





## CICHLID SCENE

**THE NEXT MEETING** will be held on the third Wednesday of this month at the **Church Hall, FINCH STREET, MALVERN (near Dandenong Rd)** at 8.00 pm **sharp** (the trading table and library open sooner). Supper will be partaken of after the meeting — visitors, as always, are welcome.

**MINI TALK:** Home Show slides/video.

**MAIN TALK:** Conference Update (and election for Editor).

**DOOR PRIZES:** courtesy of **Pet and Aquarium Industries**

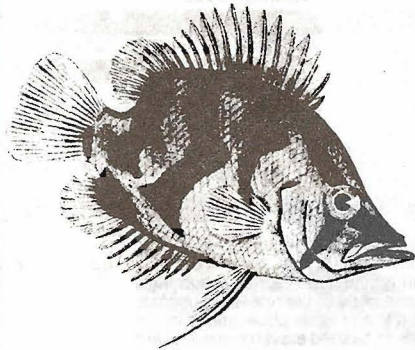
**DRAW PRIZES:**

1. Fish Books
2. Frozen Vegetable Food courtesy of **Aquavell**.
3. Wine.

**TABLE SHOW:** Africans and Asians

**MINI AUCTION:** Your support for the **DONATION AUCTION** this month, in the form of items for auction or bidding for those items, would be very much appreciated.

**TWO DECADES OF CICHLID EXCELLENCE**



**THERE WILL BE FISH FOR SALE ON THE TRADING TABLE AT THE NEXT MEETING — ALL MEMBERS ARE WELCOME TO PUT FISH OR AQUARIUM ACCESSORIES THERE FOR SALE.**

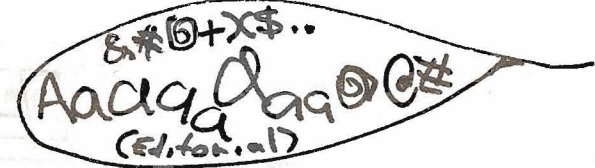
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**WELL** it looks as though we are looking for an Editor again (still). In view of the post-election withdrawal of the Editor-elect and the fact that he never actually took office, I (wearing my presidential hat) think the logical thing to do is to declare the first election null and void and, once again, call for nominations for the position of Editor at the next meeting.

Editor is an interesting job: somewhat demanding at times, but usually quite enjoyable. But Editor/president — you must be kidding — something is homing-in on the fan at this very moment. You are needed. Please consider.

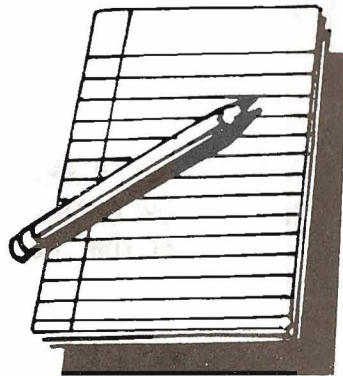
Is this en masse back-stepping whenever there is work to be done a sign of the times? How long is it going to continue? I heard on the news yesterday that we are technically no longer in recession — so it can't be that. If someone can tell me what the problem is, please let me know — I really want to know.

According to the rules of our society, persons can be co-opted to fill positions temporarily. If you feel you can not find the time to be Editor, at least think about doing just one edition. What could be simpler?

The only other alternative I can see is to stop protecting the fan and allow the missiles to find their target. This will probably have an effect on the magazine's regularity/reliability. A few years ago doing two jobs would not have bothered me (in fact it didn't), but I can not continue doing so at the moment.

*Ray Hutchins*  
ACTING-ED

**NOTICE TO ALL EXISTING MEMBERS!!!**  
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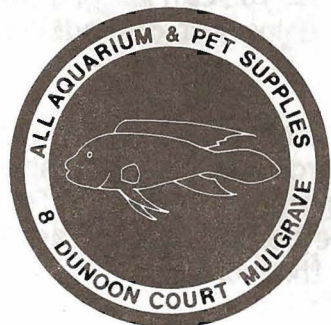
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For your convenience, the magazines mentioned in this article will be kept together in the library for one month — see your friendly librarian.



## Rowemin' 'Round

By GRAHAM ROWE

**W**ELCOME to our June flight — here is an opportunity to escape the intense cold of a Melbourne winter and the incredible schemozzle known as the AFCS Conference.

Rumor has it that the recent cold snap has frozen the posty's extremities and he is therefore not delivering very much at the moment. Therefore we only have one (double) invite to answer in the April and May issues of 'The Kitsap Aquarian' which is why we find ourselves in beautiful downtown Silverdale, Washington.

Richard and Patricia Coogan are ecstatic to report an addition to the family — their 'Lamprologus brichardi "Daffodil"' have spawned. If you wish to know anything about how they did it, Richard and Patricia are only too eager to tell you.

Meloney A. Hoyt claims to be honest but is actually being modest when she tells of 'An "Accidental" Spawning of Apistogramma agasizzi'. If anybody out there wants to accidentally spawn this beauty then pay attention to Meloney as she details exactly how to do it.

Ms Hoyt also tells us about 'Raising the Neolamprologus elongatus'. Very detailed, but strangely omits to mention, in all its other names, the Princess Cichlid. Maybe they are not called that in the (Western) States — it's not really a wild west name. "I've got to go home and see how my male Princess is," does not inspire the feeling of rough, tough cowboy behavior. Anyway, Meloney's tome tells us all we need to know to keep and breed these delightful creatures.

Settle back, relax and enjoy the MRIFL. This month we have: Jan and May 93 'Cichlid Circular', NSW CS Inc; Feb, March and April 93 'All Cichlids', Michigan CA.

Why do Americans want to annoy me by using a superfluous "the" in titles like: 'Spawning the Schaeochromis "Chewere Red Tail" ahli' (sic). (In my book Eccles and Trewavas spelled it "Sciaenochromis".) If anyone has an answer, please let me know — preferably in writing.

See you next flight.

