

DAPHNIA HELPER

by Chase Klinesteker SWAM, Jan-Feb 2005



Daphnia or "water fleas" are relished by fish

A LIVING FILTER

Daphnia is a good and easy-to-raise live food. It feeds on bacterial and other pollution in the water and clears it up. I have kept a culture going for over 20 years now and have had to renew it only a couple of times. One of the keys to raising it is not to overfeed or underfeed. I recently realized that these are the conditions that occur in most of the tanks where I am raising fry: daily multiple feedings where I am constantly fighting cloudy water with water changes. Then I added a few daphnia to tanks with fry and the water became much clearer and I could feed the fry more. Daphnia did not seem to harm even the tiniest of fry and they reproduced enough to handle any level of cloudiness. As the fry progressed from infusoria to baby brine shrimp, they were eating newly born daphnia as well as the brine shrimp. This provided a constant extra supply of live food throughout the day. The fry do not eat the adult daphnia until they grow larger so the supply continues. Regular water changes are still necessary since the dissolved pollutants must be removed. It is the growth of bacteria (cloudy water) that can suffocate and kill the fry in a short period of time. I consider daphnia a "living filter".

HELPING FRY

Adding daphnia to fry tanks may also help with some difficult-to-feed fry. There are many species of fish where the fry are very difficult to feed or have not been raised in

captivity. Discus, Uaru, and Chocolate Cichlids are 3 that are difficult to raise. These adult fish all have a similar appearing small, slightly curved mouth. Their fry are also very difficult to get to eat without polluting the water since they require large quantities of tiny foods. Currently I am working with Chocolate Cichlid fry, and the daphnia seem to be helping. Snails can be added after the fry hatch to decrease the pollution levels even more.

SLOW EATERS

Slow eating fish often are underfed and hard to condition because their food can pollute the water before they can get to it, especially in a single species aquarium. This includes Plecos, Otocinclus, Coolie Loaches, and Corydoras. Only adult corys will eventually eat full sized daphnia, although it will take several days for them to eat them all. Fish with tiny mouths like pencilfish and dwarf characins might also benefit with daphnia "helpers" in their tank. Clearer water and some extra food will benefit any fish. What better plan than to grow some live food with your fish!

The daphnia filter is not a new idea. I remember reading in the past where a fine mesh net or display trap was placed in the aquarium and daphnia was put inside to filter the water as it circulated through the mesh. I tried this but found that the fish in the tank would go crazy trying to get at the daphnia, eventually sucking them through the net or killing them. Yes, fish do relish daphnia, but we don't need to foster their mental instability with something like that!

INSTRUCTIONS

Raising daphnia for food is fairly simple if one adheres to some basic guidelines.

---60-70 degrees F. is best.

---enough aeration to keep the water slowly circulating but not heavy air.

---add seashells for them to build their exoskeletons.

---add snails to clean up the excess. Ramshorn and pond snails seem to work best.

---Change only about 30% of water every 2 or 3 weeks. Too much could cause a dieoff, and Siphon debris and excess snails off the bottom every month or two to regenerate the culture.

---Feed them yeast every day or 2 (1 packet dry yeast dissolved in 1 pint of water). Keep this refrigerated and add a few teaspoons to slightly cloud the water. When the water clears, add more. Check daily as most dieoffs are caused from starvation or excess food. If you have a dieoff, just go to your fry tanks to start a new culture!

Daphnia are a great food and a big "helper". In breeding and raising fish, we need all the help we can get!