

pH and Fish Gender

In some species of fish, pH can have quite an effect on the sex of fry.

By Paul V. Loiselle

Q. I have *Pseudotropheus zebra*, *Pseudotropheus lombardoi* and *Melanochromis johanni* in my 55-gallon aquarium, and in my 29-gallon aquarium are young *Julidochromis marlieri*, *Julidochromis ornatus*, *Chalinochromis* sp., *Lamprologus caudopunctatus* and albino *Lamprologus brichardi*. Someone told me that the pH of the water can affect the sex of African cichlid fish. If this is true, and is it true for the species I'm keeping?

A. Sex ratios of fry can be influenced by pH in some African cichlid fish — this has been reported for most of the West African dwarf cichlid fish of the genus *Pelvicachromis* and for one species of *Nanochromis*: *N. transvestitus*. There is also reason to believe that when kept at pH values in excess of 8.0, at least some Lake Malawi cichlid fish produce broods with a preponderance of males. This state of affairs has proven particularly troublesome for breeders of the so-called electric blue Malawi *Sciaenochromis ahli*.

There is no evidence that sex ratios are influenced by pH in any of the species you are presently keeping. Feed your fish well, keep up a program of regular partial water changes and you can look forward to a succession of broods with roughly a 1:1 sex ratio.