From 'Cichlid Circular', volume 12 #1, journal of the NSW CS

# Observations of Breeding Behavior: *Cichlasoma synspilum*

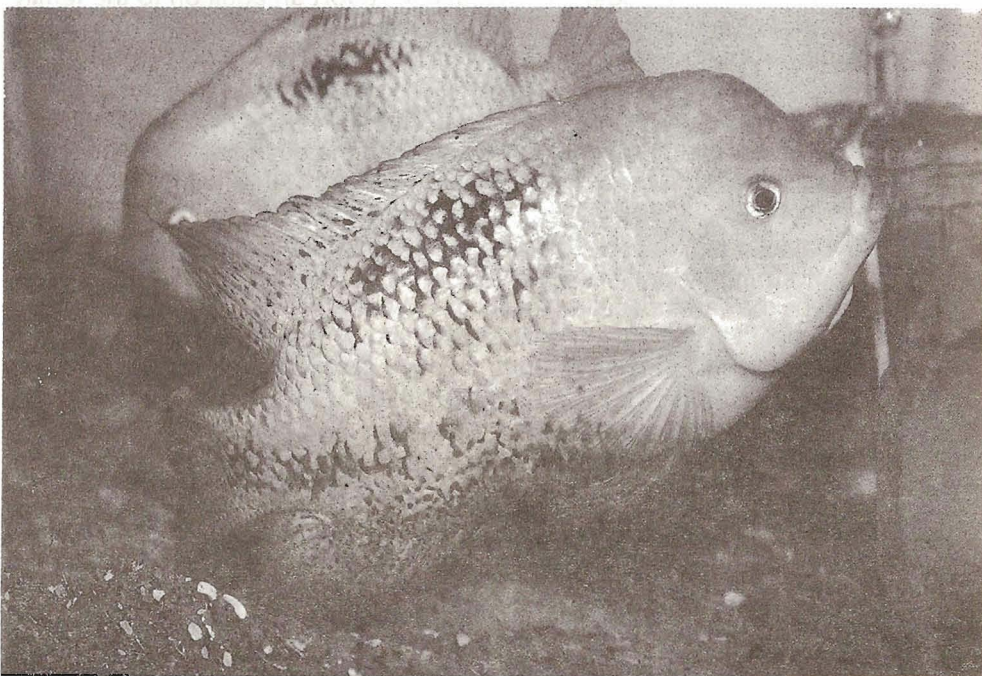
By STEVE ELLIS

## TANK:

A six by two by two, ie 6' x 2' x 2'.

## INHABITANTS:

Four *Cichlasoma (Heros) synspilum*; two *Cichlasoma (Heros) festae* (one 15 cm, the other 22 cm); one 22 cm female *Cichlasoma (Heros) festae*; one 18 cm pair of gold *Cichlasoma (Heros) severum*; one 18 cm *Aequidens rivulatus* "gold saum"; two 13 cm female *Cichlasoma (Heros) salvini*; one 18 cm Red Oscar; one 15 cm pair of Silver Dollars; one 18 cm Moonlight Gourami; and three 18 cm Sucking Catfish.



*Cichlasoma synspilum*

Picture: GRAHAM ROWE

## TANK FURNISHINGS:

Coffs Harbor golden pebble (medium), with approximately 30 per cent shellgrit mixed into the gravel as a substrate; three lengths of clay pipe; three caves made out of rocks; one large clay flowerpot and eight large pieces of Cairns mangrove root, all set out to act as hiding places, territories, etc; and two airstones.

## FILTRATION:

Eheim 2017 canister filter plus a Dynaflo 450 power filter.

## WATER CONDITIONS:

50-60 per cent water changes carried out twice weekly because of stocking level. Water taken straight from the tap. Very soft, in fact too soft to register on a test kit. pH: neutral to slightly alkaline. Temperature: 27°C.

## FEEDING:

Three times per day with a mixture of large green koi pellets, Tetra Doromin food sticks, StarGold tropical fish pellets (large), prawn-flavored Whiskettes, Tetra conditioning food sticks, and freeze-dried tubifex worms as the staple diet.

This was supplemented by regular, twice weekly, feedings of live gambusia, fresh-water shrimp, and earthworms. Beefheart was also fed about once per month.

## DESCRIPTION of *Cichlasoma synspilum*:

One large male at 29 cm (the largest fish in the tank), two females, each at 25 cm and one small male at 18 cm.

## BREEDING:

I noticed that the fish had obviously been harassed (and were hanging at the top of the tank etc). Then one morning all three sucking cats were found dead about two days after the first signs of trouble. At this time, I started to move fish to safer quarters that had been prepared.

The *Cichlasoma synspilum* became more and more aggressive. For example, I noticed the large female *festae* sparring with the largest male *synspilum*. Ten minutes later she was unconscious (she did survive). Over a period of 10 days all fish had been moved out for their own safety. All except the four *Cichlasoma synspilum* (which were showing signs of wanting to spawn) the pair of Silver Dollars, and also the Moonlight Gourami, which were obviously not worried about it in the least.

Both females were obviously very full of eggs, but one in particular looked ready to burst and yet this one just hung in one corner of the tank. Both males concentrated their efforts on the other female and totally ignored the Silver Dollars and Gourami.

The female couldn't seem to make up her mind which of the males she would accept, and for about a week she commuted between each of them. Each had set-up territories at either end of the tank. The smaller male seemed to be winning the female over, until one morning, I came down to check the tanks and noticed that both the over-ripe female and small male had lost an argument with the large male. Both fish were promptly moved to safer quarters where their wounds, which were considerable, could, and did, heal.

At this point, I thought the remaining pair would settle down to the business at hand. The male moved vast quantities of gravel, and began to clean his piece of slate in earnest. The female seemed to lose all interest. In fact she began to stay at the other end of the tank, in one corner, with her back to the male, who would occasionally come and try to get her attention, but was always ignored.

This went on for about two weeks, in which time I almost switched the males over, but after approximately another week or so, the female would occasionally spend an hour to two with the male cleaning the slate. So I decided to wait and see what would happen. Two weeks after the pair had been on their own, with only the Silver Dollars and Gourami, both fish began to clean the spawning site with enthusiasm.

