Breeding Goldfish

The Goldfish (Carassius auratus) is a freshwater fish which is usually popular in ponds and aquariums worldwide. The commercial Goldfish is scaled of metallic sheen of red, silver, black, white, and of course gold. The scale-less Goldfish has transparent scales in purple, bright blue and red. Their sizes range from 1 to 4 inches whereby they are both ornamental and beneficial since they feed on mosquito larvae.

The following points highlight the manner in which these delightful 'beginners' fishes can be bred.

**Spawning**

*Breeding Pair*

The Goldfish will become sexually mature in one year but will reach its prime in its 3rd year. The male that is ready to spawn will have pinned sized tubercles (white pimples) on the pectoral fins and gill covers. The females on the other hand will be heavy at the rear with a swelling on the left side of the body. This makes her capable of laying approximately 500-1000 eggs per spawn. **It is usually better to use two males and one female for better fertility.** The fishes should be bright, alert, sturdy and strong with a smooth outline.

*Temperatures*

For ideal spawning the temperatures during the day should be about 21°C and 10°C in the night. Goldfish usually spawn in warmer waters in the morning. Ice can be added to tank water to meet the specific temperature requirements.

*Stimulation*

The fish can be stimulated by using a **hose of fresh water** to apply pressure during the night, so that by next morning the fish will start to spawn.

**Hatching the Eggs**

The eggs should not be removed immediately after spawning as the fishes may be resting during this period to start again. However, on completion of spawning, the fish should be transferred to a fresh tank. The eggs when removed can be rinsed in a bucket of aged water of depth 6 inches at about 10°C. They can then be transferred to a 75 litre tank of temperature 10°C where they will hatch within four (4 days). **Healthy, fertile eggs should be clear but will appear cloudy or**
opaque if spoiled. The fry produced may fall to the bottom of the tank. In this situation, minimal disturbance is advised.

Fry hatching from the eggs.

**Feeding Schedule for the Fry**
Like so many other species of fishes, the young may be fed with Brine Shrimp at this stage. The spawned mops can be removed by turning them upside down while gently shaking. Feeding the fry should be done with care since they are small. A **continuous supply of moderate amounts of food is necessary** as overfeeding could lead to polluted water and fish death, while underfeeding leads to starvation and eventually death of the fish. It is better to remove uneaten food from the aquarium in a couple of hours, and then add fresh food when necessary.

**Problems to Avoid when Breeding Goldfish**
- High water depth during hatching places great pressure on the fry, making it difficult to reach the surface
- Predation on eggs by other fishes
- Fungus growth on eggs may kill the fry. Remove eggs with fungus and treat the water.

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