

# IMPROVING YOUR BAP RESULTS, PART 1

by Chase Klinesteker SWAM, March/April, 1986



Chases' 9'X10' Fish Room, left side

(Note: The Breeder Award Program (BAP) keeps track of a club members' species bred. This article was written about a year after winning the Federation of American Aquarium Societies (FAAS) international award for "Breeder of the Year" in 1984 with 79 species bred in that year)

## **BREEDER AWARD PROGRAM**

The Breeder Award Program (BAP) has been instrumental in the growth of the hobby and in making more species available to hobbyists. The expansion of knowledge and more active participation of club members are obvious benefits of the program. Everyone can participate, whether one has 4, 40, or more aquariums. An article of this type does not allow complete coverage of the subject of

breeding tropical fish, but here I hope to emphasize the importance of the BAP program and to share a few ideas that I learned which help me in breeding fish. If I can increase the enjoyment others get from this part of the hobby, I will be satisfied.

I have found six areas of fishkeeping important to getting better BAP program results. They are:

- 1) **Information and Records**
- 2) **Organization**
- 3) **Tank Cleanliness**
- 4) **Breeding Conditions**
- 5) **Hatching**
- 6) **Mental Attitude**

Each will be discussed separately. Because of the amount of material, I will cover the first three areas in this article (Part 1), and the last three in a subsequent article (Part 2).

## **INFORMATION AND RECORDS**

The most tedious, but probably the most important part of breeding tropical fish is gaining knowledge about the species of fish you are trying to breed. I try to learn as much as I can about the varieties of fish I am working with. Their temperament, food needs, water requirements, temperature requirements, sex determination, mature size, and how others have succeeded in breeding them are all important. There may be several articles, magazines, and reference books you can get the information from, as well as from club members who have spawned them. (Update 2016—the Internet was not a factor in 1986, but obviously should be also used today. However, some of the most accurate information is still in printed form). I find it helpful to write down a summary of this information about each species in my “3X5 Computer” card file that I can add to as I get more material. There is often conflicting information in different articles. What works in one situation may not work in another. With much information about a species, I can choose what might work best in my situation, and have several other ways to try if that doesn’t succeed. The SWAMAS club library has been an excellent source of breeding information for me.

Be open and share your knowledge with others. Club members have been very helpful to me in sharing their knowledge and experiences. I have learned more about more fish species and how to spawn them in the last couple of years in SWAMAS than I did in the previous 25 years in the hobby. I am still asking questions and learning. No one is an “expert”, as there is always more to learn.

It is very helpful to keep good records of the spawnings you get for each species. Record in the card file the temperature, water chemistry, or anything you think may have influenced the spawning. Also record the conditions and method of hatching the eggs and feeding the fry. Getting eggs is a long way from 10 fry checked in for BAP. Also record the conditions of your failures. I have gotten eggs from many species of fish that I couldn’t get to hatch. At least I will know what not to try next time! I learn much more from my failures because I have so many more of them. Don’t be discouraged. With thorough information and persistence, you will surprise yourself and spawn many difficult species of fish.

## **ORGANIZATION**

Organization is the key to getting things done. Filter cleaning, water changing, feeding, egg hatching and other tasks can usually be improved to save time. All one needs to do is to “dream” a little about the possibilities of how one might improve a given task. Try it. You might be surprised at the results. Probably the most time-saving yet most difficult thing to organize is your tank setup. A simple example would be a person with 4 aquariums spread throughout the house. Feeding, cleaning, and changing water would involve many trips with bucket, hose, food, and other items to care for them. One solution might be a portable service unit carried from room to room. A better solution would be to move all 4 tanks into one area, preferably near a drain and sink. Of course, not everyone can do this. Use your imagination on how your setup might be improved.

For those with a separate fishroom, consider ways it might be re-organized and improved for efficiency. It is best to put tanks of the same size together and if possible with the ends out to save wall space. A small, well-insulated fish room with aquariums closely organized is more efficient and less expensive to operate than a large basement room. A few years ago I was fortunate enough to be able to design and build (with the help of a carpenter) a small fishroom in my basement. One four-tier tank rack holds 28 twenty-gallon long tanks on one side, all in less than 8 ½ feet of wall area. Observing, cleaning, and feeding these tanks is much easier in this arrangement. Because the room has a vapor barrier and is well insulated, water in these tanks stays from 73 to 80 degrees all year. No heaters are used, as adequate heat is given off from a large air pump and florescent lighting fixtures in the room. In the summer, the door is kept open and a dehumidifier is used in the basement.