At this point I gave them a large feed of live freshwater shrimp, and also did a 50 per cent water change to boost them along. Four days later I came down to give the morning feed and noticed two things. The first was that the female's breeding tube was fully extended, as was the male's. I took this to be a great sign that spawning was imminent. The second thing was very confusing. Overnight, the female had thoroughly cleaned a large piece of slate — at the other end of the tank to the male.

Both fish seemed not to be speaking. I decided to take special notice of the day's events. As the morning progressed, the male would go down to the female and seemed to want her to inspect his site. This she did on several occasions but each time, after five to 10 minutes, she would return to her end of the tank. Each fish would then continue busily cleaning their respective pieces of slate.

By this time I was beginning to tear my hair out wondering what was going to happen. At 2.00 pm I had to go out for an hour or so, and on my return I was relieved to see that the male had finally succumbed to his desires. Both fish were in the middle of laying (and/or fertilising) about 500 beige-colored eggs.

The Silver Dollars and the Gourami had been herded up to the far end of the tank, where they stayed, while the male *synspilum* patrolled the outlying territory and the female busily fanned her eggs.

Occasionally, these roles were reversed, while the female dug a series of pits in preparation for the soon-to-hatch young. Since this was the first time this pair had spawned, I decided to leave the lights on for 24 hours to minimise the parents being startled by lights going on and off, and perhaps eating their eggs.

At around 1.00 am, I noticed the male had banished his mate to the far end of the tank, and had taken over the care of the eggs. As the female had been badly beaten up, I decided to stay up and watch what happened.

Over the next two hours the male became more and more aggressive, and when I went to bed at 4.00 am, he seemingly had lost nearly all interest in the eggs in favor of making very sure that the female did not move from her place of hiding.

On awakening, I again took up my vigil and watched everything that took place in the tank. First, I noticed that the eggs were gone. I assumed that the Silver Dollars and the Gourami had had quite a feast while the male was harassing the female. At around 2.00 pm that day things had deteriorated and I was feeling disappointed.

I decided to take a gamble by introducing into the tank the previously rejected pair of fish, with a view that I would be on hand to rescue any fish that needed assistance. It turned out to be a good idea.

Within half an hour of the four *Cichlasoma synspilum* being back together, the female which had just spawned and the small male were being chased around the tank by the other two fish. In fact, within 45 minutes of these two fish meeting again they were busily cleaning a piece of slate and moving gravel around in preparation for spawning to take place.

At this point I removed all the other fishes from the tank, leaving only the newly formed pair, and did a 50 per cent water change, as the water had become very stirred up. Courtship was carried out in the usual fashion with both fish, but especially the male, showing very intense colors.

Two weeks later this pair had a very small batch of eggs (no more than 100) inside a large flowerpot that was lying on its side (again, the female chose the site). Spawning was carried out as previously described, with nothing unusual being observed. At this point the water temperature had risen to 28°C with all other values as previously stated.

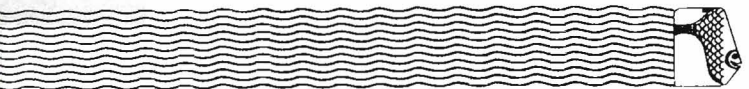
This pair performed well up until late-afternoon the following day, when again the male behaved in a similar manner as before — although on this occasion he did not harm his mate at all. For this reason I decided to leave them together for another spawning or so.

A great deal of this behavior parallels that which I observed with another large pair of *Cichlasoma synspilum* that I have. They required eight spawning efforts before they were successful in raising a healthy group of about 350 fry that were sold when large enough. This other pair are about to spawn yet again in their 5' x 18" x 18" tank.

END

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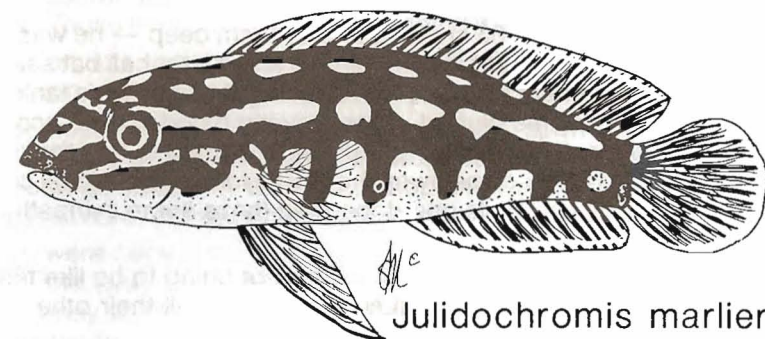


europet

## SPECIES MAINTENANCE COMMITTEE

Allowable Cichlid Importation List Update  
as of March 1993

Aequidens maronii	Malanochromis similans
Aequidens pulcher	Mesonauta festivus (albino prohibited)
Apistogramma spp	Nannacara anomala
Astronotus ocellatus	Nannacara aureocephalus
Aulonocara nyassae (5cm+ only)	Nannacara taenia
Aulonocara spp	Neolamprologus brichardi
Benthochromis tricoti	Neolamprologus cylindricus
Chalinochromis brichardi (bridled morph, 5cm+ only)	Neolamprologus leleupi (yellow morph only, 5cm+)
Chalinochromis spp	Neolamprologus meeli (5cm+)
Cichlasoma nicaraguense (5cm+ only)	Neolamprologus ocellatus (5cm+)
Crenicara filamentosa	Ophthalmotilapia spp
Crenicara maculata (5cm+ only)	Papiliochromis altispinosa
Cyathopharynx furcifer	Papiliochromis ramirezi
Cyprichromis leptosoma	Paracyprichromis nigripinnis
Cyrtocara moorii	Pelvicachromis pulcher
Eretmodus cyanostictus	Pelvicachromis subocellatus
Eretmodus maculatus	Pelvicachromis taeniatus
Iodotropheus sprengerae	Pterophyllum spp
Julidochromis spp	Spathodus erythrodon
Laetacara curviceps	Symphysodon spp
Laetacara dorsigerus	Tanganicodus irsacae
Melanochromis auratus	Tropheus spp



# It's a Jungle In There

By KEVIN ARCHIBALD

I WAS starting to be a real chore. Every couple of weeks I had to clean the algae off the glass just to see the few swordtails that were left. Enough is enough, I said, it's time to go back to some real fish.

