



FEDERATION OF BRITISH AQUATIC SOCIETIES

summer 2012

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BULLETIN



NEWS, VIEWS & ARTICLES
by FISHKEEPERS
for FISHKEEPERS



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BULLETIN

June 2012

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*Opinions expressed in any article remain those of the author
and are not necessarily endorsed by this publication*

Produced for FBAS website by Dick Mills



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EDITORIAL

First of all, I would like to take up a little space to thank all those fishkeepers who sent me 'Get Well' messages in recent weeks. I am sure that they played a big part in helping me through a bit of a worrying time and I really appreciated all your kind thoughts.

It's the small things in life that make things so interesting and none more so than the fish on our cover. Trust the Judges to give our roaming photographer a challenge when they awarded First Place to these fish - none are bigger than a centimetre - and the chances of getting the four together for a Breeder's team photo was minimal. But we managed it!

Whether it's breeding fish that's your interest, or taking photos of the results is neither here nor there. What really matters is that you're taking an active interest in at least one aspect of fishkeeping and, either through exhibiting or placing the results on these pages, you are providing proof that there's life in the hobby yet.

For the curious, the fishes are *Danionella translucida*, and you can easily see where the *translucida* bit of the name comes from.

If you've got a special interest in a particular part of the hobby we'd love to hear from you and share in your appreciation.

Malcolm Goss,
25 The Gowers, Chestnut Lane, Amersham,
Buckinghamshire HP6 6ER
tel: 01494 722786 e-mail: malcolmgoss@tiscali.co.uk



Parkinson's Rainbowfish ***Melanotaenia parkinsoni***

Over the last decade, Rainbowfish have become very popular with aquarist, and why not? The Family of fishes Melanotaeniidae vary in size from 50mm to 115mm in males (FBAS SIZE SHEET Mc).

Parkinson's Rainbow Fish on the 2012 FBAS size guide puts males and females at 80mm although in the wild these are nearer 100mm.

The main colours are, as in the photo, vivid orange on a base of dirty sliver/green, however the orange in some species can be yellow. In their natural habitat of Papua New Guinea, between the River Kemp and up to the Miline Bay they will be seen in large shoals, so at least try to purchase four at any one time.

An aquarium of 90cm (3ft) in length or larger, well-planted with grass-like plants such as *Vallisneria sp.* will make these fish feel at home, being a middle to surface swimmer. They will feed on flake and small pellet foods, but like most frozen foods as a treat.

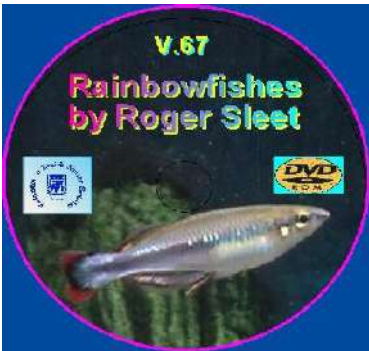
This Rainbow is not demanding in any way, liking a water temperature of between 24°C (75°F) and 30°C (86°F) and pH 7.5/7.8 - as you can see, it's very hot in their part of the world!

Sexing as with most Rainbows, the males have a longer first dorsal fin that often overlaps the second, whereas the female's will not. Older males develop a notched forehead, with a much deeper body than a female. Females are not only smaller in size but are nearly all silver in colour.

Although these fish are not difficult to breed they still maintain a high price in the shops. A well-planted aquarium set up with fine-leaved plants, such as *Cabomba piauhyensis* (Red) or *C. caroliniana* (Green), species of *Myriophyllum* would also be good to use. Ideally using one male and two females, but a pair should spawn as they are prolific, and will breed in most water conditions. The problem is raising the fry as they are very small and grow slowly. Feed them on large amounts of infusoria, but it is essential to keep the water clean. As soon as you spot the eggs on any of the plants or see them actually spawning remove the parents as they will eat the eggs and subsequently eat any fry they can see.

Although there are several colour varieties (in even in the same brood), it is not clear as to the reason for this and females will breed with any colour form, without distinction.

Adam Lundie
MG. (2012)



NOTE: The FBAS Video No. 67: RAINBOWFISHES presents a comprehensive review by Roger Sleet, of Orinoco Aquatics, of the many species within this group of fishes, the Silversides.

FBAS-affiliated Societies can free hire this video or you can buy your own copy. See FBAS website – www.fbas.co.uk - for details.



Two atoms of Hydrogen and one atom of Oxygen constitute water, the most important part of a fish's environment in which it lives. Yet it can be the most neglected part within our aquarium. A study to the requirements of the particular species is necessary and may well have to be adjusted to their needs being somewhat different from what is coming out of your tap.

One can feel the difference in the water from those of us living in the London area to that of when you are on holiday in Cornwall, when doing a simple thing, like washing your hands. So, whatever part of the UK you live in, you need to know what is coming out of your tap, other than just to know it's water.

So many aquarists, often with just one community aquarium, have neglected their aquarium till it has become filthy and then they remove plants, rocks, fish and gravel, scrub every part and refill with pure tap water. This can cause an environmental shock of such magnitude that the fish may not survive long and feel real hardship till their death. One must always adopt new tank procedures after such major water changes. This also includes pond cleaning and the care of Goldfish.

