



Embryology Tips!

Steps to having a Successful Hatch

City of Alexandria Extension Office

1108 Jefferson Street
Alexandria, VA 22314
Ph: 703-746-5546 /
Fax: 703-684-5285
E-mail: rbmorris@vt.edu

Get Ready

1. One week before eggs arrive clean and test your incubator. Use a 25% bleach solution and a damp rag to clean the incubator. Do not use harsh cleansing products that contain ammonia to clean the incubator.
2. Two days before your eggs arrive, set up your incubator. Locate it in a place that is...
 - at least 6 inches away from the edge of a surface to prevent being knocked over,
 - out of direct sunlight or drafts,
 - will be heated to at least 65°F at all times,
 - on a sturdy level surface, and
 - plugged in to an electrical outlet that is always “on”.
3. Make sure your incubator is set to the correct temperature. Forced air incubators should maintain a temperature of 99.5 – 100.5° F and still air incubators should hold a temperature of 100.5 - 101.5°F. The incubator should also have at least 60% humidity.
4. Leave the incubator on in preparation for the eggs.
5. Decide who will care for the eggs on the weekends during this project.

Get Set

1. Remember to wash your hands before and after touching the eggs.
2. After you get your eggs, candle them to make sure there are no cracked shells or double yolks.
3. Mark eggs with a number on the large end of the egg using a pencil or wax crayon. This is done to...
 - Track individual egg progress
4. Mark the sides of the egg with an “X” and an “O” using a pencil or wax crayon. This is done to...
 - Remember if you’ve turned the egg during the day.
5. Let eggs come to room temperature for two hours before putting them in the incubator.
 - If you can’t put your eggs in the incubator on the day you pick them up, store them between 50-60° F—don’t put them in the refrigerator!
 - If you put the eggs in the incubator in the late afternoon, your Day One begins the following morning.
6. Put eggs in the incubator with the “O” end down and the “X” end up.
7. Do not adjust the temperature during the first 48 hours. The eggs will begin to give off heat as they develop.



Get Incubating

1. Wash your hands before and after handling the eggs.
2. Record the room and incubator temperature in the morning and evening.
3. Remember to turn the eggs (gently) 3 times per day and initial the record sheet
 - Note: On weekends it is OK to turn the eggs only once per day.
4. Mist the eggs or add warm water to the water dish to keep humidity levels within range each day.
5. Record the humidity each day.
6. On days 7, 14, and 18 candle the eggs to view the development of the embryo.
7. On day 18 stop turning the eggs.
8. On day 18 until the hatch, keep the humidity between 65-70%.
9. On day 20 cover the water dish with cheesecloth or a very thin rag to prevent shell and down from falling in to the water during the hatch.
10. On day 20 prepare the brooder for the chicks.
 - Add paper towels or shavings to the bottom to protect the chicks' weak legs
 - Add a jar lid, small dish, or small tuna can with marbles for water
 - Prepare a dish for food
 - Locate a heat source (lamp, light bulb, or other source)
 - Add a thermometer—brooder temp should be around 95°F.

Get Pipping

1. Chicks should start to "Pip" out on day 21. You may begin to hear the chicks peep on day 20.
2. When chicks start to hatch, remove the back plug on your incubator to help with the excessive humidity.
3. Do not "help" chicks hatch out of their eggs.
4. Chicks should stay in the incubator until their fluff is dry (usually 2-6 hours).
 - If a chick hatches overnight it is OK to keep it in the incubator for a maximum of 6-12 hours.
5. Move chicks to the brooder in groups of 2 and 3.
6. Feed chicks with a chick starter that is at least 18-22% protein.
7. Keep water available in the brooder box.
8. Clean the brooder box daily.

