

Introduction and Embryology

3 Week Study Program

Check list:

_____ On Tuesday beginning your 3 week study, you will pick up your Incubator, Chick Care Kit, and your eggs to be hatched (they will be fertilized eggs that have not been preset for you). After you have picked up your Incubator, you will want to plug in the incubator and make sure it is turning from side to side every 2-4 hours (different turners vary in timing). Some of the new incubators have electronic thermostats; these are wonderful because they are preset. No adjusting needed. The older incubators have an adjustable thermostat that may need to be set manually. Refer to troubleshooting guides on the website (<http://extension.missouri.edu/cole/4hchicks.aspx>) for additional instructions. **Be sure your incubator is plugged in; running at the correct temperature and water reservoir is full. Mark this date on the calendar.**

_____ Approximately on the 10th day, you will be able to candle the eggs to check development. You can try sooner but the vein network is difficult to see until about the 2nd week. An infertile egg will look clear. A viable 10 day incubation will have a vein system that runs throughout the egg and along the interior of the shell. An egg that has ceased to continue growing will have distinct dark ring or dark spot that free floats in the albumin. At this time a break out project can help determine when the egg may have stopped growing. If at any point you would like additional break out eggs for the project contact the Extension Office.

_____ On the 19th day, take the eggs out of the turner and lay them on the wire mesh in the bottom of the incubator. They no longer need to be turned. Prepare your chick home. A moderate size box with pine shavings, heat lamp with 75 watt bulb, feeder and water makes a nice brooder box. Refer to the Care of Chicks section of the handbook for additional information.

_____ On approximately the 20th day, you may begin to hear the chicks peeping (cheeping) inside their shell.

_____ On approximately the 21st day the chicks will peck a small hole in the egg. The eggs that have a small hole are now piped. Most chicks will hatch within the first 12 hours. It can sometimes take up to 24 hours. If the chicks seem to be “stuck” or sticky in the shell, add more moisture by putting the handi-wipes provided around the eggs. Check the water reservoir to make sure the water is not covered with the down or hatching debris from the chicks. Down or

chaff is a fine feather dust that is created as the chicks dry off. This can coat the top of the water and maybe retarding the evaporation. Chicks require a high level of humidity during hatching. If the remaining eggs have not hatched within 30 hours of the first egg that hatched, they will more than likely not hatch. Discard remaining eggs or do a break out project to determine the cause of death and the approximate age of the chick at the time of death.

Temperature fluctuation in the incubator can cause an early or delayed hatch. Be sure to check the temperature frequently to make sure it is holding at or very near 99.5 degrees. Do not adjust the temperature too often. One degree above or below the correct temperature at a constant is going to give a better hatch than the temperature fluctuating. Check to make sure there is water in the tray before you adjust the temperature. A dry incubator runs at a hotter temperature. As the eggs mature you may also see a slight rise in temperature. The chicks start to produce body heat of their own about the 15th day.

_____ Friday, ending your 3 week program, have the incubator and chick kit clean and ready to be returned to the Extension Office. You may use diluted bleach water to clean the incubator. Do not submerge any electrical parts. Water will damage the thermostat and heater. They can be wiped down with a damp cloth. Please return a clean incubator. There will be a charge of \$50 to clean any incubator that is returned dirty.

If at any time you have questions or concerns please call the Extension office. If you are unable to find homes for the chicks, you can return them to the Extension office with your incubator and supplies. We have made arrangements for the chicks to be taken to a good home.

DAILY CHECK:

***TEMPERATURE AT 99-101 DEGREES**

***WATER IN THE BOTTOM RESEVOIR**

***TURNER WORKING CORRECTLY**

All of these things will greatly influence the success of your hatch!!!