Tap water is suitable for drinking but not for keeping fish. When setting up a new aquarium with plants and fish, you may well have to use tapwater.



In this case, you must use a one of the well-known brands of 'dechlorinator' or initial water treatment to remove poisonous 'Chlorine' along with a tap water conditioner to help age the water. Actually, most water authorities nowadays use chloramines to treat water (which is more difficult to remove than old-fashioned chlorine) but the principle still holds true.

Alternatively, it would be of great help if you topped up a third of the water for your aquarium with water from your pond, providing it's clear and clean - and that any fish in the pond are healthy!

Rainwater is ideal, and once again it must be collected in a clean non-contaminating container that has not been used or cleaned with detergent.

Once your aquarium has matured after a few weeks of being set up, carry out water changes of up to one fifth, this will dilute the nitrates. Use known soft or rainwater and don't forget to have a well fitting cover glass to eliminate evaporation.

You may well have the access to distilled, R.O., or de-ionised water, but for aquarium use it will require vigorous aeration, the use of a tap water conditioner and has limited use.

Lastly, whatever water conditioner you use always read the instructions as they do vary between different manufacturers. Water test kits are valuable and give immediate results, but I am not encouraging you to be a Bio-chemist, but to use your eyes, knowledge and common sense.

Aquarian Laboratories, Halifax.

MG

CONTROL OF SNAILS IN AQUARIA



Possibly, after Duckweed constantly floating across your aquarium, snails are the next biggest pest. Snails will almost certainly find their way into your aquarium at one time or another. Once present, they will undergo periodic population explosions. This is quite normal and follows a well-known biological pattern. Unless one is spawning egg layers, most species of snails need not be regarded as a major problem. Really? Let me get my hands on who said that!



The aquarium may be treated with a molluscicide, a chemical that kills snails.

This will certainly do its job, however it will turn out costly for those aquarist with large tanks such as 3ft in length or more. It is also essential to remove all the dead bodies, not easy in a well-planted tank or with many rocks for them to drop behind. Failure to do this will lead to the water fouling and inevitable loss of fish.

Whilst some species of snails will float when dead, and can be netted up off the water's surface, burrowing species are a concern with many bodies remaining buried and rotting where they lie.



Snails may be baited with an inverted saucer (or the commercially-available Snail trap from JBL, pictured) that is placed over a piece of meat and raised off the gravel with just enough room for the snails to get under but not the fish, once again not easy if you have small fish like Neon Tetras and the like.

This is left overnight and the snails removed along with the meat the following morning. The procedure is repeated with fresh bait until the snail population is down to a controllable level.

A slower and less effective method is to crush any small snails against the sides of the tank glass and the leftovers eaten by the fish! A high number of snails needs to be borne in mind when feeding your fish as overfeeding will encourage the snail population even more.

Veteran fishkeepers may also recommend the use of a low-voltage battery (4.5v) to introduce a weak electric current through the aquarium water – just dangle a wire from each of the battery's terminals in opposite ends of the tank.



Pufferfishes (*Tetraodon* species) are great eaters of snails and a friend of mine kept one of these fascinating fish - in fact, all Club members used to collect snails from their tanks and bring them to him on Club nights. However Pufferfish tend to be fin-nippers and are best kept on their own.



Another 'natural' way of eradicating snails is to have some Loaches, especially *Botia*, in your aquarium. They do a great job in keeping the number of snails down also they seem to limit their actions to the round-shelled species rather than the more tiresome (and far more numerous!) conical-shelled snails.



The removal of snails eggs, that form jelly-like blobs of strips containing yellow to brown eggs, is the real first step in snail control.

These can be found on the undersides of flat leaf plants and if you have a large tank fully planted this take some time, if ever they disappeared all together.

So we are left with one sure way to keep them out of your aquaria and that is to treat your plants with molluscicide *before* they are placed in your aquarium.

To make up a preliminary 'plant bath,' I use a shallow plastic tray, measure how much fluid it will take to cover your new plants. This you will need to work out the dosage as the manufacture recommends (read instructions carefully). I now use this method even when moving plants from tank to tank. However, this treatment will only kill off existing snails on your plants, not their eggs.

HAVE I GOT NEWS FOR YOU!

There is a new J & S Chairman - Keith Cocker

Pete Cottle is a new Vice-President

The most expensive aquarium in the form
of a table lighter by Dunhill sold for
£1,000.00 on BBC 'Flog It.'

There will be a Ladies Nano Furnished Aquarium
Competition at Sand Bay this year.

The Japanese used to think *tsunamis* were caused
by giant Catfish waving their tail fins.

I saw Dick Mills purchase an aquatic plant

The J & S have reduced all Show Sizes for 2012

More Aquarists have Bus Passes than not



In November 1992 collections were made in the Upper Negro River and some of its tributaries being Nobua oba near Sao Gabriel da Cachoeira, Brazil. Catfish collected there being *Corydoras adolfoi* Burgess 1982 and *Corydoras imitator* Nijssen & Isbrucker 1983. During the journey to Nobua oba several adjoining streams and the lower waters of tributaries adjoining the Upper Negro were sampled. It is hypothesised that the presence of *Corydoras* in these tributary streams of the Upper and Middle Rio Negro rather than the main River Negro is an indication that natural barriers restrict distribution of the species. Adding to this it is suggested differences between the small streams and the Negro, may well prevent the dispersal or migration of populations.