Down to Heinz's I went. After I told him I'd had enough of looking after swordtails, he walked down to a tank full of fish that looked like goldfish. I assured him that I was not into goldfish as they were more boring than swordtails. He said I should have a closer look; it was then I realised that they were built a bit differently to your average goldfish.

Apparently, someone had been successful in breeding what we call "Red Devils" and had done quite a good job because these particular Devils had quite a bit of color.

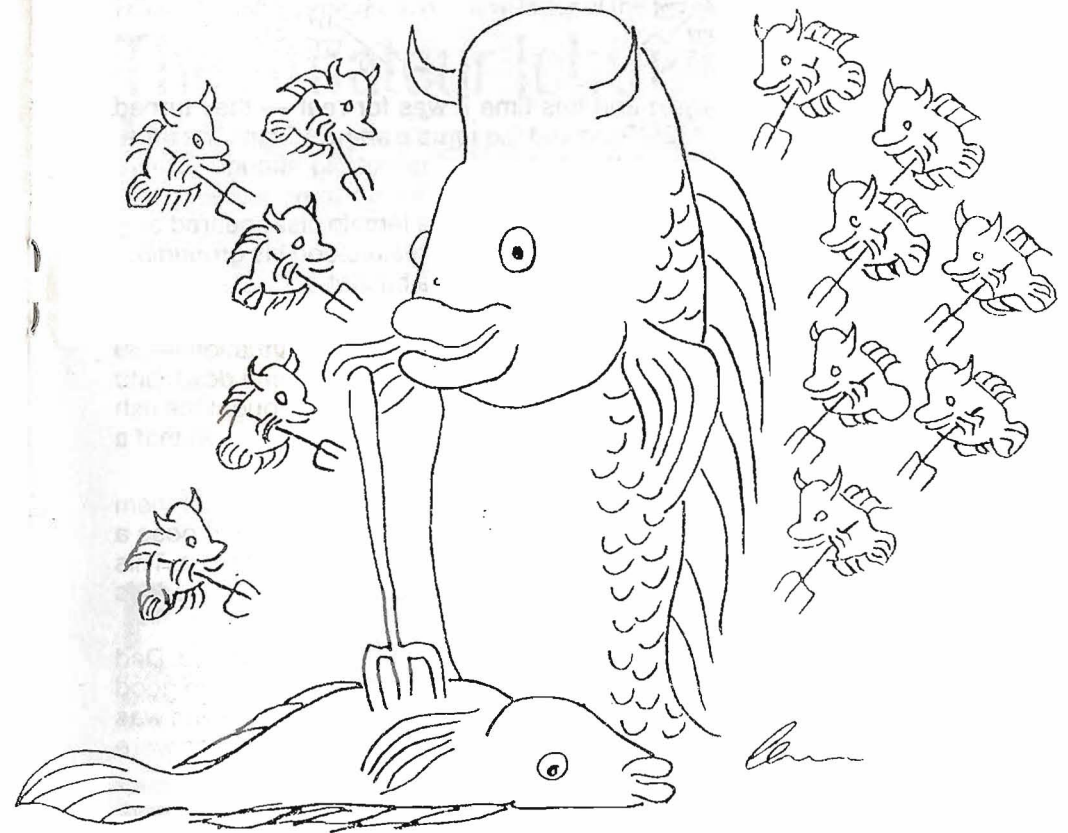
What we call Devils in Australia are *Cichlasoma citrinellum*, which, when young, are colored grey and normally turn white with a hint of yellow coloration later on. The proper common name of these fish is "Midas Cichlid", but we have always called them Red Devils. (Sad isn't it? We know it is wrong, but don't seem to be able to kill-off the name — Ed.)

Well, that was it. Out I walked with my four new "goldfish". I took them home and introduced them to my 6'x2'x2' tank. There was plenty of room for them to grow as their only tankmates were a couple of old Swordtails, a few Corydoras and an unknown amount of Bristlenose catfish. I soon chased-up some Convicts and *Cichlasoma spinosissimum* so that they would be kept honest. The Devils were approximately five centimetres when I put them in, so there was plenty of growing to be done.

My original Devil was over 33 cm long and 17.5 cm deep — he was quite an impressive fish. I remember that leather gloves and a baseball bat seemed the most appropriate equipment to assist with cleaning the filter in his tank. He was quite a fish and sure had me bluffed. After drawing blood on one occasion he certainly had my respect. Most other people who wanted to test their courage by placing a hand in the tank came away the worse for wear. An ideal community fish to keep with your pit bulls and dobermen (have some sympathy for the dogs).

This new bunch of little Midas Cichlids were not going to be like that. They were going to grow up to be peaceful companions to all their other peaceful tankmates.

Not long after their introduction, I noticed that there were not many Swordtails left — old age I guessed. So, I removed the few survivors to the tank at work where they lived happily ever after (until the heater played up and cooked them). This left just the Devils, Convicts, Spineys and cats left.



Life was tranquil for the next year — no more algae on the glass like we used to have. Those little Devils must be cleaning it — what marvellous fish.

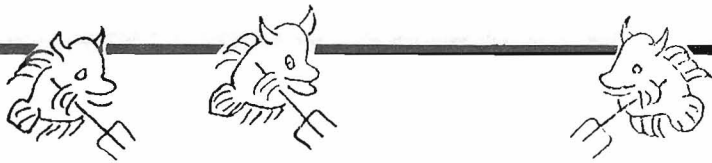
The Convicts spawned a few times, as did the Spineys, but they never raised their young — must be the catfish?

