

Freshwater Angelfish Sex

How to tell the boys from the girls in freshwater angelfish.

By Paul V. Loiselle

Q. A friend and I have been breeding fish for some time and we wish to breed angelfish, but we can't find out how to tell the male from the female other than when they are spawning. The books in our library either say that there are no differences or state that there are minor differences, but without explanation. We can't afford to buy a group of angelfish to raise to adulthood, so identifying them by gender is our only option.

A. Compared to many cichlid fish, angelfish are indeed difficult to sex. However, there are two differences that will allow you to distinguish male from female. The first has to do with the shape of the head. Angelfish are highly derived cichlasomine cichlid fish, in which many males develop conspicuous bumps on their foreheads when sexually active. Angelfish do not develop such nuchal humps, but males do have a much more rounded cranial profile than females.

The second difference relates to the shape of the ventral profile. In male angelfish, the outline of the body between the insertion of the ventral fins and the origin of the anal fin slopes sharply downward, whereas in females this is a straight line.

Before you rush off to select your future breeding pair, however, I must make a couple of cautionary remarks about the breeding of angelfish. The first is that these distinctions apply reliably only to full-grown angelfish. The second is that there is a sound reason for securing a pair via the group rearing method that has nothing to do with assuring that you have individuals of both sexes.

When working with monogamous cichlid fish, it is unwise to assume that any two individuals of the opposite sex will pair successfully. Cichlid fish with such a mating system — and angelfish are among their number — can be extraordinarily choosy about their partners. Attempts to pair two incompatible individuals are far more likely to end in mayhem than in matrimony.

The easiest way to avoid this problem is to raise a half dozen youngsters to maturity together and allow them to select their own partners. I suspect that if you compare the cost of buying a half dozen quarter-size angelfish with the purchase price of two full-grown specimens, you will find the difference in cost is negligible.

As for the extra adults, retailers are always happy to acquire adult angelfish, so it's usually a simple matter to swap such specimens for credit toward the purchase of fish or supplies. Alternatively, there's always a local aquarium society annual auction. Well-grown angelfish never want for buyers in such a setting and often command very impressive prices.