There are many simpler things that can be done to save time. Just using a larger diameter siphon hose or siphoning into a drain will help when changing water. If your tanks are close together, use a ¾ inch garden hose for faster siphoning and jump from tank to tank. To replace water, attach the other end to a H/C mixing faucet and run water back into the tanks while adding dechlor. A plastic gallon jug with the top cut off is used to carry the hose from tank to tank with the water running. Try to standardize procedures as much as possible to save time. For example, I use undergravel filters in most of my tanks because they are effective and easy to clean with a power, canister, or diatom filter after being stirred up. (Update 2016: I now use sponge/large gravel pan filters that can be easily removed and quickly cleaned. See “Pan Filter” article). One canister power filter can reach all of my 20 gallon tanks and is easy to move from tank to tank. In breeding fish, set up several breeding tanks at the same time. Cleaning tanks, moving water, and observing for eggs are more easily done together. For feeding fish, decide ahead of time what foods you will be giving each tank, then feed one food at a time.

Probably the most time-consuming yet most enjoyable part of my hobby is observing my fish. By being organized in other areas of fishkeeping, I can be assured of enough time for this. Spawning activity, sickly fish, polluted water, and unusual or aggressive fish behavior are things I look for in order to take early action when necessary. Because much time is involved in breeding fish, it is important to be organized in order to improve your BAP results. People organize differently, and ideas I use may not work in your situation. I suggest that you consider how you might improve your own setup. Increased satisfaction and enjoyment may well be your reward.

## TANK CLENNLINESS

I feel that tank cleanliness and water quality are extremely important in breeding fish. Optimal health is essential. Some fish may be unable to breed if kept in poor quality water for even short periods of time. We all have kept “delicate” species of fish that seem to die off easily. It is usually poor water quality, not water chemistry that is the culprit. Overfeeding and overcrowding are the main causes of tank pollution. Also, unnoticed dead fish, plants, and snails can quickly pollute a tank and kill sensitive fish. Proper conditioning for breeding requires heavy frequent feedings of a variety of foods. Yet, tank cleanliness is essential for optimal health needed to breed fish. The two are opposites, and we need both. Therefore, we must take extra care and time to maintain clean tanks and pollution-free water. Following are a few ways in which I keep my tanks as clean as possible.

### Clean filters frequently

I use undergravel filters because they keep the water clearer than most other types. Every 2 to 4 weeks I will stir the gravel and pick up the suspended debris with a power filter. The fish in the tank always seem to perk up when I do this, and often show spawning behavior. There is always enough bacteria left to restart the biological filter.

### Change water

A 30% water change one or two times per week seems about right for larger tanks. Small tanks (1-3 gallon) need a more complete water change. For these, I siphon out 80 to 90% of the water and replace it with fresh aged and filtered water.

### Observe fish and tanks daily

Finding and quickly removing dead fish, plants, snails, and uneaten food is essential. Also, look for any discolored or cloudy water. Quickly check the general health of the fish in each tank. Slightly clamped fins, fast breathing, inactivity, and other subtle signs indicate that a filter cleaning and/or water change must be done soon. Too often I have waited a day or two, only to find a prize fish belly-up! Pollution will not usually cause all the fish in a tank to die at once. Usually, the weaker fish and more delicate species are affected first.

### Remove any algae from the glass

If light is not excessive, algae is usually a sign that pollution is building up. Use a razor blade scraper to suspend the algae. This is usually done while cleaning the filter so the power filter can remove it from the tank.

### Catfish, snails, and growing plants

Scavengers can help. Use smaller species of snails so if one dies, it will not foul the tank. Growing plants will adsorb some pollution. I like to use floating Hornwort on the surface and anubias and potted cryptocoryenes on the bottom where there is less light. Catfish, barbs, and livebearers are good “bottom pickers” and do a fairly good job of cleaning up excess food.

Think about how pollution affects fish. The effects accumulate slowly over a period of time. We might even relate this to humans, since poor personal hygiene and sanitation cause many infectious

diseases, and chemical pollution (asbestos, pesticides, smoke, etc.) is related to human cancer and other diseases. Cleanliness is important to both people and fish!