After approximately 18 months the Devils spawned, but lost the young (you'd think he would have removed those catfish eh? — Ed). They had lost the bright-orange color they had in the shop and were now typical Midas Cichlids, with just a hint of orange when breeding.

They were fairly timid and it did not take much to have them hiding in the back of the tank. I had added a pair of Parrot Cichlids, or *Cichlasoma nicaraquense* (they were called *Cichlasoma spilatum* when I started keeping cichlids — it's anyone's guess what their proper name is now). They sure are pretty and not the least bit shy like all the other sooks.

I was starting to wonder why we used to call them Devils. Maybe I might have to call them Midas Cichlids — yuk! — doesn't sound as good, but they sure were getting timid.





Eventually they spawned again and this time it was for real — they turned into Devils. The male was now 22-23 cm and the female about 15 cm. The other pair were soon given the message that the tank was not big enough for two pairs of Midas Cichlids, let alone two pairs of Devils, so they proceeded to harass them even though they were equal in size. The female disappeared only to be found later when stripping the tank — yuk! The male stood his ground but they eventually wore him down and I removed him to a bucket.

My biggest problem was having only the one tank. I had nowhere to put the prisoners of war and did not want to get back to the fishhouse situation — 30 tanks and no spare time — so I rang Heinz and asked him to come down and pick him up when he had some spare time. It was summer, so I thought the fish would be OK for a week or two. He was not chewed up badly — nothing that a bit of mercurochrome wouldn't fix.

They now had the tank to themselves and their little family — all 200 of them swimming around together, tolerating the Parrots who did not seem to pose a threat. Heaven help those Convicts though, if they poked their heads out. This went on for several weeks and it looked great. Mum and dad and all the kids swimming around tank — life was great

Scott Haymes came out and took a family video and they all performed. Dad was starting to look like a real Devil, even attacking the glass. It was too good to be true. Sure enough, you guessed it, mum and dad had a blue over who was going to do the dishes — mum lost. She was removed to a bucket. Things were getting serious.

I had set up a small tank for the spare male and he was starting to look good. I knew the female would not survive in the bucket so I put the spare male outside in a live-food tank — better than a bucket.

The female did not pull through even with mercurochrome and was buried out back with the old huntin' dogs. The spare male wasn't looking real flash either but I left him where he was because at least the outside tank got warm during the day.

I could hear 'Jaws' music coming from inside the main tank. The kids were not real happy with dad and had started to pick on him and were literally eating him alive.

To cut a long story short, there was no happy ending. There rarely is when you're dealing with the Devils. All four ended up dead and Heinz was the owner of approximately 150 little Devils.

My tank got cleaned out for the first time in seven years and is now set-up to breed those lovely Parrots — you won't see any more Devils in my tanks, I have been exorcised.

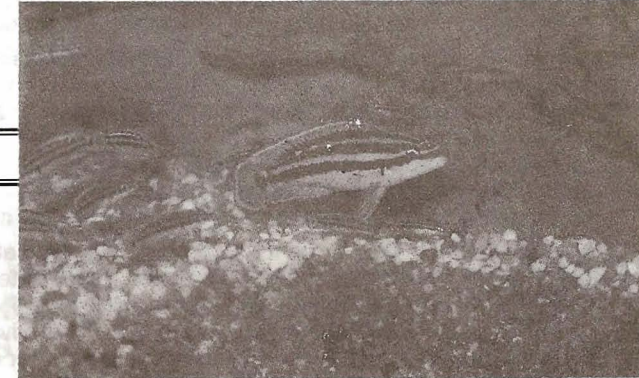
PS: I couldn't help myself. I kept just two little Devils. But they are gentle and such good community fish I am sure they won't cause any trouble.

END

From 'Shoreline', volume 4, #5, newsletter of the Jersey Shore AS

## The Amateur Ichthyologist — Notes on Feeding Fry

Photo: STEVE BUTCHER



By JEFF BILBROUGH

**P**ROFESSOR of Ichthyology at SUNY-ESF, Robert Werner, explained in a lecture that, as far as has been determined, larval fishes all consume zooplankton as their primary food source. Larval fishes, for hobbyists, are young fishes that are independent of their yolk-sac but not yet possessing the traits of juveniles of their species. We call these fishes "fry" though the term has no meaning in the scientific community.

Zooplankton (pronounced "zo" as in "Oh!") means meat, as opposed to Phytoplankton which means "vegies". So, even though we know that many adult fishes and even juveniles require algae and other plant life in their diet for good health, as fry they require meat! Steak and eggs for breakfast, like our astronauts. These fry, like our astronauts, have a big job to do; growing up to be juveniles and eventually adult fishes, and "vegies" just ain't gonna do it.

So, if you are feeding "green water" or "blenderised" spinach or brewer's yeast or some brand of liquid fry food to your fry, you are really feeding the zooplankton (such as infusoria if they are present in your tank) and your fry are eating the zooplankton. If there are no zooplankton present in your tank, you are just polluting the water. Now you know happened to those 200 rasbora fry (there's no accounting for taste — Ed).

Fortunately, many fry can consume brineshrimp nauplii, which are easy to hatch. Brineshrimp from San Francisco Bay are smaller than those from the Great Salt Lake, and are the choice for smaller fry, but some fry need even smaller first food.

Microworms are smaller. I always keep a couple of cultures going. All you need is about six centimetres of cornmeal in a ventilated container. Add water, yeast, and a starter culture, and in a few days you will have thousands. Many members of our society have cultures going — just ask for a starter.

It seems that the next step down the size ladder is infusoria. This zooplankton has been my personal nemesis. Of course, my primary interest is killifish, whose fry do not ordinarily need "microscopic" infusoria. But wouldn't you just know that the killie I most desire to be successful with is *Epiplatys annulatus* — and their fry absolutely require infusoria. Even if you are not into killies, look this one up in your books. It is one of the

few killies with a common name, and the "Clown Killie" is one of the most beautiful of all tropicals.

