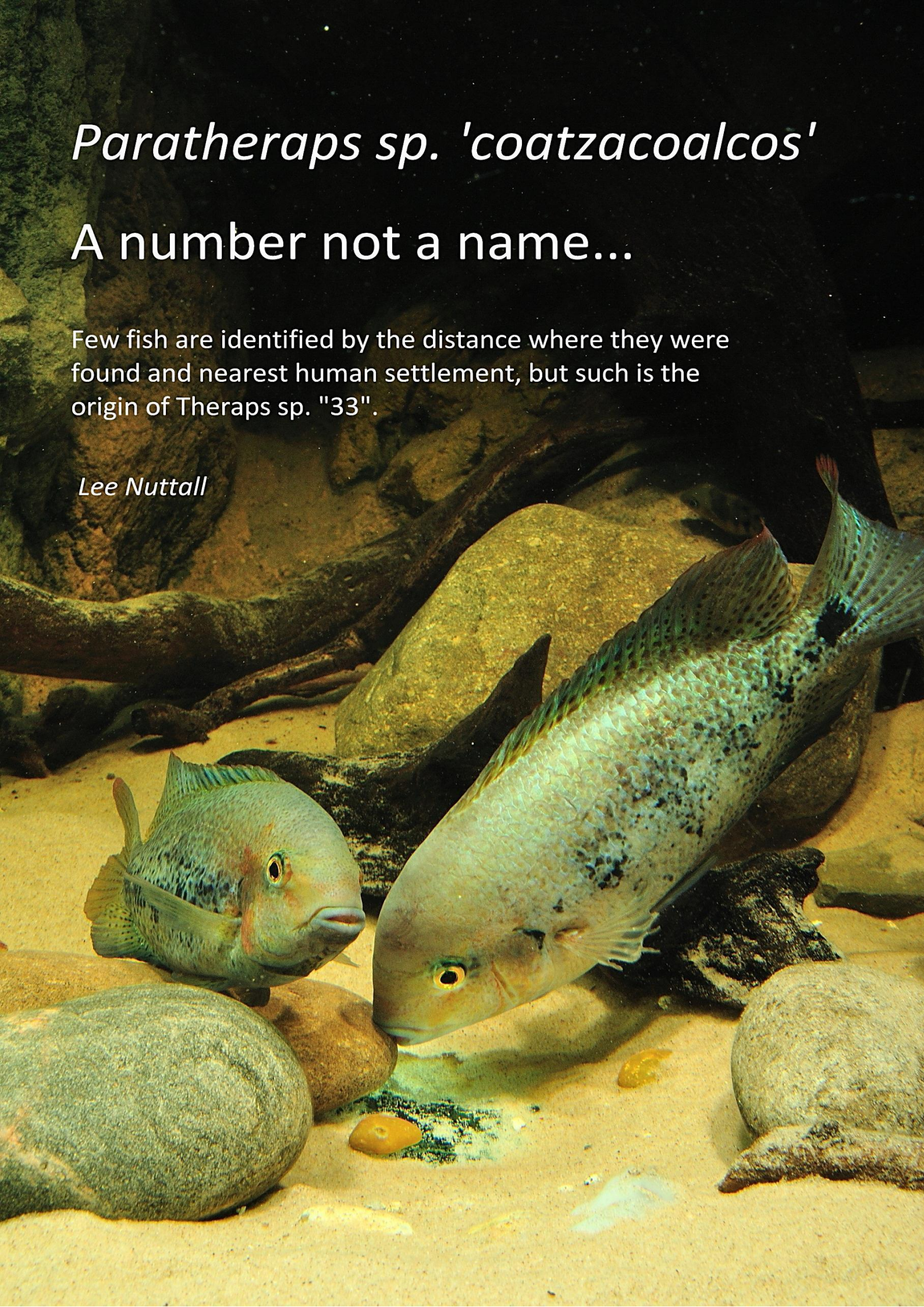


Paratheraps sp. 'coatzacoalcos'

A number not a name...

Few fish are identified by the distance where they were found and nearest human settlement, but such is the origin of Theraps sp. "33".

