



USING A SLIDE PROJECTOR TO MAKE A SIMPLE EGG CANDLER

Dave Hillmann, Cornell Cooperative Extension, Albany County



WHY CANDLE ??

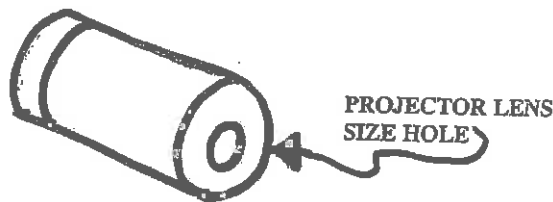
- Candling is transfusing light through the egg to determine if there is a viable embryo present. It helps to eliminate eggs that are infertile and also embryos that may stop developing during the incubation period. By removing eggs that will not hatch the potential of unwanted microbe-buildup in the incubator can be reduced. It also adds a great educational opportunity to the chick hatching project. Seeing the embryo and tracking it as it develops is very exciting. Eggs can be candled as often as desired. They should be candled at least on the 5th, 7th and 10th day.

EQUIPMENT AND MATERIALS NEEDED:

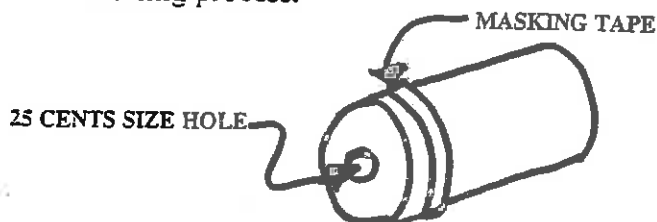
- This simple egg candler is made using a slide projector which is a very common device found in many schools and educational institutions.
- The only other materials needed are a small round oatmeal or corn meal box and masking tape.

PREPARING THE BOX;

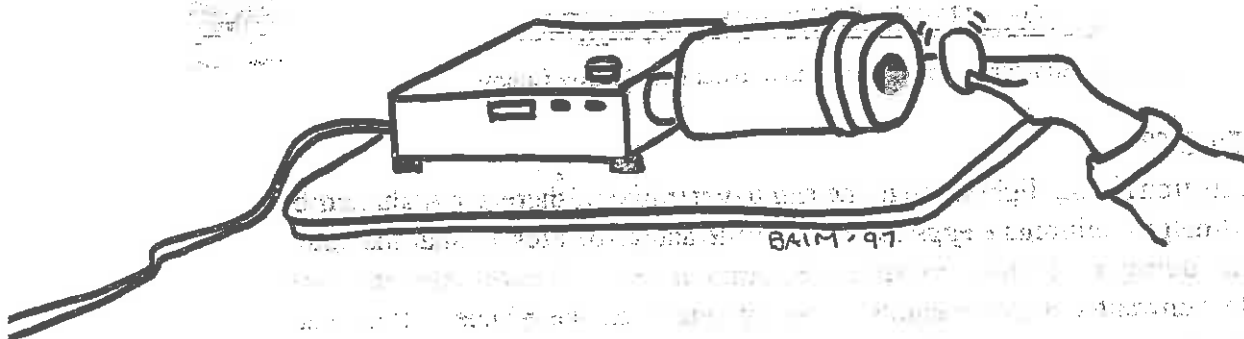
- On the bottom of the box trace a circle the same size as the lens on the slide projector (be sure the circle is traced in the center of the box bottom). Using an exacto knife or razor blade cut out the circle. This will allow the box to fit over the end of the lens while it is on the projector.



- On the top of the box draw a circle by tracing a twenty five cent piece. (Again be sure the circle is drawn in the center of the box top) Using an exacto knife or razor blade cut out the circle leaving a hole the size of the quarter in the top of the box. Using masking tape fasten cover in place. This will be the hole to which the egg will be held against in the candling process.



- Assemble the slide projector and place it on a flat surface and plug it in to an electrical outlet. This should be set up as near to the incubator as possible to reduce possibility of eggs being dropped during the candling process.



- Place a folded towel or small carpet square on the table or desk so it is in front of the projector, under the lens.
- Fit the round box over the lens of the projector.
- The candler is now ready to use.
- Bring eggs to the candler. (Note; The embryo is at the top of the egg as it sets in the incubator . It will help to locate the embryo if the egg is kept in the same position as it was in the incubator as it is brought to the candler.)
- Hold the blunt end of the egg up to the hole in the box. Tip the egg to about a 45 degree angle. Gently rotate the egg back and forth. The embryo should be visible. Remove any infertile or dead embryos.

