# UARU- Obtaining, Maintaining and Breeding By Graham Ash

Obtaining

It was not so long ago that you could have taken it for granted that any Uaru that were being offered for sale would have been of good quality, recently, however, events have changed and, as with most things, for the worst.

It was about three years ago that Uaru began to be bred in sufficient quantities in the Far East to make them a viable addition to the lists of fishes being offered by the exporters in these regions. This species is still relatively expensive and are usually shipped at a small size - around one inch in length. As with most species that are mass-bred, Angels and Rams being typical examples for cichlids, the quality has gone down rapidly and the fishes that we are now seeing being offered for sale, that have come from the Far east, are for the most part of a very poor quality.

Uaru are very rarely imported from the wild, one reason being is that they are a local food source. Also, wild-caught specimens are often in a poor condition with things like badly damaged finnage due to their rigours of life in the wild. Therefore, it would take a lot of time, effort and money to get them back into a reasonable condition ready for shipment.

It was not that long ago that Uaru were one of those species that were considered, more or less, impossible to spawn and were only kept by a very small number of fishkeepers. As times changed, and more about them being learnt, then captive breeding was achieved and a small number of tank-bred fish then became available.

Despite successfully being bred in the UK, tank-bred fish are still not very common and we certainly are not overrun with them. Most breeders appear to be able to get their fishes spawning for a period of time, after which they suddenly stop or one of the pair is lost, thus breaking the breeding cycle.

Personally, I think that I have been lucky in that, after initially obtaining a trio of one male and two females, I was quickly able to add a further pair to them. Having then got two pairs spawning I then parted with the spare female. A rigid culling system was introduced by which no more than forty young fish were ever raised from a single spawn.

Despite great care being taken when it came to culling out unwanted young, four did manage to slip through which turned out to be very slow growers indeed. So although tank bred Uaru are available in small numbers care should still be taken when selecting stock. Large specimens still tend to be quite expensive and it is very difficult indeed to ensure that you are actually getting a breeding pair unless you buy them from a breeder who can show you the pair with fry.

It would be well advisable to steer clear of any fishes that exhibit a dark colour, as with most cichlids these fish are under stress. Also specimens whose finnage is torn should be treat as suspect as it could be the first signs of possible fin rot or may have been caused by nitrites when over-crowding has occurred.

Selecting Uaru should be done in the time honoured manner of, firstly, speaking to the retailer to find out where they have come from, observing the fish for alertness, poise, movement and any abnormalities. Ask to see them feeding, if the fish are well they will definitely eat, I have yet to see a healthy Uaru refuse any food that it is offered. Try to buy your Uaru at three inches, or less, in length. If they are larger then, not only will they be more expensive but also more difficult to move and settle. Uaru, as with most South American cichlids need a bit of care when it comes to transporting them. If you are travelling any great distance then ensure you have a polystyrene box, preferably with a cardboard outer, for extra warmth. If the weather is cold then try to obtain some heater packs, if available, or use old newspapers or bubble packing to wrap around and in between the fish bags to reduce on the amount of unused air space in the box. Always ask the retailer to, at least, use double bags when preparing the fish for the journey. Also always ensure that only one fish is put into each of these bags as this greatly reduces the chances of fish being damaged and also reduces the chances of the bags being punctured by the spines of the Uaru, as they have very sharp dorsal spines.

Uaru should be bought in a group of at least three, more if possible, and from at least two different sources, where possible, in order to mix potential breeding stock.

### Maintenance

Before finally deciding to purchase your Uaru, ensure that you have a tank set up correctly in which to house the four to six young fish that you will eventually purchase. A tank of  $35 \times 15 \times 15$  inch dimensions would be ideal at the outset, but be aware that given the correct conditions they will grow very quickly to six inches or more in size in a relatively short time. At this stage a tank that is  $48 \times 18 \times 15$  should then be envisaged as a pair's eventual home.

Water quality should be as immaculate as possible, with zero nitrites and nitrates. The water should be biologically stable, as should the filtration employed. Filtration is, of course, entirely up to the individual, but I would not use undergravel filters on their own but in conjunction with methods of filtration. I have kept and bred Uaru in 60 x 15 x 15 tanks with no more than a pair of Algarde sponge filters that were air driven. One very good advantage of using sponge filters is that once the fry you have bred become free-swimming they will browse off of the sponges. Also the adult fish enjoy nibbling at the sponges where they end up by being chewed up quite badly and have to be replaced, often before any of the youngsters have the opportunity to get at the sponges. Of course other filtration methods can be applied, such as internal or external power filters, but Uaru do not appreciate great flows of water from spray bars and power head outlets and so you need to balance filter flow with water changes.

Temperature within the Uaru aquarium should be maintained at around 82"F or slightly higher. At this temperature, with good feeding and many water changes, a good growth rate should be achieved.

The pH of the water, I have found, is not as critical as some would have you believe. I have known Uaru to have been bred anywhere within the range of pH 5.5 to pH 7.5. © BCA 1993

If the pH of your aquarium water is within this range then I would suggest that it is left alone as continuous adjustment of the pH will only end up by making a rod for your own back. pH should, of course, be kept stable and if the fish are being maintained in a bare tank then a small bag containing coral gravel or similar should be employed as a buffer to prevent the pH from crashing below 5.5.

A water requirement that is often overlooked is that of water hardness. The hardness/softness of water is fairly critical to the successful breeding of most South American cichlids and from breeding results correlated from different areas of the country, it would appear that hardness affects the size and viability of successful spawns.

Achieving water softness is fairly easy; however, you need to decide how much you will require before selecting the system to be employed. Water softness can be achieved in a variety of ways from resins, through to Zeolite, Peat and R.O. units. Personally, I am not an advocate of R.O. units as I find it difficult to sanction a system which obtains ten gallons of treated water from one hundred gallons initially used, thus letting the remaining ninety gallons go to waste. This in turn can result in water shortages if used on a very large scale.