Lee Nuttall

Paratheraps sp. 'coatzacoalcos'

*By **Lee Nuttall** 2011*

Origins

First discovered by the late Jean Claude Nourissat in 1983, the fish was given the temporary name of *Theraps sp* "33", this referring to the amount of kilometres away from the Coatzacoalcos, Veracruz where the fish was first found. Some 28 years later and the status of this cichlid are still undescribed. For many years now the fish is widely known as *Paratheraps sp. 'coatzacoalcos'*, this refers to the range of the species in the Coatzacoalcos river system in the Tehuantepec isthmus in Mexico.

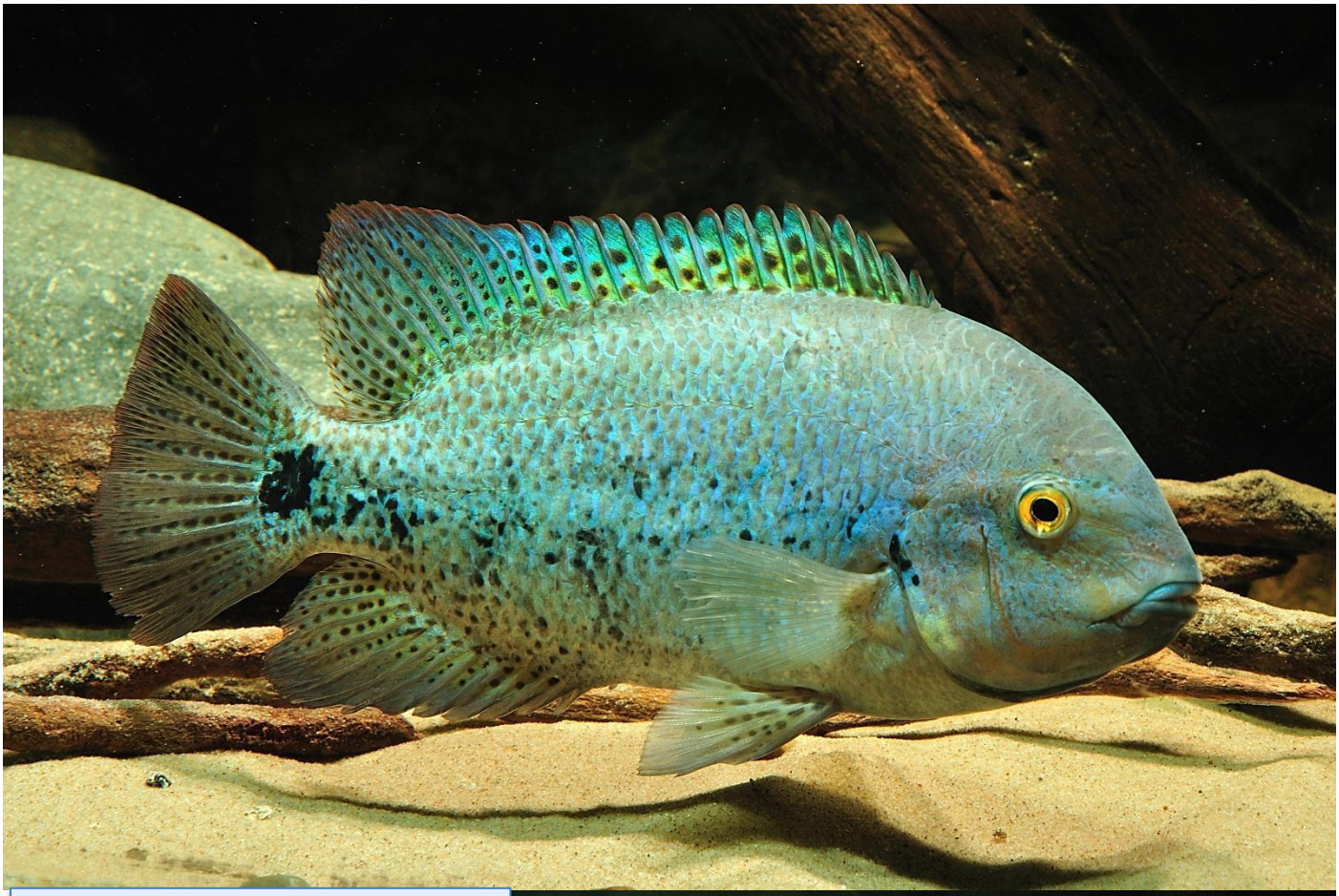
There have been a lot of questions regarding this cichlid, mostly the confusion with another very similar looking fish, *Paratheraps zonatus* (Meek 1905). This cichlid was once regarded as a possible variation of *zonatus*. However many experts believe that there are enough different traits between the two fish to separate and regard sp. *'coatzacoalcos'* as its own valid species. In fact a lot of so called *zonatus* keepers are probably unaware that they are very likely keeping *sp. 'coatzacoalcos'*.