Current estimates suggests there are about 120 species and sub-species of *Corydoras* know to science with many more awaiting description. With some sympatric species sharing a similar cryptic colour pattern, that leads to doubts over true identification. This particular true in the case of *Corydoras adolfoi* (Burgess 1982) and *Corydoras imitator* (Nijssen & Isbrucker 1983) a topic that I discussed with Gordon Howes when I met him at the Natural History Museum in London some years ago.

Whilst surveying the Miua River system which flows into the Upper Rio Negro revealed new species of *Corydoras* some being clearly new species and others that are similar to know species in colour. Raimundo Jose Dias and D. D. Sands were night collecting in the Rio Miua system of streams some 10/12 kilometres away from joining the Upper Negro River with a water depth of 1.5 meters and at that time very slow-moving.

10 named *Corydoras* were collected, these being named *Corydoras amandajanea*, the largest being 58mm in length, they had a range of colour patterns with the body colour pale tan and having a black dorsolateral blotch which almost reaches the mid-lateral line below the dorsal spine and reaches up into the lower dorsal rays. These markings have similarities to *Corydoras imitator*, also found in the same tributaries of the Upper Negro and *Corydoras ambiacus* (Cope 1972) these being from collections made in Peru & Ecuador by Nijssen & Isbrucker in 1980.



Corydoras amandajanea is a comparatively large species which inhabits similar, deeper and faster part of the Miua system. A nearby stream is also home to *Corydoras imitator*, also collected was *Corydoras crypticus*, the Uarinabe stream with river banks of dense forest edged with tall palms, the substrate of sand that is littered

with dead and decaying palm leaves however is only half to a metre deep.

Once again a *Corydoras* with a pale tan body having a vertical black eye band reaching up to cover almost all of the dorsal fin rays remaining black to a dusky colour.



In contrast *Corydoras serratus*, just the one specimen collected in the Rio Poranga 8 kilometres north of Nobua Oba, where two streams join the Upper Negro. Once again having a body colour of pale tan also having eye band that looks faded but also having an area of black running a long the dorsal spine and into the upper rays of the caudal fin.



In November 1992 *Corydoras* species, *C. bicolor*, *C. crypticus*, *C. duplicareus*, *C. serratus*, all being close in their markings and colour patterns to that of *Corydoras adolfoi*, *amandajanea*, *biocolor*, and *imitator*, were new to David Sands at the point of collection.

Their discovery in the Negro River tributaries posed several questions. The Negro has been scientifically and commercially collected for the last two decades at that time without revealing any new species belonging to this genus. What was found that analysis of water samples, obtained from the Upper Negro at Sao Gabriel da Cachoeira, measured pH at 4.5 /4.6 with a temperature range of 28°C-30°C in the shallows.



Samples taken in the Miua, obtained several miles up the tributary and nearest to the Upper Rio Negro revealed a higher pH 5.5 /5.9 and a lower temperature of 25°C this area being where both *Corydoras crypticus* and *C. biocolor* were netted.

Corydoras adolfoi and *C. imitator* located about 60/70 kilometres upstream revealed even higher pH 6.2 /6.5 with an even lower temperature of 23°C. The combination of all these factors could represent an ecological barrier for fish species, that include *Corydoras*.

D.D. Sands Ph.D. (first published June 15th 1995)

Photographs in the original article were unnamed, however David Sands does thank both Liverpool University & Museum.

Extracts M.L.G. 2012



Wholesale Tropicals on the Bethnal Green Road, Bethnal Green, London has been a magnet for fishkeepers from all over the UK and those that live in or near London. It's a "must" retailer you just have to visit. So when the Bulletin heard about four aquatic clubs joining up together – Southend, Mid-Sussex, Strood and Hounslow - one just had to go!



With Clubs getting smaller in members or fading away altogether, Terry and his Dad don't have nearly the same amount of open nights like they did. Terry says it's "just not worth us staying open for half a dozen, but Clubs getting together like tonight, well, it's like the old days!"

Myself, Dick Mills and Peter Anderson arrived a bit late, boy, was it crowded, and with so many faces one had not seen for so long. Everyone squeezing passed each other in the aisles trying to see the fish, I clearly remember closely pushing past the lady with the big(come on Malc! Concentrate on the fish!) ... I remember now, that *Mystus wycki* !



These days Terry tells me there are 330 tanks of fish to look at. As well as the fish to see, the hospitality soon got under way with mugs of tea being passed a round. The plant display tanks took my eye and Dick thought not only the quality was very good, but the selection as well.

When one visits other shops it's hard to see many Killifishes for sale, but hear there was a good variety along with many species of Dwarf Cichlids.



In these small tanks that caught my eye were plants from Madagascar, these being *Aponogeton henckelianus*, a plant that likes shade, well Dick, Peter and myself brought one each. Dick joked that me and Peter had picked the best ones, I think it's time to clear up to the other end of the shop, after all, Dick drove us here.

As I am trying to breed a true line of Cambodia Fighters, *Betta splendens* I spotted one male and brought it to go with the stock I have.

