

SETTING UP ZEBRAFISH TO SPAWN

It is best to set up fish in the mid-to-late afternoon and plan on changing tank water and collecting embryos when the lights turn on at 9am the next morning.

1 – Select the males and females you wish to spawn together. Please ask a CZAR staff member for help if you have any difficulty telling males and females apart. Fish are generally most productive between 6 - 18 months of age.

2– Set up mating cages with inserts and dividers. Fill the tank with about 2” of system water. Place the males on the opposite side of the divider from the females. Place lid on tank.

3 – Please label your spawning tanks with your name, lab name, DATE and line of fish you are using. Set the tanks on the shelf over the benches for the night. Fish in unlabeled tanks may be disposed of by the CZAR staff, though we will do our best to locate the owner of the fish.

4 – In the morning, change the water in your spawning tanks. It is best to have about 1” of water above the bottom of the insert. Remove the dividers when the lights come on. The fish will usually spawn in the first hour they are together. Sometimes they will spawn as late as early afternoon.

5- If your fish do not spawn they may spawn the next day. If they do not produce eggs the second day, return them to their tanks. After you have collected the eggs, return your fish to their tanks and label the tank with the last spawning date. Allow them to rest for a week before setting them up to spawn again. Success with pair-wise crosses (one male and one female) may be only about 50%. One male with 2-3 females will generally provide a higher success.

6- Clean out the unviable eggs and debris later that day or the next morning. Count NO MORE THAN 25 embryos into a petri dish and place a tape label on each dish with the name of the fish, your name, your lab and date of birth. DISHES WITH MORE THAN 25 EMBRYOS IN THEM WILL NOT BE PUT INTO TANKS, so please make sure you accurately count your embryos..

Place your dishes of embryos in the incubator on the appropriate day to be put into tanks (day 5).

Your embryos need no additional attention until day 5 when the CZAR staff will put them on the circulating water system.

If your fish do not spawn:

- Did you correctly sex your fish?
- Fish were set up to spawn recently and are still stressed.
- Obese females are poor egg producers.