

High Summer Temperatures

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By Al Castro

Q. My three freshwater tropical fish aquariums, two of 55 gallons and one of 10 gallons, are installed in my garage where, in the summer, the water sometimes reaches temperatures in the high 80-degree Fahrenheit range. I wish to avoid the purchase of species that might succumb to these high temperatures next summer. Please suggest some not otherwise unusual species that would be more likely to survive high temperatures.

A. This is a relatively easy question to answer, but there is related information to pass along as well. Almost every tropical fish in the hobby can take water temperatures in the high 80-degree Fahrenheit range for a short period of time (perhaps two or three months). Remember, they are tropical fish. The difficulty is not in the fishes' inability to withstand the temperature, but rather in the side effects of the higher temperatures.

Increased temperatures bring a decrease in the oxygen-carrying capacity of the water. This means that the aquarium must be clean and have no extra organic material buildups that will deplete the oxygen levels further. The fish aquarium should be well aerated, with lots of surface agitation to ensure that there is adequate gas exchange to release harmful gases and acquire maximum oxygen content under the adverse conditions.

As a source of additional problems, the fish have an increased metabolism and require somewhat more food at higher temperatures. This added organic material and the resulting waste products will require more work to maintain good water quality. An extra water change or two during the hot period will help alleviate most of the problems, but remember to ensure that the new water is the same temperature as the aquarium water to prevent problems. One last thought on the oxygen levels — if you anticipate higher temperatures, you should think about reducing the fish load in the aquarium. Purchase a few less fish than you feel the aquarium will hold, thereby giving all of the fish a chance to do better.

The real problem occurs when the air temperature drops back to the normal range. If the water temperature falls too rapidly, the fish will be stressed and prone to any of the various disease-causing organisms that are present in the aquarium. The secret to combating this is to use an aquarium heater to maintain the high temperature and to gradually (no more than 1 degree every two days) lower the temperature until it is back to normal.