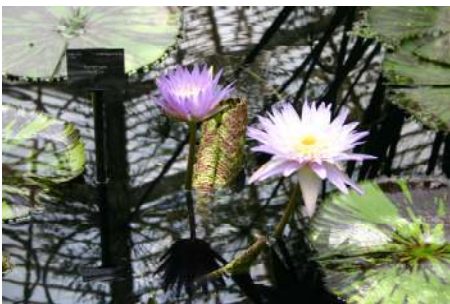
The time went by so quick and all to soon every one had gone and the evening was over, just one last look round and I spotted some very nice *Corydoras nanus*; I purchased three at £4.50 each so I was now truly a happy fishkeeper with my plant, Fighter and 3 catfish. Was the evening over? No, with Dick and Peter we had lots to chat about on the hour long journey home.



Many of us that have a pond are well aware of the Water Lily (*Nuphar*) with their many colour varieties, these coldwater species are known as temperate water lilies. Providing they are planted in a rich loam and from time to time are feed with some clay balls they will flower through the summer.

Clay balls are made by rubbing a small amount of clay between the palms of your hand, forming a ball about 1/2" in diameter, then with a piece of round wood push down into the earth close to the root system, push your clay ball in and cover with more earth.

Often the leaves start to over grow and stop light getting to the new Lily buds so, where possible, cut these off but leave some if you are to stop string algae growing.



In contrast to temperate lilies, there are many tropical species, these often in colours not seen in temperate varieties, examples in bright blues and mauves.

To distinguish between tropical and coldwater specimens, tropical always flower on stems 150mm to 300mm above the waters surface, and coldwater always flower on the surface. Tropical Lilies may grow outside in very hot summers, but will die if left out over the winter. In the aquarium given the right conditions many aquatic plants will flower.

Plants that I have grown on to flower are species of *Anubias*, *Aponogeton*, *Cryptocoryne*, *Sagittaria* and *Vallisneria*. Although I have bought *Cabomba* in flower I have never brought it into flower myself.



So often, aquatic retailers sell the floating plant Water Hyacinth (*Eichhornia crassipes*) that is truly tropical, yes it may flower on one of those very hot sunny days, and if it does you should get your camera out quick, as by the second day the flower will have gone.

Like with the tropical lilies it's not only the sun tropical plants require, but the hot moist air that comes from being near the equator. Botanists will tell that many plants cannot be correctly identified until they flower and none more so than *Aponogeton* and *Cryptocoryne*.

In the case of *Cryptocoryne* this will not happen unless you grow them out of water.

To do this I use a leakproof tray and fill it with gravel, then fill the tray with water, plant my *Cryptocoryne* plants with the roots in the gravel and the crown of the plant just showing. I then cover them with a matching size all-glass tank, upside down, and put some light over the top. Within a couple of days the glass will be misty, now you have the correct atmosphere for your plants not only to grow strong, but hope fully come into flower.

Growing *Aponogeton* requires a different concept altogether and they require growing fully submerged. The only similarity to growing *Cryptocoryne* is that both family of plants like rest periods and none more so than *Aponogeton*. These come from an area known as the "Old-World Tropics" meaning that excludes America. In fact many are found in Madagascar, an island off the East of Africa in the Indian Ocean. Here, 80% of all living animals, fish and plants are not found anywhere else on our planet.

I grow my *Aponogeton* in terracotta pots with a mixture of gravel and aquatic soil. The plants are often purchased as corms, just like garden bulbs and placed in the gravel. I then place them in a tub, eliminating any light coming from the side and just having defused light over the top of the plant, too much light will encourage algae growth within the fine lace leaves. They like soft acid water, I used some old oak wood in the base of the tub held down by a couple of bricks, that was ideal to stand the pots on.

Aponogeton plants start growing well from April onwards and will flower during our summer. When you see the leaves dying back around end of September switch off any light, one month later drop the temperature to around 60°F. In the following year turn the temperature up to between 72° – 75°F during March and then turn on the light within the first few weeks of April and the plants start their growing cycle all over again.



It's from the flowers - white to pinkish spikes - you can correctly identify your plant.

Asiatic and Australian species have one spike, Africa (including Madagascar) have two.

You don't need bees or any other insect activity to pollinate these flowers, you can do it yourself using a small soft paintbrush to transfer pollen amongst the flowers. With a twin-spike flower you can just rub the two together - no fire, just setting seeds.

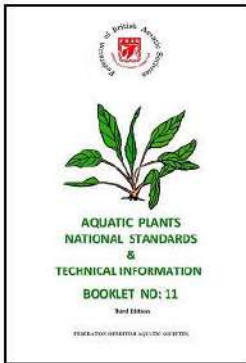
Plant the set seeds in sand shallow water - those seen here planted themselves after the seeds fell back into the tank!





Lastly a plant that has flowered in the aquaria is *Barclaya longifolia*, when growing well this is a true show plant with its large purple/brown coloured leaves that you could mistake for a species of *Cryptocoryne*.

I purchased it from a Stand at last year's Festival of Fishkeeping at Weston Super Mare as a bulb for £1.50. At this time I am growing it in shallow water, once again with not too strong a light, although the sun does also shine on this tank. As you can see, it has an odd little flower but a flower none the less.



For more information on these plants, their Show Standards and a lot more check out the FBAS Aquatic Plants National Standards & Technical Information Booklet No: 11.

