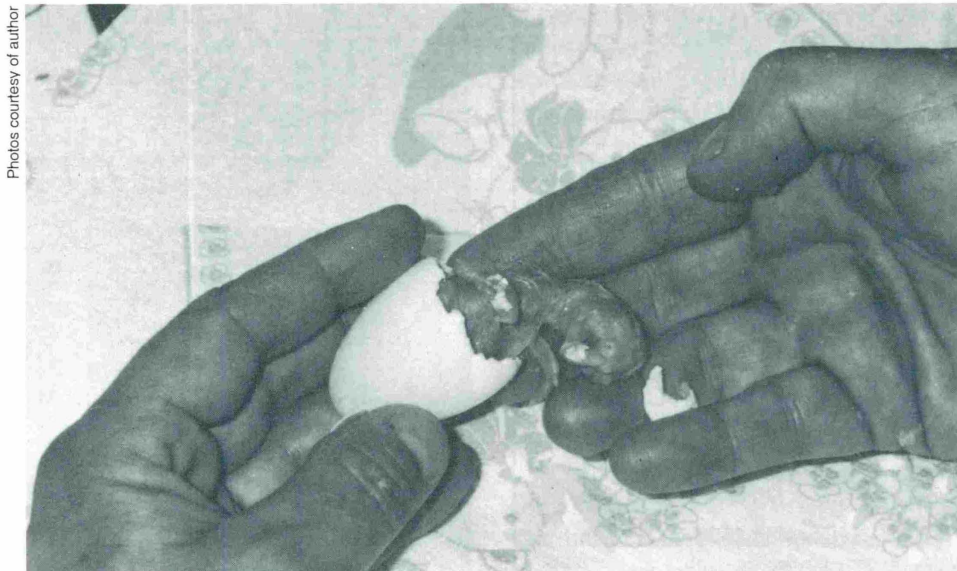
After organizing the supplies, begin carefully peeling away the shell with tweezers.



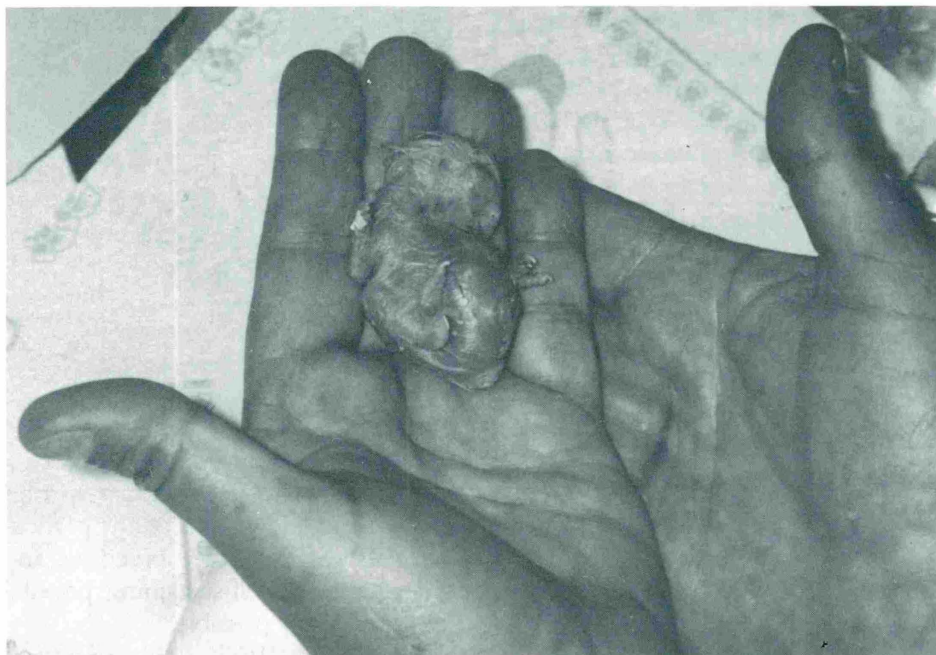
Dab membrane to moisten it, making it transparent.

ent. If blood vessels are apparent in the membrane, stop immediately and take a deep breath. This is one of the most critical points, as a broken blood vessel will likely drain the life from the chick rapidly.

At this point, air supply to the beak must be evaluated. The feeling of the warm moisture from the Q-tip usually causes the chick to open and close its beak, allowing the beak position to be determined. If there is an opening in the membrane that will allow airflow into the beak, this is time to stop assisting the hatch until the blood vessels are no longer visible. If the membrane



The struggling chick now can make a final push and slide out.



It was worth the effort.... for the new chick and its assistant!

covering the beak is entirely sealed, an airway must be established or the chick will smother.


Observe closely the location of any blood vessels in the membrane around the beak, and locate a space between the upper and lower mandibles where there are no blood vessels. With the toothpick, slowly puncture a small hole through the membrane. The hole should expand a little on its own once the membrane has been punctured, so it should allow an adequate airway for the chick for the next few hours.

The next few hours give you time to relax from the stress of what just hap-

pened, and allows time for the blood vessels to dissipate. The egg should be placed in the hatching dish, which is then placed inside the sandwich baggie. Half of a paper towel saturated with water is placed in the baggie underneath the hatching dish, and the bag is sealed most of the way, leaving the last inch of the seal open to assure adequate air supply. This is to provide some humidity to prevent the membrane from drying out too much before the blood vessels have receded. The bagged egg then goes back into the incubator or hatcher.

Check for blood vessels in about

three hours, using a fresh Q-tip and fresh warm water. If blood vessels are still observed, put the egg back in the hatcher for a couple of more hours. Continue to check until no blood vessels are seen. The moistened membrane can then be slowly peeled away from the chick's body, and more of the eggshell can be removed. Once the head and shoulders of the chick are free, he will be able to give a push with his feet and slide out of the egg. There is nothing more gratifying than the feel of a newly-hatched chick in the palm of your hand.

[Editor's Note: This article reflects the experiences of the author. It is not intended as a "do-it-yourself" guide to a complex avicultural procedure. The assistance of an avian veterinarian is always a good idea if possible. If you are completely on your own and compelled to act, perhaps this article may help. SLD] 

Lifetime Membership

\$1,000

Installment \$100/month
for 12 months.

Installment plan available with
Credit Card payment only.

Regular Membership

Individual - \$30

Family - \$35

Supporting - \$50*

Commercial - \$100*

*Supporting, Commercial and Lifetime Members
receive Fast News/Fast Ads by 1st Class Mail.

Name

Address

City

State & Zip

Phone

Fax or E mail

MC/VISA #

Expiration Date

American Federation of Aviculture

P.O. Box 56218, Phoenix, AZ 85079-6218
phone 602-484-0931 • fax 602-484-0109