If I am ever to achieve success in breeding and raising the fry of this fish I will have to master the hidden, forbidden art of maintaining a supply of infusoria. Now, it's not that I haven't tried! Every attempt so far has ended in the same result. Imagine this: my long-suffering spouse Kathy, fists on hips, saying: "What is on my kitchen windowsill and how long will it take to stink-up the house?" I guess the next step is to purchase a pure or isolated strain of infusoria from a pharmaceutical supply house.

Feeding of fry, or larval stages of our fishes is simply the most important step in spawning and raising our captive tropical fishes. The reason came from another lecture by Dr Werner. A Russian fish biologist named Ivlev established the concept of "The Need to Grow". Simply stated, this means that after consuming its yolk-sac nourishment, a larval fish must be provided with sufficient food to maintain its normal functions (swimming, respiration, etc) plus enough to enable a minimum growth rate of three per cent per day. If it does not receive this amount of food it will die.

Considering that on three to 10 per cent of strikes at a food supply are successful by larval fishes, this means that 90 per cent of their attempts to eat are unsuccessful. It seems almost impossible that any fish would survive. In fact, in a natural environment, 90 to 95 per cent do not survive. Those that do survive improve their ability to capture food, but they still must maintain the three per cent per day growth rate.

So, the next time you decide to spawn a particular fish, put as much time and effort into preparing the food for the fry as you do into conditioning the breeders to induce spawning.

END



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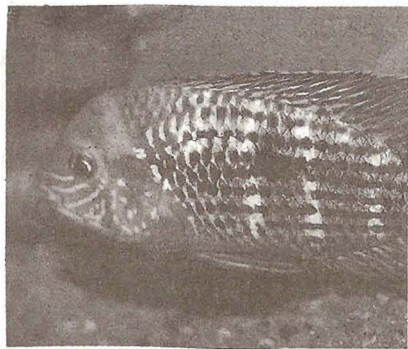
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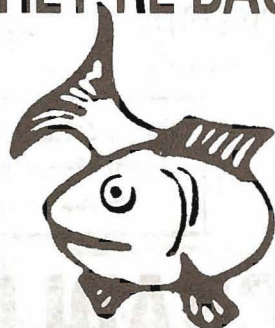
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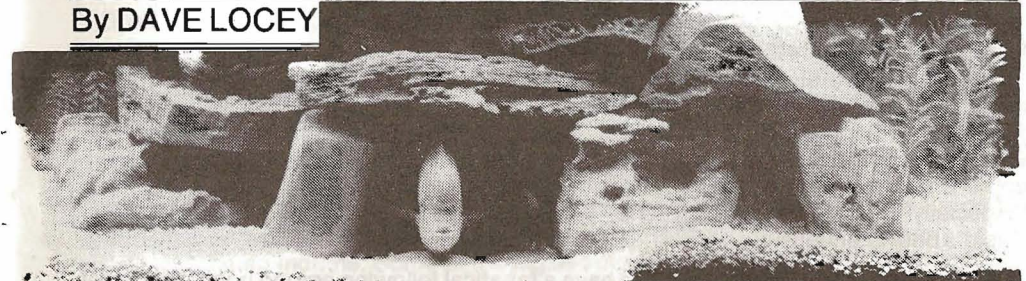
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From 'Cichlidae communique' #75, Nov/Dec 92, journal of the Pacific Coast CA

## An Introduction to Cichlasoma

By DAVE LOCEY



**C**ICHLASOMA Swainson 1839, is the largest genus of American cichlids. This genus has numerous members that range from the Pecos-Rio Grande river system in the north to northern Argentina in South America. Most occur in Central America and Mexico where the water is generally warm (21-29°C) and alkaline (pH 7.2-7.6).

All share a number of common morphological characteristics. Some of these traits require special tools and scientific knowledge to determine specific membership within the group. However, some traits are easily recognised by experienced hobbyists and retailers.

Like all other cichlids, they have a perch-like appearance with spiny and soft dorsal fins that merge into a single structure. In addition, they have a single pair of nostrils and do not have the bony ridge below the eye-socket that is common to the Damselfishes, their marine cousins. Furthermore, their lateral line, which aids in maintaining balance, is split into a long segment meandering over the upper flank and a shorter segment across the middle of the caudal peduncle, or base of the tail.

Cichlasoma do differ from other cichlids in many ways. The dorsal and anal fins are not closely scaled. Their jaws have bands of small conical teeth. The outer teeth may even enlarge to form canines. The forehead, cheeks and opercular cover are scaled. The gill rakers are short and few.

What really distinguishes Cichlasomas as interesting pets is the care they provide for their progeny. They are primarily substratum spawners with the level of sexual dimorphism and compatibility varying with their size. Small fish tend to be more compatible and show less sexual dimorphism than larger members of the group. Males are often large and possess more-pointed dorsal and anal fins.

Much energy is spent in pre-spawning displays to cement the pair bond. Once the bond is firmly established, the fish seek a suitable spawning site. The site is then scrubbed thoroughly. Prior to spawning, the male and female show their breeding tubes. Anywhere from a hundred to a few thousand eggs are laid on a solid surface. The clutch is well cared for and closely protected. Within a week the fry hatch and during the following week they become free-swimming. The parents care for the fry for another four to 12 weeks, or until they are ready to spawn again.

Although there is a lot of overlap and similarities among all the groups, Cichlasoma can be split into the following groups:

- Parapetenia (the predators)
- Archocentrus (the "dwarfs")
- Thorichthys (the sand-sifters)
- Theraps (the herbivores)
- Amphilophus (the snail-crushers)
- Herichthys (the Texas clan).

Each of the groups will be discussed in some detail. The focus will be upon general behavior and variation within the groups. Please note that within some groups (eg: Theraps and Amphilophus) not all members follow the same dietary norm.

#### **Nandopsis — The Predators** (including *Caquetaia*)

Generally, the worst is first. The members of this group have helped generate the negative conception of *Cichlasoma* aggression in hobbyists. They are primarily large predators with big mouths and appetites to match. Their mouths are often equipped with two large canine-like teeth on the upper jaw. The tail has a rounded outline. The upper snout profile is straight. They tend to be very territorial and aggressive, even (especially!?) among their own kind. Many a wedding becomes a funeral despite Cupid's best intentions.