DISFIGURING VIRAL DISEASES -

Carp Pox and Lymphocystis

Some viral diseases of fish causes very serious disease from which few infected individuals recover. Others however cause merely a mild disfigurement that usually leaves the fish otherwise unaffected. We will look at two common viral pathogens that fit into this category:

Carp Pox – a virus that affects many fish, but is especially common in cyprinids – all varieties of goldfish, Koi carp, Orfe, Tench etc. This disease is very commonly seen in pond fish for reasons we shall discuss later.

Lymphocystis – a virus that affects fish with spiny fin rays such as the cichlids. The disease is rarely seen in pond fish but is especially common in many marine aquarium fish.

Carp Pox

The Virus: The Carp Pox virus belongs to the herpes virus group (viruses can be classified by their morphology, biochemical and genetic characteristics). The virus is sometimes referred to as *Herpesvirus cyprini*. We know very little about the virus or the disease it causes. The incubation period for the disease appears to be around 6 months, so following initial infection, it will be 6 months before the patient begins to show symptoms. How the virus spreads is uncertain and little research has been done.

Affected fish are believed to be infectious to their pond or tankmates. Fish are able to carry the virus in their tissues without symptoms – with stress seeming to be the key factor triggering disease – this is a common feature of the herpes viruses.

Certain individual fish also seem to have a genetic predisposition to the disease, so selection of resistant strains should be possible.

Symptoms: As mentioned above, this disease is principally seen in coldwater fish but occasionally may be observed in some tropical species. The virus causes the formation of irregular shaped waxy lumps on the skin of the fish. These lumps may be 1 – 2 mm thick and a white to pinky colour depending on the colour of the skin beneath the growth. The disease is very rarely fatal to the fish but can be disfiguring. NEVER SCRAPE THE WAXY LESIONS OFF THE FISH – this will wound the fish inviting bacterial and fungal secondary infection.

Treatment: There is no treatment for Carp Pox available. However the fact that stress usually brings about the disease it follows that elimination of the stressor should allow the fish's immune system to bring the infection under control. Pond keepers may see an individual fish succumbing to the Carp Pox over the winter months (when the activity of the immune system is massively down-regulated), with a 'cure' occurring in the late spring – when water temperatures raise and immune function elevates.

If a fish is found to have Carp Pox it is wise to isolate it to prevent spread to other fish in the pond or tank. However if this is not possible other fish are at a low risk of infection as transmissibility is very low. By maintaining good water quality and good nutrition tankmates or pondmates should be able to resist infection. Isolate the affected fish if you have the facilities or if tankmates are vital fish such as show grade Koi or goldfish or if they are valuable broodstock.

Self-cure of Carp Pox is encouraged by the fish keeper eliminating any stressors on the fish. Thus check water quality of the pond or tank meets the environmental requirements of the fish. Ensure the fish is getting a good diet, out of date food or poor quality food will not have the correct level of vitamins and minerals required to keep the fish in peak health. There is a positive correlation between the levels of particular vitamins in the diet (such as vitamin C) and the activity of certain components of the immune system demonstrated in many fish species. Finally the activity of the immune system can be boosted by feeding the fish a diet containing an immunostimulants, such as beta glucan. Many fish foods now contain immunostimulating agents, Tetra foods contain a blend of immunostimulants we call 'Active Formula'

Lymphocystis

The Virus: The Lymphocystis virus belongs to the iridiovirus group, it is a mere 200 nano-meters (nm) in size (There are 100,000 nano-meters in a millimetre!). The virus lives inside the cells of the fish where its presence causes the cells to swell up considerably, a condition known as hypertrophy. The cells affected are most often those on the skin, as infected cells die and rupture they release the virus into the water ready to infect other fish. Infection routes are through skin wounds or orally (through the mouth), leading to infection of the gut. The incubation period for the disease seems to be several weeks.

Symptoms: Infected cells become massive, (they can reach up to 5mm across), and one cell frequently infects its neighbours leading to clusters of infection. These clusters manifest at the surface as hard, cauliflower like lumps. They are usually white in colour but can be pinkish, depending on the colour of the underlying tissue. External infection is common in many tropical aquarium fish, and is very commonly seen in long-term inhabitants of marine aquaria. The cauliflower-like lumps are often seen around the fin margins. Internal infection of the gut is possible by orally infecting virions. Infection of the Heart, swim-bladder and other internal organs has also been recorded. Infection is usually merely disfiguring and is rarely fatal; the fish may only die if some crucial function is impaired by the presence of the growths – for example it grows over the mouth, or hinders the function of a key internal organ.

Treatment: Much like Carp Pox there is no direct treatment for Lymphocystis, care for infected fish centres around removal of stressors and boosting of the immune system to encouraging self-cure. However infected fish pose a much greater threat to their tankmates than those with Carp Pox. The skin of fish is continually being replaced, so the cauliflower-like lumps will be constantly sloughing off infected cells. These cells are heavy due to the massive increase in size brought about by the virus, so they sink straight to the bottom where they are a source of infection to scavenging bottom feeders in the aquarium. The cells may rupture releasing virus into the water, or the whole cell may be ingested by a fish. Remember these cells may be up to 5 mm in size! Thus infected fish should be isolated in a separate filtered aquarium. Water quality must be monitored to ensure it meets the environmental preferences of the fish. Nutritional needs must be met, the fish would benefit from the addition of an immune stimulant such as a Tetra diet containing **Active Formula**. Offering natural sources of vitamin C should also help to bring about a self-cure. Ensure the isolation tank is well away from the main tank, use separate nets, siphons etc to prevent any cross contamination – remember the virus will be in the water, and it's a mere 200 nm in size. (5000 viruses laid side-by-side would fill 1 mm!). Only return the fish when all signs of disease have disappeared. – this may take several months.