We have to be careful when trying to separate the two fish, as there is no clear cut answer to the problem and not many experts appear to be committing themselves. From what i understand, if we compare the type locality zonatus (Niltepec, Southern Oaxaca), then I personally think they look very different. I've discussed the key differences with some guys who have caught *zonatus* populations in the Rio Zanatepec, they say it's all in the tail. True *zonatus* are reported to have almost completely red caudal fin or a very thick red caudal band, knicknamed "Rotschwanztheraps" (Red tailed theraps.) If you take a look at "Aqualog SA Cichlids book 3", page 72, there's a pretty good example of what's explained. This *zonatus* population appears to have a very red caudal fin and the end base of the dorsal appears very red too. Also I've noted that the pectoral fins look red, traits which appear to be lacking in *sp. 'coatzacoalcos'* populations. The red caudal is reported to be more noticeable in juvenile *zonatus* fish, but will fade away with age leaving the thick red band on the caudal.

Sp. 'coatzacoalcos' have quite a large distribution range in the Coatzacoalcos system tributaries (Atlantic side) like Rio Jaltepec, Rio Junapan, Rio Ajal, Rio Grande. The "true" *zonatus* populations are noted to be in the Pacific side, Rio Tehuantepec, Rio Niltepec and Rio Zanatepec. UK populations of *P. zonatus* available to the hobby are said to be from the head waters of the Coatzacoalcos system Rio Nanchital and Rio Jaltepec. If that is true, then it's my understanding that they could very well be a population of *P. sp. 'coatzacoalcos'*. It's a very complex confusing subject that I'd hope to see clarified.

Sp. 'coatzacoalcos' has quite a bit of variability in their coloration and varies from different populations. Some are blue others green. Some have a golden brown sheen to their appearance (this more so in females) and display a lot of red speckling on the face. I've personally found slight variability can also be present with the same population within aquarium conditions. They aren't widely available in the UK hobby, but more so on the continent like Germany and the Netherlands. Rio Grande and Rio Junapan are perhaps the most widely kept populations available in the hobby.

Recently a newly discovered population were collected by Rusty Wessel. These are from Rio Carolino and were kindly made available to a handful of keepers in the UK. Looking at recent photos, they appear quite blue with red edging on the dorsal and caudal fins, with some red speckling displayed round the head and facial region. I personally think they look very similar to the Rio Ajal populations that I've seen in the hobby.



Above, *a magnificent male sp. 'coatzacoalcos'*

Right photo*, sp. 'coatzacoalcos' Rio Grande. Male top fish. Same population on the* ***bottom right photo*** *illustrating the variability within the aquarium. The male fish on the bottom right photo has certainly developed an lighter overall blue colouration. I personally think they look very different!*

Biotope information

Paratheraps sp.'coatzacoalcos' are found in slow to fast moving rivers, with rocks, pebbles, drift wood and sand making up the underwater environment. Plants are very rarely encountered, except overhanging grasses which penetrate the water from the banks. Many different fish can be found alongside which gives good ideas on setting up a biotope specific setup. These include, *Paraneetroplus bulleri, Thorichthys callolepis, Thorichthys sp. "mixteco*", *Vieja regani, exCichlasoma salvini, Amphilophus trimaculatus*, (there's a question mark if this has been an introduced species.). Non cichlids *Poecilia sp, xiphophorus helleri, Astyanax fasciatus* and catfish species like *Rhamdia guatemalensis.*

***Top Photo**:Omar Barajas.*

Sp.'coatzacoalcos in the Rio Almoloya.