I believe that it is far less wasteful to purchase a water treatment unit, which will remove most, if not all, of the "nasties" from your water supply, and then to run the water through Zeolite, resin softeners or Peat to obtain a supply of very good soft water without waste.

A point that is very often missed concerning R.O units is that the membrane used to filter the water is very easily blocked and needs a pre-filter to be attached to the unit. Water changes on your tanks containing Uaru need to be carried out as often as is possible, as keeping their water clean is vital.

As Uaru have a tendency to demolish plants and green foods fairly rapidly then it is not advisable keeping them in a planted tank, other than with plastic plants. Uaru have often been called "Flymo's" within BCA literature and that is about as close a description of a nickname that fits the species as you can get.

Apart from plants, and other green stuffs, most types of food is avidly taken and the range of flake, pelleted and frozen foods that are generally available makes it so the hobbyist has no need to buy expensive live foods for the fishes well being. One source of live food that is both free and very welcome by the fish are garden worms, but, however, do not feed these too often as they can, and will, cause the Uaru to become addicted to them.

With good tank maintenance and good feeding then young Uaru will grow very quickly and should attain six inches within a year. At this size, indeed from five inches in length, upwards, they will begin to show signs of pairing up, going through the repertoire of mouth-wrestling and body wagging in the normal cichlid fashion. The hobbyist should let nature takes its course and at the same time, decide on how many pairs or groups of Uaru are finally to be retained. Large specimens can be successfully kept in-groups in large aquaria that are a minimum size of  $60 \times 24 \times 24$  inches. It should be remembered that Uaru can easily attain a size of ten inches.

Once a pair has established themselves and they are to be kept for breeding purposes, then surplus fish such as other Uaru and catfish should be then removed from the tank as Uaru are not a fish that defend their eggs and young very well from other tank companions who may decide that the young are a good source of food.

# Breeding

Once pair bonding has been established, the "pair" should then be left in a tank that is of such a size as to allow them to raise their young within the same tank in which they are kept. The tank can be fairly spartan, a light covering of gravel to a depth of half an inch with a couple of good sized lumps of well soaked bogwood, plus a couple of pieces of slate will suffice very nicely. Tank lighting is optional. The temperature should be maintained in the mid 80's E pH, as previously stated, should be anywhere between 5.5 to 7.5, so if your local water is around neutral then do not go rushing about trying to lower it. It is unnecessary, as once it has been lowered then you will have to keep it there.

Hardness needs to probably be below 10" GH to ensure viable spawns, and it is hardness coupled with pH values that seem to dictate the size of spawns and here I have presented a few results obtained from other Uaru breeders:

pН	Hardness	Spawn size	Viability
1] 5.5	3	200-250	200
2] 6.3	5	200-250	180
3] 7.0	5	150-180	150
4] 7.5	9	100-150	100 maximum
5] 7.8	12	80 -100	20 maximum usually zero

Initial spawnings by young pairs are often small and, therefore, seen as being unviable to raise by the pair. It will probably take half a dozen attempts before the pair begin to raise their first spawn. The selected spawning site can be any hard surface, usually near to the tank's base and often on the base itself. The site chosen is then cleaned down and light-brown coloured eggs are deposited over a small area. Eggs and the resulting fry are not defended with any gusto by the parents, so the pair should have a tank to themselves if the spawn is to be reared. I have actually witnessed a pair of Uaru let other Uaru eat their eggs as they laid them.

The eggs are then fanned primarily by the female who is the main tender of both egg and fry care, the little that is practised that is. After some 48 hours the eggs will hatch and the brood will then be moved, by the female, and spat out under a piece of bogwood or slate. Often at this stage it is difficult to see the spawn and it is best to leave well alone and wait until they become free-swimming. The parents should continue to be fed throughout, but do not attempt to feed the fry just yet.

Once free-swimming it is still not necessary to feed the fry as, with both Discus and Severums, the parents produce a body mucus on which the fry will feed. That is not to say that the hobbyist should leave it solely to the parents, newly-hatched brine shrimp should be offered as soon as possible. If this is not available then flake food can be moistened and made into a mix between the fingers before being rinsed into the water.

© BCA 1993

Do not overfeed and also watch your fingers, as they will be bitten by the parents if they are able to reach them.

The fry can also be easily reared away from the parents. I have found it best, however, to leave them with their parents for the first two weeks. The fry and not the parents should then be removed to a tank that is large enough to hold the number being reared up until they are two inches in body size.

Fry growth is rapid and therefore heavy feeding of both parents and young is needed. Water quality should be kept immaculate. At one month old the fry should be about half an inch body size, any slow growers should be culled out. Once they have attained one inch body size then they should be carefully observed for any possible deformities and any fish showing such should then he removed. The young should be offered for sale as soon as they reach between 1.5 to 3 inches as this is the best time in which to move them. Continuing rapid growth can be expected with young attaining at least four inches in their first year.

#### Conclusion

I am able to firmly state that Uaru have been wrongly classed as a "Difficult to spawn" species. As with many South American cichlids it is the obtaining of a breeding pair that is the most difficult task. The potential Uaru breeder should be prepared to wait some considerable time to allow a pair to develop and then even longer before they will successfully raise their first spawn. Put them in perspective along with some of the other South American species, when did you last see Biotodoma over three inches? a breeding pair of Satanoperca? a breeding pair of Acarichthys?, Guianacara or Pike cichlids? No?, never, or just on occasion.

The answer to all of the above, I think, can be summed up in just one word - patience! ! © BCA 1993