

Keeping Julies

Of the Julidochromis species from Lake Tanganyika, transcriptus may be the best.

By Paul V. Loiselle

Q. I'm setting up a 30-gallon long Tanganyikan aquarium. I am interested in keeping Julidochromis transcriptus, but have not been able to find any information on them. In particular, I'd like to know if they will get along with L. brevis, and if these two cichlid fish will live compatibly with Synodontis multipunctatus. Any additional information on J. transcriptus would be greatly appreciated.

One other thing. I live in Connecticut, where there seems to be a shortage of fish stores carrying these Tanganyikan species, or, for that matter, any rift lake cichlid fish at all! Do you have any suggestions on how to go about finding these fish?

A. Allow me to congratulate you on your taste in Julidochromis! I have always felt that J. transcriptus is the most attractive of the three dwarf Julidochromis species. Initially described from specimens collected near the lakeside village of Bemba, in northwestern Zaire, the distribution of the typical form of J. transcriptus appears to be limited to the stretch of coast between the villages of Luhanga and Makobola.

Small, reclusive, rock-frequenting cichlid fish are not the easiest fish to collect, and the Zairean coast of Lake Tanganyika is far from thoroughly explored. It is thus unclear to what extent this extremely restricted distribution represents the actual range of the fishes. The discovery of a very similar Julidochromis at Gombi, a Zambian village not far from the Tanzanian border in the extreme southeastern corner of the lake, suggests it would be wise to keep an open mind in this regard.

Like the other dwarf representatives of the genus, J. transcriptus lives in intimate association with the rocky bottom. It appears to be most abundant in waters of less than 17 feet, but scuba divers have observed pairs at a depth of nearly 100 feet. Such deep-dwelling fishes look very dark in overall appearance because their transverse ivory-colored vertical bars are very narrow. The alternating light and dark bars on the flanks of fish collected in shallow waters — the source of the present aquarium strain of J. transcriptus — are roughly of equal width, giving them an overall paler appearance. The smallest described species of the genus, rarely exceeding 2½ inches not including the tail, this julie is an ideal resident for the sort of aquarium you wish to set up.

The basic husbandry requirements of J. transcriptus are the same as those of other Lake Tanganyikan cichlid fish. These fish require hard, alkaline water to prosper. A pH range of 7.5 to 8.5 is acceptable, and the water hardness in the aquarium should be at least 5 degrees carbonate hardness (dKH). The easiest way to provide these conditions is to use Philippine coral gravel as the substrate in your aquarium. An efficient biological filter is also essential for their well-being.

Julidochromis species are extremely sensitive to ammonia and nitrite. Elevated nitrate levels are also to be avoided. Because julies share the aversion of other lamprologine cichlid fish for large-scale water changes, nitrate buildup should be prevented by a combination of light fish loads and frequent small water changes. This species will prosper over a temperature range of 70 to 85 degrees Fahrenheit. Like other Tanganyikan cichlids, J. transcriptus is very intolerant of abrupt temperature changes.

This species is not a picky eater and will accept a wide range of live, frozen and prepared fish foods. Artemia nauplii and frozen bloodworms appear to be particular favorites. Although julies also relish them, live Tubifex worms are best avoided, as there is a strong correlation between regular inclusion of these worms in the diet and the incidence of systemic bacterial infections.

Julies are biparentally custodial cave-spawning cichlid fish characterized by a monogamous mating system, with a very strong pair bond. Pairs are highly territorial and strongly intolerant of both other members of their own species and of other dwarf julie species. Non-rock-dwelling tankmates are ignored as long as they keep clear of the pair's territory. Shell-dwelling Lamprologus species share much the same approach to life, and are even less inclined to leave their buried shell dwellings than the julies are to move away from the rockwork. As long as your aquarium is set up in a manner that provides sharply delineated rocky and sandy zones, a pair of J. transcriptus and a pair L. brevis should coexist quite amicably.

Neither species is likely to pay much attention to a couple of *Synodontis multipunctatus* until they have produced free-swimming fry. At this point, life is apt to become rather more interesting for the catfish than you — or they — might like, as the ferocity these diminutive cichlid fish bring to their parental duties is well out of proportion to their size!

Although males are slightly larger than females of the same age, and often display a pendant, pointed genital papilla, dwarf julies are not easily sexed. They also have a well-earned reputation for preferring to select their own mates. The easiest way to obtain a compatible pair is to purchase a half dozen youngsters and allow them to grow to maturity together. Over the course of time you will notice individual fish spending most of their time positioned just below the surface of the water. These fish are the losers in the ongoing contest for social dominance and should be removed as soon as they are spotted.

In nature, or in a larger aquarium, these fish would simply move out of range of their dominant fellows. In a 30-gallon aquarium, this option is not open to them, and failure to intervene promptly will result in their deaths. Either the dominant fish will finish them off or they will jump out of the aquarium to avoid further persecution. The two compatible individuals left at the end of this process will prove to be a stable pair.

Julidochromis transcriptus does not engage in obvious courtship, and shares the preference of other rock-dwelling lamprologines for well-hidden spawning sites. Thus, the abrupt appearance of free-swimming fry under parental supervision may well be your first indication of reproductive activity.

Julies have two quite distinct reproductive patterns. A pair can either lay a small number of eggs every few days over an extended period of time or they can produce a clutch of as many as 100 eggs separated by an interval of several months. Presumably, each pattern represents an adaptive response to environmental conditions, but no one has the least idea of what factor or factors elicits a given spawning schedule.

In any event, it is quite common to see a pair of *J. transcriptus* sharing their territory with several different size classes of young. While older fry seem disinclined to cannibalize their younger sibs, there are no reports of them assisting in the defense of the *Julidochromis* breeding territory in the manner documented for several representatives of the *L. brichardi* species complex.

Finally, I am somewhat surprised that you have encountered difficulties in finding a retailer who stocks this species in your area. Dwarf julies, such as *J. transcriptus*, together with *L. brichardi*, are without question the most commercially available representatives of the Tanganyikan cichlid fauna, and southern Connecticut is quite well supplied with tropical fish shops. I would suggest you pursue three possible approaches in your search for this species.

The first is to simply sit down with your phone book and let your fingers do the walking through the yellow pages. You may be pleasantly surprised at how quickly your search is rewarded. The "Aquarium Dealers" listings of this magazine will also help you find a retail supplier who can satisfy your search.

The second is to join your local aquarium society. An active club — and I know there's one in your area — is bound to include members who share your interests. Any one of them may be able to direct you to a local source of these fishes.

Finally, join the American Cichlid Association (ACA). The ACA's Trading Post, published every other month, allows members to list fish for sale or trade. Home-bred Tanganyikan cichlid fish dominate the trading post listings, so I predict you should have no difficulties finding a breeder within a few hour's drive who has *J. transcriptus* fry for sale. For ACA membership information, send a stamped, self-addressed envelope to American Cichlid Association, P.O. Box 5351, Naperville, IL 60567.