

Correct pH for African Cichlids

Tanganyikan and Malawian cichlids will prosper and breed at pH values as low as 7.2 and hardness values to 3 DH.

By Paul V. Loiselle

Q. From books, fish magazine articles and word of mouth, I've learned that it is best to keep the pH of the water in an African cichlid fish aquarium between 8.0 and 8.2. Possibly because of my routine of frequent water changes, I've never been able to get a reading higher than 7.4 from my aquarium water despite the use of coral gravel for the substrate. Does this lower pH value pose any problem to my fish? If so, is there any other way of raising it other than through the use of a commercial buffer solution?

A. Your question would be easier to answer if you had specified exactly which African cichlid fish you are keeping. Because you have expressed concern over whether your pH is sufficiently high to keep your fish healthy, I assume you are keeping either Lake Malawi or Lake Tanganyika cichlid fish. Published pH values for Lake Malawi range from 7.7 to 8.6, and for Lake Tanganyika from 7.3 to 8.0. Reported hardness values for Malawi range from 6 to 10 degrees of hardness (DH) (125.0 to 170.5 parts per million total dissolved solids — ppm TDS), and for Lake Tanganyika from 10 to 12 DH (170.5 to 205.0 ppm TDS). Experience has shown that both Tanganyikan and Malawian cichlid fish will prosper and breed at pH values as low as 7.2 and hardness values to 3 DH. What seems critical is the stability of these values rather than their absolute magnitude. Your use of coral gravel as a filter bed provides all the stability your fish require given the relatively hard, alkaline character of the tap water where you live (Southern California).

What is far more critical to successful husbandry of rift lake cichlid fish is proper nitrogen cycle management. These cichlid fish are extremely intolerant of ammonia and nitrite. The program of regular partial water changes you presently practice may depress the pH in your aquarium somewhat, but its contribution to the well being of your fish far exceeds any imaginable benefits from a higher pH. Your management practices are exactly those I would recommend to a prospective rift lake cichlid fish aquarist. Just keep up the good work and don't lose any sleep over those pH values.