***Bottom Photo**:Francisco Gutierrez Franco.*

Photo showing part of the Rio Almoloya.

Paratheraps sp. 'coatzacoalcos', in the home aquarium.

I was lucky enough to obtain a group of seven F1 young fish to raise on. These were a population from the Rio Grande. I believe the parents were sourced from German collectors. Like most very young centrals, they are unimpressive to look at. They will be a grey/silver colour with a dark slight curved lateral bar from the caudal peduncle, that extends to the operculum. As they grow, the body develops to a grey/blue colour with a lot of speckling. Dappling will start to develop on the dorsal fin, as will blue with red edging.

Like many *Paratheraps sp*, they will grow into large fish and it's not unusual for *sp. 'coatzacoalcos* to attain sizes of up to 30cm in the confines of the home aquarium. That said, the absolute minimum size aquarium for a large pair should be in the region of 150cm, with width and height at least 60cm. Provide plenty of hiding places such as caves made from flowerpots or naturally assembled with rocks and wood. This will provide sanctuary for the female, as the male fish can sometimes become very aggressive. There are various reports of the temperament of these fish. Some keepers report of placid behaviour others of an extremely aggressive cichlid that rarely tolerates other fish let alone conspecifics. Certainly this behaviour will be influenced by the size of tank. If you're thinking of keeping them within a community setup, then go for a tank of at least 180cm in length, height and width of 60cm. I wouldn't recommend adding conspecfics, perhaps only in very large aquaria, but small to medium sized centrals like *exCichlasoma salvini* or groups of *Thorichthys sp.* should do well.

Feeding is very straight forward. They will except all sorts of dry foods like flake, floating pellets and food sticks. Chopped up mussels and prawns are eagerly excepted, full of proteins which will help bulk up your fish. Stay clear from mammalian foods like beef heart. I personally don't see the need in offering these types of foods as the alternatives mentioned earlier will benefit your fish in the long term. Other important foods to offer are vegetables.

Paratheraps sp. are known to be herbivorous detritus feeders and makes up a lot of their diet in the wild. Offer thinly sliced cucumber or quickly blanched lettuce and spinach. Blanching helps soften the vegetable, so will be easily digested. For convenience, offer them with a lettuce clip. The fish can then graze at their own leisure.

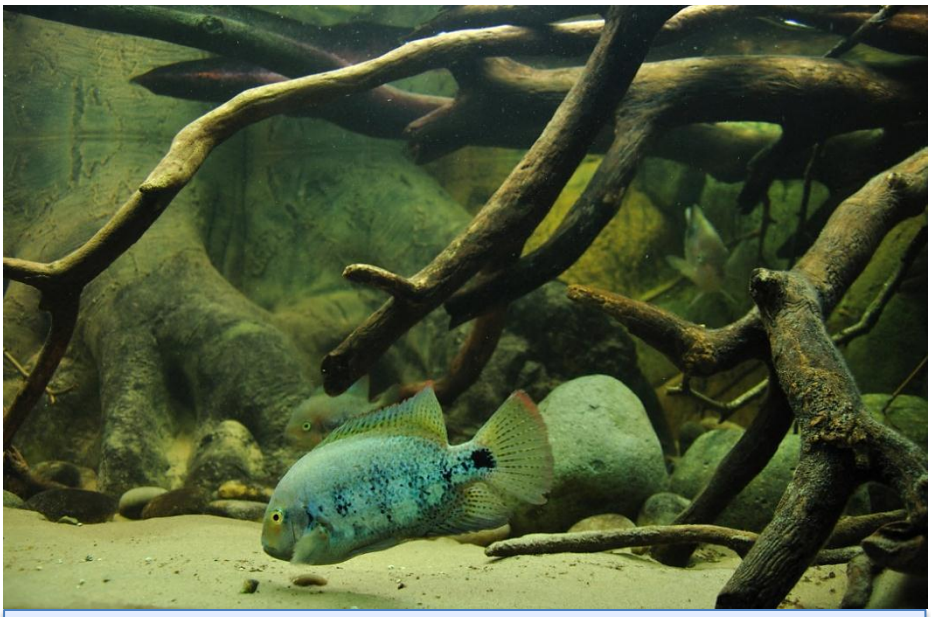
Left: *For stronger pair bond try to grow juvenile fish in a least groups of six.*

Below: *Semi adult sp.'coatzacoalcos, at the beginnings of pair bonding.*

Setting up the aquarium.

