

## Jaws Locked

**Angelfish that exhibit this behavior may not, in fact, actually be a pair.**

*By Paul V. Loiselle*

Q. I have a question regarding four of my freshwater angelfish. Two or three months ago the two angelfish in my 34-gallon angelfish started flaring their gills and locking jaws. They continue to do this frequently.

Recently, the two fish in my 55-gallon angelfish began to behave in the same way. I have heard that this is what most cichlid fish do for courtship, but angelfish tend to be so different from other cichlid fish, and they certainly haven't spawned yet. If this is courtship, should I give each pair an angelfish of its own? The only other fish with them now are upside down catfish, Corydoras and Otocinclus.

A. Although angelfish certainly don't look like the typical cichlid fish, and do possess some interesting behavioral responses to their highly unusual lifestyle, broadly speaking their behavior differs very little from that of other representatives of the family. The gill flaring you describe is a frontal aggressive display. When the two displaying individuals are evenly matched with regard to their level of motivation, the outcome of such a confrontation is usually the sort of jaw-locking behavior you describe. As manifestations of aggression go, jaw-locking is an example of the sort of highly ritualized behavior that rarely results in serious injury to either contestant.

Courtship in angelfish is not a drawn-out process. As a rule, spawning occurs within seven to 10 days of the sort of behavior you have described. That spawning has not to date occurred in either your 34- or 55-gallon angelfish suggests strongly to me that what you are seeing is ritualized aggression between two sets of males.

Certainly there is nothing in the makeup of either angelfish's population that would serve to inhibit spawning. If the fish constituted a true pair, you would have had fry by now. If they were females, the result would have been a series of infertile egg clutches deposited in rapid succession. Under these circumstances there is really nothing you need do. My advice to you is thus to let matters stand as they are.