Despite all the negatives, these fish have a fanatical following among hobbyists. They will take any bite-sized live or meaty food with relish. They also make exceptionally good parents, often raising large broods very efficiently. Furthermore, they often interact in interesting ways with their keepers. That interaction often includes recognition; however, it may also include tank redecoration and equipment stress-testing. A prudent aquarist must take steps to ensure that he/she protects the fish from abusing the tank equipment. Finally, these fish are extremely long-lived, and, with proper care, often live for more than 10 years.

#### **Archocentrus — The "Dwarfs"**

Archocentrids are a widespread group throughout Central America. While they are not true dwarfs, they are pint-sized cichlids with extremely spiny dorsal and anal fins. These spines give them protection from the aforementioned predators. They tend to be rather feisty, but not as territorial as their predatory relatives.

Most of these fish stay between 7.5 and 15 centimetres SL. Because of their small size, they rarely venture out into open water. Instead, they prefer to remain near a cave, such as an overturned clay flowerpot, for security. While they do tend to be feisty among their own kind, little damage is done as long as a refuge is available for the vanquished. Although they are usually kept in smaller tanks because of their size, they are very sensitive to excessive levels of nitrogenous wastes. Regular water changes are required to manage water quality.

These fish are easy to spawn. In fact, it is next to impossible to prevent them from doing so. Often, the female is more colorful, smaller and more sexually active than the male. Broods number 50 to 100 eggs per spawning. Since spawns are so frequent, the resulting fry may be difficult to dispose of except to a resident predatory *Cichlasoma*.

#### **Thorichthys — The Sand-Sifters** (including some *Theraps* and *Amphilophus*)

These fish are common in southern Mexico, south to Costa Rica and Panama. Their body is elliptic with small terminal mouths. The tail is triangular and the snout is pointed. There is a noticeable spot on each side of the cheek near the gills. They are primarily cave spawners that rarely exceed 15 centimetres SL. Spawn sizes are normally in the range of 300-700 eggs.

Thorichthys share the aversion to toxic wastes that all members of the genus have. It is what they do not share that is really important. They tend to be the least apt to eat or

abuse other fish. Hence, they can generally be kept with a surprising variety of other non-cichlids without fear of disastrous consequences. True community tanks can be built around these fishes. Suitable tankmates include fish that are too fast to be caught and/or too big to be eaten.

Brood care and spawning rituals follow the standard norms. Brood protection, however, is not as efficient since these fish are not as well equipped with offensive dentition as are other members of the genus. Fry also grow slowly under crowded conditions. However, since they are not as belligerent as the predators, the fry are much less cannibalistic and more gregarious.

#### **Theraps — The Herbivores** (including *Paraneetroplus*)

This group has a wide geographic range from Central to South America. All have deep, spade-shaped bodies with short caudal peduncles, rounded tails and relatively small, terminally located mouths. Some of the algae-eaters within this group, the *Paraneetroplus* especially, have developed elongated bodies, emarginate tails and wide subterminal mouths similar to the African cichlid genera *Labeotropheus* and *Petrochromis*.

These are large fish that require large tanks to maintain good health. Juveniles and sub-adults tend to be rather nondescript and very social. This trend reverses in adults and is especially true among young adult pairs. Since adult pairs require about three square feet of spawning territory, a large breeding tank is a must.

Like the predators, these fish have healthy appetites and produce substantial amounts of waste. Similar maintenance procedures of regular water changes must be observed. However, unlike the predators, they are much less messy eaters and much less belligerent toward other tankmates.

Since they are large fish, they produce large spawns in excess of 500 eggs. They are, however, more prone to eat their young than any other *Cichlasoma*. With practice and a suitable setting, they can be exceptionally good parents. They can raise very large broods, but, since they are easily spooked by sudden movements, they may dash about the tank and sometimes jump completely out. It is always wise to approach their tank cautiously.

#### **Amphilophus — The Snail-Crushers**

These fish are predators of a different sort. While they do eat fish in captivity, their preferred menu item is freshwater snails. They have developed the necessary pharyngeal bone structure to enable them to crush the shells of their prey. Some more primitive members of this group swallow the shell while more advanced snail-crushers expel the shell through the gill openings.

When snails are scarce, these fish readily adapt their dietary preferences to macro-invertebrates and small fish. It is this degree of adaptability that makes them excellent aquarium inhabitants. Since they are very messy eaters, feeding these monsters aquatic snails will only make the situation worse. Besides, a large supply of snails has to be either maintained or available to the aquarist to meet their needs. Terrestrial snails are not good food due to the potential pesticide pollution and undetermined parasitic damage potential. Hence, their willingness to adapt to more readily available "feeder" fish, like guppies and goldfish, makes their maintenance much easier.

Spawning fish willingly adapt to aquarium conditions. However, there are some interesting variations from what is normal for the group as a whole. The Red Devil complex reportedly bonds only for the duration of the spawning attempt. In essence, territory is held by a pair only during this time. Territorial defence during this time is extremely fierce.

The most unusual spawning strategy is the one practiced by *Cichlasoma minckleyi*, a true enigma. This fish is from a series of freshwater springs in northern Mexico called Cuatro Ciénegas. Morphologically, it bears strong resemblance to the Texas Cichlid group, but dietetically, it is a fish with split preferences between meaty foods and herbaceous foods. Thus their omnivorous food preferences do assist them in breeding and successfully rearing fry.

Oddly enough, when they do spawn, they do it more like Apistogrammas than like typical Cichlasomas. The male will capture and maintain a large territory, while females will maintain smaller territories within this realm. The male visits each female during the spawning season just long enough to fertilise the eggs. Once his work is done, he leaves for the next female in another part of his territory.

Despite their occasionally unusual spawning methods, these do make intriguing aquarium residents. They are robust, fearless animals that intimidate less vigorous species. With them, only the strong survive; the weak become lunch. There are no wimps in this group.