Finally, as with Carp Pox, this disease is not life-threatening, merely disfiguring. However, with Lymphocystis isolation of infected individuals is important to prevent spread to other tankmates. An aquarium full of fish with white lumps all over them is not very attractive!

SUMMARY TABLE BELOW:

Summary table of Carp Pox and Lymphocystis:

	CARP POX	LYMPHOCYSTIS
Viral type	Herpes virus	Iridiovirus
Susceptible fish	Mainly coldwater / pond fish	Mainly tropical and marine fish
Lesion	Soft, waxy, clear, white or pink in colour	Hard cauliflower like lumps, white or pink in colour
Incubation period	6 months	Several weeks
Treatment	None – remove stressors and stimulate immune system to encourage self-cure	None – remove stressors and stimulate immune system to encourage self-cure
Infectivity to other fish	Negligible	Very infectious especially if other fish are stressed
Management	Isolate if tankmates or pondmates are important fish	Isolation of infected fish vital

Dave Hulse, Tetra



Visit Tetra at www.tetra-fish.com

ASK US

Q: I have a simple question for you. Why are many favourite aquarium fishes called Tetras?

A: In this commercially-minded world, it would be understandable (or even cynical) to assume that it's a cunning form of 'product placement' of a fish-food salesman's dream.

The actual reason has its roots in one of the species' generic name.

Most fishes' names are either descriptive or attributable - that means description of form, colour, physical characteristic, geographic location or, additionally, named in honour of a person.

In the case of Tetras, it stems from the generic name *Tetragonopterus*, meaning square, or four-sided -finned. Tetra = square, or four; opterus = finned.

Once a family of fish was found that to all intents and purposes shared this physical characteristic, it was only too easy to abbreviate the long name and apply it generally.

The same reasoning can be applied to the Barb group of fishes. The generic name *Barbus* means 'bearded' and refers to the small barbels around the fishes' mouths.

Killifishes are so named because they often come from small streams or ditches - and 'Killi' is the Dutch word for such bodies of water.

Once you start investigating the origins of fish names, who knows where you're likely to end up?

THE FLUVAL G FILTER RANGE - A REVOLUTIONARY FILTRATION CONCEPT BY LES HOLLIDAY.



When Hagen first introduced the Fluval G series of filters a completely new approach to aquarium filtration was borne. Earlier filtration design trends were put on one side in favour of a new objective based upon developing an advanced new form of filtration system that combines both unparalleled filtration performance and interactive computerized systems to continually monitor and control its operation.

These were the lofty ideals I was given the challenge to evaluate when I first received two test models from the Fluval G range, the Fluval G3 for aquariums 33-66gal (150-300ltrs) and the Fluval G6 for aquariums 66-132gal (300-600ltrs). Rich in a whole range of innovative features it wasn't long before I was becoming more than impressed. Although designed to sit beneath the aquarium, each slick, well-proportioned filter immediately grabs your attention. Hagen initially made a huge investment in market surveys to not only ensure this wow factor appeal but also to guarantee that each filter's performance reflects hobbyists' requirements in terms of quality and durability, ease of use, whisper quiet operation and the latest interactive technology.

The filters were easy to set up with mechanical and chemical media housed in separate cartridges, directly accessible from the top of the filter. Changing or maintaining is quick and mess free. Both media cartridges can be removed and cleaned or replaced without disassembling the whole filter. Filtration is 3 stage with the addition of the biological media baskets which contain Fluval G BioNodes, a high capacity biological media.



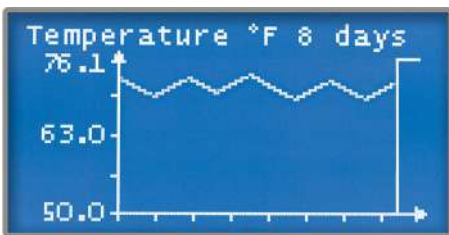
The filter design provides highly effective filter performance combining enormous filtration capacity with an extended contact time.

Water is first siphoned together with any suspended debris through a clog-proof intake strainer which sends it on through a pleated pre-filtration cartridge and traps most of the suspended solids.

The pleated design of pre-filter is superior to the sponge mechanical filters incorporated in the design of most other filters on the market requiring less maintenance and comes in fine mesh for marine tanks with lower levels of suspended matter and coarser mesh for less pristine fresh water systems.

The powerful pump then draws the water through the chemical media cartridge from where it flows into and through the biological filtration baskets. Here the Fluval G BioNodes accommodate millions of beneficial bacteria which break down the nitrogenous wastes. The return flow of water back into the aquarium passes through an adjustable output nozzle or spray bars ensuring good water agitation and creating currents that help break down organic wastes and prevent them from settling. The result is a continuous flow of clean and crystal clear water.

