



BREEDING KEYHOLES

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The Keyhole Cichlid (*Aequidens maronii*) is a beautiful, peaceful and medium to small sized cichlid. They grow to nine centimetres and come from Surinam and Guyana in South America.

With our pair of Keyholes we can distinguish the sexes quite easily, the male has a much longer dorsal and anal fins than the female although this is not always the case. Sometimes a pair may have almost the same size fins.

Our Keyholes are in a 2'6" community tank with fish that are all smaller than them, with plenty of plants, a log and a flower pot. The tank has a stable pH of around 6.7 and the temperature varies from 23 - 26°C but mainly stays around 24°C. Most books will have you believe that Keyholes prefer a warmer water of 28 - 30°C to live in and especially to spawn but they seemed perfectly happy at the temperature we have them as do the rest of their tankmates, so we decided to leave it.

Our first inkling that we had a breeding pair was we noticed the pair hovering over the log in the centre of the tank. On closer inspection, we noticed a mass of eggs in an oval shape about the size of a 50 cent piece, there were probably around 50 eggs. At this stage, we thought the keyholes were too small to breed as they were only around six centimetres long, but who were we to argue.

We also thought the cooler temperature of only 24°C would put them off. We had no where to put the large log to artificially hatch the eggs, so we left the first lot to them. As it was, the next day, they went fungus and were gone by that evening.

They laid a few times before we were really successful, at intervals between 11 and 18 days, in various places. Our best success was when they laid inside the flower pot. This was laid on its side with the small hole only about 2cm in diameter, facing where we could see in. In the afternoon, 18 days after their previous spawn, they spawned again inside the flower pot. Laying the eggs on the side of the pot which was now the bottom. Again they were laid in a circular shape. We removed the pot, late that evening so as to make sure the eggs had been properly fertilised. We placed another pot in its place so as not to upset the parents too much and it seems to work.

The pot containing about 90 eggs was placed in a 9" tank, this was all done underwater in the 2'6" tank so the water was all the same. This 9" tank was then floated in a slightly larger tank containing a heater, with the temperature set at 28°C. The pot was put in an upright position and an airstone was placed inside the pot, sitting in the small hole at the bottom. The air bubbles were adjusted to allow a fairly healthy stream to fan the eggs but not enough to knock them off. Several drops of promethisal were added to help prevent fungus. About 2 - 3 times daily any white eggs would be knocked off carefully so as to prevent any fungus spreading. This really made a big difference

in improving the hatching rate, we feel. The eggs hatched in two and a half days and the airstone was adjusted down slightly. Over the next few days they were wriggling continuously and most were on the bottom of the pot now as they had wriggled off the side. The last few were carefully allowed to fall off and the pot was removed, as a number were already out in the tank and not receiving much aeration. Now they were all on the bottom of the tank the airstone was placed in a corner and adjusted so the water was kept moving at a slow to medium current. The keyhole fry were free swimming five days after hatching and were not fed before. We had approximately 60 fry.

At this stage their first foods were green water, infusoria, vinegar eels and brine shrimp. Although most could handle brine shrimp on their first day, we feel it is still a good idea to give some smaller food to them, as they will also eat this anyhow. However brine shrimp is by far the best food for fry to grow up on. Daily partial water changes were given using water from the 2'6" tank water. Over the next week, they were given their (little red bellies) fill of brine shrimp twice daily. After a week they were tipped into the larger tank in which the 9" tank had been floating. This had a sponge filter in and water of the same pH etc. only mainly aged tap water. None of the fry were lost in this move. The water changes were now done weekly or bi-weekly and replaced it with tap water. For a further two weeks they were given gradually increased twice daily feedings of brine shrimp. As a substitute meal after they were two weeks old they were given fine daphnia which they also hopped into well, they would then have full white bellies.

At three weeks old we felt another move was about due, we had now cleared out a 2' tank and made it ready for the keyholes. A slight water change, pH check and temperature check was done. The fry were then carefully bailed into their new larger home where they would be staying. We only had one casualty, for reasons unknown.

This tank was reasonably well planted in a base of gravel with two corner box filters. The keyholes, around 60 of them, were now beginning to split up out of the tight group they had kept in the previous weeks, they would now do their own thing. They were still fed brine shrimp, only now, they were being supplemented with fine flake food, various other small dried foods, daphnia and the occasional feeding of white worms. A pair of peppered catfish (*Corydoras paleatus*) were added to the tank to help clean up any uneaten or too large food particles.

At one month old the keyhole shape pattern is already noticeable and at around two months old they are a miniature replica of their parents.

We have also had more spawnings of the keyholes in the community tank, however, they get past the hatching and the parents place them in hollows and the next day there is no sign of them ever being there. Except the male who chases the female and nudges her chidingly as if it is all her fault. They must have a tank of their own one day when we have one free.