#### Herichthys — The Texans

The Texas clan ranges from Texas just north of the Rio Grande-Pecos river system into northern Mexico on the coast of the Gulf of Mexico. As their nickname implies, these fish are large, robust critters. Most reach 25-30 centimetres SL. Even their spawn-size is large, often 1000-5000 eggs.

Their size strongly influences their disposition. Any fish of 25 centimetres SL or more is more often than not likely to be one very ornery beast. These fish rarely are anything but ornery unless they are sick or dead. Any trouble in a tank with them in it will find them either to be the cause, or an abettor. Trouble seems to attract them as sugar-ants; they are addicted to it.

Despite their robust demeanor, these fish make excellent parents. They take excellent care of their fry. Their defence of the fry parallels that of the predators. Also, they are often among the most beautiful of aquarium fish, when they are given sufficient room to expand. They do, therefore, have some important redeeming values. These values are enough to give these fish and others like them an almost fanatical following among cichlidiots.

#### Summary:

The goal of this article is to give aquarists new to the genus *Cichlasoma* an idea of what to expect. It is not a complete treatise on these fishes. That would take much more space. I have summarised the differences and similarities of *Cichlasoma* and other cichlid species behaviorally and morphologically. Then, each group was analysed similarly. Each group was also examined on its ability to adapt to captivity, including its feeding and general care requirements. Additionally, more detailed information may be obtained by checking out the cited references. If the library does not have it, one of our many local supporting aquarium stores will have it on sale. Happy cichlid tales to you!

#### Literature Cited:

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END

# VCS Table Show

## Americans and Asians

Species	Entrant	Cond (max 30)	Fins (max 30)	Shape (max 20)	Scales (max 10)	Age (max 10)	Total
1 <i>Cichlasoma octofasciatum</i>	John McCormick	25	26	17	8	6	82
2 <i>Heros severum</i> *	Lynda Van Pooss	25	25	16	8	6	80
3 <i>Cichlasoma sajica</i>	Maurice Breward	28	29	18	8	8	91

#### \*Popular Choice

This month's show was judged by Kevin Archibald, who made the following comments:

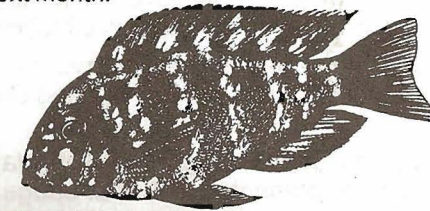
Tank 1 — Good, young fish.

Tank 2 — Tail appears to show deformity.

Tank 3 — Good show fish.

I would like to thank Kevin for judging and also those members who entered their fishes. It would be nice to see a few more entries for next month's show which is Africans and Asians.

See you and your fish next month.



John McCormick

## Table Show Calendar 1993

- |              |   |
|--------------|---|
| 1. APRIL     | African and Asian Cichlids  |
| 2. MAY       | American and Asian Cichlids   |
| 3. JUNE      | African and Asian Cichlids  |
| 4. JULY      | American and Asian Cichlids   |
| 5. AUGUST    | Dwarf Cichlids  |
| 6. SEPTEMBER | African and Asian Cichlids  |
| 7. OCTOBER   | American and Asian Cichlids   |
| 8. NOVEMBER  | Cichlid Pairs   |
| 9. DECEMBER  | African and Asian Cichlids<br>(and Baby Show [any cichlid species]) |
| 10. FEBRUARY | American and Asian Cichlids   |
| 11. MARCH    | Cichlid of Your Choice  |

# Minutes of Previous Meeting

The meeting opened at 8.17 with the president in the chair. He apologised for the late start and welcomed all. Apologies: David Sutton, Kathy Breward, Heinz Staude, Allan Hawkins.

Minutes of the April meeting were accepted as read on a motion moved by Jeffrey Staude and seconded by Maurice Breward.

**Correspondence:**

- Steve and Deborah Zink — Renewal
- Scott and Karen Welbourn-Lees — Membership application
- Glenn Sant — Information request
- Aart Langelaar — Rejection of Editor's job

Correspondence was received on a motion moved by Daryl Hutchins and seconded by Jeffrey Staude. Business arising (correspondence): Dave Thorn asked about outward correspondence. Conference information to each state only outward letter. Dave enquired about letter of thanks which had not gone due to lack of current address (since rectified).

Steve Young narrowly defeated John Groves in the quiz and won a can of Energen food. John McCormick thanked for his questions.

John McCormick and Daryl Hutchins then gave the (extremely impressive, complete with mind-blowing video — Acting Ed [and cameraman]) mini talk on Oscars.

Brian Bone, Carl Bentin, Brett Montgomery and Wayne Montgomery were welcomed to the society and presented with their badges, etc by the president.

Daryl Hutchins presented the video quiz and then read the treasurer's report:

Opening balance	.....	\$ 447.59
Income	.....	1611.35
Expenditure	.....	942.09
Closing balance	.....	\$116.85
Term deposit \$13,913.48		

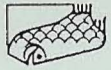
This report was received on a motion moved by Dean Groves and seconded by John Reeves. Table show results were then announced and trophies presented. Draw prizes: 1st Air Pump — Lynda Van Pooss; 2nd Frozen Food — Michael Thomas; 3rd Champagne — Jeffrey Staude.

New members Michael Thomas and Mark Pipunic were welcomed by the president and presented with their badges, cards and handbooks.

Quiz winner was announced: Danny Genovese narrowly beating John McCormick, with Michael Hayes a close third. The members were invited to supper at 10.16 pm.

END

## Application for Membership



The Secretary  
 Graham Rowe  
 The Victorian Cichlid Society Inc  
 23 Mangana Drive  
 Mulgrave, Australia 3170

Ordinary Membership	.....	\$25.00
Family Membership	.....	\$27.50
Junior Membership	.....	\$10.00
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Age next birthday (if under 18): .....

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Date: ..... Signature: .....

Areas/s of interest: .....

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