The main element that defines the Fluval G series is the Hydrotech computerized aquarium performance monitoring system. This unique intelligent monitoring system provides a continuous performance overview displayed on an LCD panel. Digital controls indicate a range of essential data including a clogged pre-filter cartridge warning to ensure maximum water circulation at all times.



Information about aquarium temperature and also electrical conductivity, a parameter for ascertaining water quality, are always at your finger tips as are indicators regarding when the last filter media service or replacement were carried out, plus maintenance intervals for mechanical, chemical, and biological filters.

Electrical conductivity (EC) is a measure of the water's ability to 'carry' an electric current and indirectly a measure of dissolved solids or ions in the water. The greater the salt and/or mineral content, the higher the conductivity level. One of the most important issues for aquarium keepers is providing and maintaining a suitable and stable environment for their living organisms.

EC can therefore be a very important parameter to monitor in both fresh and salt water aquariums, as it provides a general but fundamental alert that something is changing inside the aquarium. If a fish dies but is not spotted for example, the rapid increase in EC will alert you to a problem which can then be investigated and resolved before it becomes a major issue.

The EC meter can also be used to help create the perfect living conditions for your fish. Fish will do best if kept in the conductivity levels they have evolved to thrive in (see www.fluval-g.com for a conductivity chart for common species). To create perfect EC conditions it is easy to change levels by carefully adding dissolved aquarium salt to raise the conductivity of the aquarium water. To lower conductivity, perform a partial water change, replacing the water removed with RO (Reverse Osmosis) water. The ease of measuring conductivity values using the Fluval G series filters provide a valuable extra tool in maintaining good aquarium water quality.

My daily assessments of the G3 and G6 filters commenced in June 2009 and have continued to the present. Two Fluval Roma 240ltr aquariums, a marine setup containing a selection of marine fish, soft corals and anemones equipped with the Fluval G3 filter and a fresh water system housing discus equipped with the Fluval G6 filter have continued to be run successfully.

The performance of these filters has been state of the art. The main plus points for me have been the easy maintenance and simply unparalleled filtration performance, plus smart interactive technology provided by the Hydrotech Performance Monitor.

Priming was easy requiring only a few rapid pumps on the priming button but there is a technique which needs to be mastered, causing some users to report difficulty.

Replacement chemical cartridges are available and usefully, the supplied cartridge can also be popped open and refilled with bulk media of your choice.



Some users may find that cleaning the mechanical pre-filter is necessary at intervals as frequently as once a week. This can be common when the filter is first set up as it is very effectively doing its job - removing waste from the water. Long term, excessive sediment in the water due to bottom feeders or messy fish could be the problem. This kind of frequency has not occurred with either of my test filters.

The pre-filter on each has been removed and cleaned at roughly two monthly intervals throughout the test period, as part of regular planned maintenance, even though flow has remained high. It has been found that the filter material is much easier to clean when dry and so it is recommended that an extra pre-filter is obtained so that the two filters can be used one against the other. This allows the dirty filter removed at each maintenance interval to be dried out for easier cleaning. Your filters will also last twice as long before needing to be replaced, recouping the initial cost of that extra pre-filter.

With so many positives and few negatives the Fluval G series of external filters brings aquarium filtration to a new level combining, for the first time, intelligent microprocessor capability with advanced levels of aquarium filtration in one sleek, efficient canister filter package.

For more information or to find a stockist visit www.fluval-g.com



For further information or to find a local stockist visit www.hagen.com



LONDON PET SHOW Earls Two Court 12th-13th May 2012



Once again, it fell to Rolf C Hagen to represent the aquatics hobby at the London Pet Show.



Occupying a prime position just inside the main entrance, the Fluval Aquatics Display Stand became an instant magnet of attraction to visitors with a Fluval Profile 1000 aquarium containing imposing Discus fish.



A corresponding Painting Competition featured these fish, with the main prizes being Fluval Marina Surfin' and Marina Seahorse aquariums for the two winners. Many children were making careful note of the fishes' vibrant colours, alongside

the visual appeal of the Marina Naturals replica plants in order to incorporate them in their entries.

Two other aquariums, Roma 200s, showed younger Discus and a separately displayed breeding pair complete with terracotta breeding cone, should they have felt so disposed.



Further Fluval Roma aquariums were fully-furnished, courtesy of members from Hounslow & District Aquarists Society, either with natural live plants or with Marina Naturals.



Reflecting today's trends toward stylistic design, an island display of Fluval Edge aquariums - 23 and 46 litre respectively - together with a Chi, showed just how far fishkeeping has come from its much earlier days of framed tanks.

The larger Edge aquarium featured colourful Odessa Barbs, whilst the unheated Chi was home to White Cloud Mountain Minnows.

Both these Marina Naturals furnished aquariums clearly showed what could be done in a limited space without compromising either looks or efficiency.

The 'dry' smaller Edge was a favourite with the smaller visitors and, for worried parents, the special 'Edge accessories' - the cleverly-designed triangular Net and elbow-handled Bottle Brush allayed any fears over practical maintenance problems.



The practical side of the hobby was well-represented by an eye-catching display of six breeding set-ups.

Each small aquarium showed one method of fish breeding - including livebearing Endler Guppies, mouthbrooding Cichlids, secretive egg-depositing Cichlids, Bubblesnesting Gouramies, egg-scattering White Clouds and mop-spawning, drought-conditions-defying Killifish.



