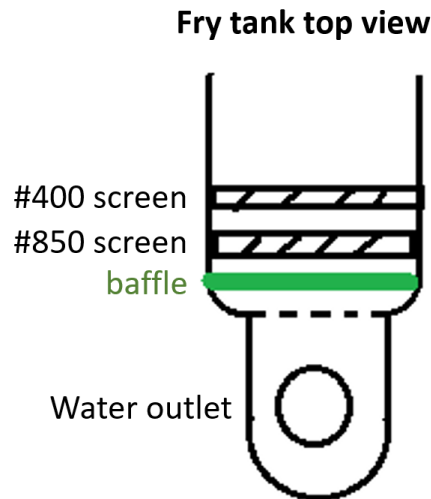


Standardized Fish Room Guidelines and Schedules

I: Setting up tanks

Fry tanks (0.8 L) (Rack #1)

- Place the #400 and #850 mesh screens before the back baffle to prevent losing fry.



- Adjust water flow to slow drip rate.
- Recommend to house at most 4 to 5 fries per 0.8 L tank in the first two weeks, and 1 to 2 in the next two weeks. Then fish are expected to reach sexual maturity and in a good size to transfer to adult tanks.

Adult fish tanks (Rack #2 - #4)

- Each fish should have its own label (must include hatching date MMDD), with female labels on the top and male labels on the bottom. The feeding is conducted based on the label numbers of each tank.
- The label must include the hatch day of the fish (MMDD).
- Dead fish should be removed and its label should be transferred to the fishroom log.
- Avoid to house multiple males in one tank, as males are aggressive to each other.
- Adjust water flow to slow drip rate.
- When needed, use the turkey baster to remove excess debris in tanks and clean off gunk that blocks the water outlet.

II: Bringing down tanks

Cleaning tanks in the fishroom

- Scrub your dirty tanks, lids, baffles, feeding funnel, and mesh screens with sponge and DI water in the sink.
- Use the test tube cleaner to clean off gunk in the water outlet of the tank.
- Place dirty mesh screens in the bleach soak.
- The mesh screens should be cleaned and soaked in DI water overnight after the bleach soak.
- Leave everything next to the fishroom sink. Jason will send them to the washer.

Washing tanks in washer in the autoclave room

- The key to the autoclave room can be found in the fishroom drawer.
- The washer can hold 14 tanks (except jumbo tanks).
- Place tanks upside down on the racks of the washer
- Place lids, blocking plates, and mesh screens in the stainless-steel baskets, and place baskets on top of the tanks.
- The detergent loader is located on the top right corner inside the washer
- Fill the loader with 1/3 to 1/2 full of Alcojet Low-Foaming Powdered Detergent.
- Make sure the switch on the panel is at "Plastic"
- Choose cycle A1, washing usually takes ~30 mins.
- Be considerate of other users in the department so pick up washing on time.
- Let tanks dry on the cart overnight in the fishroom.

III: Feeding

- Weekdays: twice a day, around 10 am and 3 pm
- Weekend: once a day, between 10 am and 3 pm

Brine Shrimp for fry

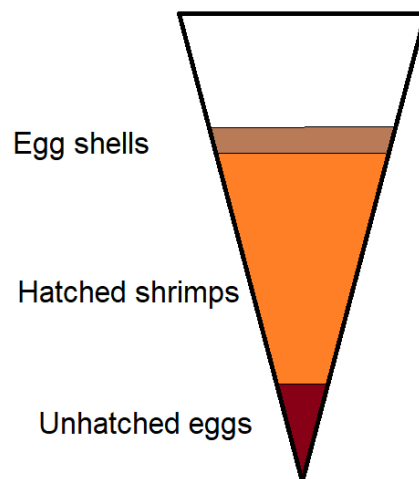
- Shrimp takes 24 hours to hatch.
- Hatched and cleaned shrimps will last 2 days, which is enough for 4 feedings.
- Start a hatcher in the morning when the other hatcher has the amount of 2 feedings remaining (i.e. start a new shrimp hatch every other day morning)
- Can always trace back to the shrimp log to figure out what to do.

- **Start a shrimp hatch**

1. Fill the hatcher with approximately 1 L DI water (to the orange tape mark)
2. Add ~25 g of Instant Ocean sea salt, measure with the mini electronic scale (~53 g if including the weight of the measuring cup)
3. Add 4 g of shrimp eggs (1 flat cap of the 50 ml Falcon tube). Shrimp eggs are stored in a 50 ml Falcon tube in the mini-fridge next to the hatcher.
4. Cap the hatcher, make sure the air tube is inserted into the bottom hole of the hatcher.
5. Complete the shrimp log.

- **Cleaning shrimp before feeding**

1. Remove air tube, rest the shrimp hatcher for 1-2 mins. Egg shells will float, hatched shrimp will stay in the middle, unhatched eggs (if any) will stay on the bottom.



2. Open hatcher valve to collect all the hatched shrimp along with the unhatched into a big beaker. Close the valve right at the moment when only the floating egg shells are remaining in the hatcher.

3. Scrub the hatcher and air tube with sponge with DI water in the sink, while letting the shrimp and the unhatched to rest in the big beaker.
4. Use a big spoon to skim off egg shells on the surface from the big beaker (if any).
5. Place the hatcher back to the hatcher rack. Make sure the valve is closed.
6. Slowly and gently pour the shrimps from the big beaker back into the hatcher and leave the unhatched at the bottom of the beaker in the end.
7. Cap the hatcher, make sure the air tube is inserted into the hole at the bottom of the hatcher.
8. Clean up and complete the shrimp log.

- **Feeding fry with shrimp**

1. Feed shrimp ONLY to fish on rack #1 (the fry rack)
2. Open the hatcher valve to collect approximately 250ml of shrimp in a small beaker.
3. Feed each tank with one full squeeze of the pipette.
4. Check if water flow to tanks is normal, look for any dead fish. Discard dead fish and transfer its label to the fishroom log.
5. Return leftover back into the hatcher.
6. Dump all the leftover shrimps after the 4th feeding of that hatcher.
7. Clean hatcher.

Dry feed (granule) for adult fish

- Do NOT feed dry food to rack #1.
- Use our small size homemade 3D-print feeding spoon.
- Every individual fish should have its own label on its tanks, so please correspond with the number of scoops of food for each tank, one scoop per fish, two scoops for two fish, and so on.
- Check if water flow to tanks is normal, look for any dead fish. Discard dead fish and transfer its label to the fishroom log.
- Check if the feeding funnel is clogged with fungus or dry feed. If so, clean and replace it with a new one.
- Try your best not to spill any food. Please keep our fishroom clean.