***Above**, The aquariums main feature is the overhanging root system on the right hand side. Created using beech tree branches and smaller twigs, this creates shelter for the fish and ideal spawning territory.*

The tank can be decorated with rocks and wood. Plants are rarely encountered, so will probably be up rooted and eaten. A sandy substrate is preferred rather than a pea gravel one, as fish find it easier to sift through. Sand also looks better and natural to the fish. You can either use children's play pit sand or pool filter sand. Pool filter sand is starting to take preference with many hobbyists as it is heavier and doesn't compact as much as play pit sand. Periodically stirring the sand with a tool, will ensure the sand stays fresh.



A lovely male sp. 'coatzacoalcos sifts through the sand in search of food.

The tank used is 8ft, 2ft, 4ft wide and fitted with a 'Back to Nature' background. I decorated as natural to their home environment as best I could. This included large boulders and beech tree wood, arranged as if there is overhanging roots penetrating through the water surface. *Sp. 'coatzacoalcos* live in faster flowing bodies of water, so we can try to replicate this by adding a power head or positioning a spray bar so that it agitates the water surface. Bright clean water is good, so regular water changes will benefit and aid growth and vitality. Water quality needs to be taken in account, so as a guideline we should be looking at medium to hard alkaline water with a ph of 7 to 8 and a temperature between 72 to 82. This range seems the best compromise when accommodating water conditions to centrals. The higher temperature range will produce lively fish and prolific spawning activity, so adjust to lower levels if required.

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Sexing and spawning.

For the benefit of the article the fish described are a population from the Rio Grande. Other populations may have different traits when describing sexing differences.

Early sexual dimorphism in *sp. coatzacoalcos* can be weak. Rio Grande females will display a darkened area on the dorsal fin. This is usually seen when females are dominant or becoming sexually mature. Females can also display subtle pink coloration around the operculum . Males tend to display black dappling on the unpaired fins and also develop a larger head profile and thicker body than the female. As the fish become larger and sexual mature the differences are quite apparent. Males develop a lovely blue colour with a yellow green iridescence on the base of the dorsal. Red is displayed on the edges of the dorsal and caudal fin. The thickness of the red band on the caudal can vary between populations. Females can develop an overall golden/brown colour, but not so much the strong blue colour of the male fish. I found that they can be early developers and it's not unusual for fish to start pairing up at only 4". Two fish will separate from the group and start body shimmering and circling each other. It's interesting to note that their eyes change to a bright orange/yellow colour and the dark lateral band will be broken up somewhat. The female's dark blotch will certainly become noticeable at this stage. Bonding can be quite rough with occasional jaw locking and chasing. Once the pair has bonded, the two fish will stake out a territory, which will include a lot of digging and rearranging. Any fish within that vicinity will be chased away. These are open spawners, so a suitable rock is cleaned so that the eggs can be deposited. Depending on the size of the fish a few hundred up to a thousand eggs can be deposited. Fertilized eggs will hatch in around 3 days, this is when the parents will move the fish to a dug out pit (nursery pit). After around 6 days the fry will slowly emerge and become free swimming. At this stage the parents spawning dress becomes pale almost cream colour, with a darker belly and throat region. It's also interesting to note, that spawning pairs observed in the wild adopt a bright yellow colouration. This spawning dress can be quite difficult to stimulate within the aquarium. One theory is to do with low pressure conditions.

Parental care is done in typical cichlid fashion with the male and female tending the brood. Both fish will take over parental responsibility if one needs to feed.

However it's worth noting that male fish can suddenly

turn and attack the female. This unfortunate incident happened to one of my pairs even though the female was attending to wrigglers. Nothing could be done at the time and I was greeted by the female badly beaten hiding in the corner, with no sign of the brood. Although she was quickly removed into a hospital tank, she succumbed. I can only put this down to stress and possible internal injuries. Again centrals show these diverse behaviour patterns and one need to be ready all the time just in case!

Lee Nuttall.