From build-up to finished display, the whole operation went as smoothly as one might expect - with one or two hiccups thrown in - but nothing that the Hagen team headed by Jonathan Wright and Steve Rodgerson couldn't handle from the logistics and product knowledge side, ably abetted by members of the Federation of British Aquatic Societies Festival Show team, headed by Joe Nethersell, with Peter Anderson, Malcolm Goss, Barry Meades and Dick Mills for setting up skills and expert advice to visitors, together with special thanks to Mick Minns of the UK Discus Association and Tim Wragg of Corban Discus for their collective expertise and fantastic fish.

No visitor could possibly gone away not being impressed by the design appeal of the entire Fluval range nor the huge source of practical knowledge from those present - we now all know how to put on aquarium backgrounds to the best advantage, don't we John?



KNOW YOUR FISH



Red Cherry Rasbora - *Rasbora lacrimula*

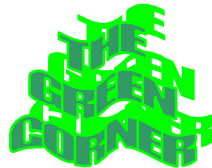
Geographical origin: Ulu (river) Belayan drainage in Kalimantan Timur (East Kalimantan), Indonesian Borneo.

One report describes that it is found in streams and gullies on a burnt-out oil palm plantation, although the trees and shrubs are regaining their previous status.

This species is also traded as Bornean Redfin Rasbora, Sunshine Rasbora and Dwarf Volcano Rasbora and first appeared in the hobby during the latter part of 2010. The variety of commercial names suggests it might be found at other locations

It differs from all other members of the genus by a combination of the following characters: possession of small tubercles on the dorsal surface behind the dorsal fin that continue on to the top part of the caudal fin, visible as an irregular 'crest' when viewed laterally; a few tubercles on the lower edge of the caudal fin. These tubercles may be indicative of sexual maturity as they're not present in smaller specimens. The only other *Rasbora* to possess such tubercles is *R. tuberculata* but in that species the tubercles are also distributed in front of the dorsal fin as well as on the dorsal fin itself.

The area for aquatic plant-lovers



Brandy Bottle - *Nuphar lutea*

This is the Yellow Water Lily of large lakes in woodland parks.

Originally named *Nymphaea lutea* in 1753, it was re-classified as *Nuphar lutea* in 1809. It can easily grow in water depths of around 2 metres (6 feet plus) and the thick leathery floating surface leaves develop from much softer, more wavy-edged submerged leaves on their way up on triangular-sectioned stems.

With less sunshine, the plant simply covers the water surface with leaves and it is only with sufficient sunshine that the familiar yellow flowers emerge.

Despite its apparent virility (it's a bit too active and rampant for the domestic pond), the plant loses out in favour of the hardy Water Lily, *Nymphaea*, as its rather rudimentary buttercup-shaped flower cannot compete against the larger, more colourful multi-petalled flowers of its near relative.

The Brandy Bottle name comes from the shape of the seed pod.

BOOKING FORM

Festival of Fishkeeping & Water Gardening Weekend

16th, 17th, & 18th October 2012Sand Bay Leisure Resort, 87 Beach Road, Kewstoke, Weston Super Mare,
North Somerset BS22 9UR

Number of people between the following ages: (Age at date of weekend)													
Under 2	2 - 5	5-9	10 - 15	16 - 17	18 - 25	26 - 44	45 - 59	60+	Total Persons	Total Rooms/Doublets	Pluses/Plus-ifs/Disabled	Please tick if wheelchair ramp is needed	
Name of Society if any		1/ We would prefer bed type		Single	Twin	Double	Accommodation		Pluses/Plus-ifs		Pluses/Plus-ifs		
		Shared but not Guaranteed					Accommodation type is fully booked. Preference for other options		Yes	No	Both	None	
No. of the Site	Full Name of Person Responsible	Surname		Address			Cellular/other phone no. (leave two-week advance notice)		General Place Name				
Tariff	Please indicate the number of nights -->			Three Nights	Two Nights								
Adults 16+	Children 10 - 15 Years			Children 5-9 Years	Children 2 - 4 Years	Infants Under 2 Years							
Two Night Weekend	Two Night Weekend			Two Night Weekend	Two Night Weekend	Two Night Weekend							
£130.00 pp	£80.00 pp			£40.00 pp	£20.00 pp	Free							
Three Night Weekend	Three Night Weekend			Three Night Weekend	Three Night Weekend	Three Night Weekend							
£130.00 pp	£80.00 pp			£50.00 pp	£25.00 pp	Free							

Deposit & Insurance Premiums
I ENCLOSE THE REQUIRED DEPOSIT £..... IN TOTAL AT £20 PER PERSON
BALANCE IN FULL TO BE PAID BY 1st SEPTEMBER 2012
PLEASE MAKE ALL CHEQUES PAYABLE TO FBA THANK YOU
INSURANCE TO COVER SICKNESS ONLY WITH A DOCTORS CERTIFICATE
PREMIUM £..... IN TOTAL AT £4.50 PER PERSON
FOR ALL PERSONS OVER 16 YEARS OLD.
INSURANCE PREMIUMS MUST BE PAID AT THE TIME OF BOOKING
REQUIRED / NOT REQUIRED
SIGNATURE: _____ Date: _____

DECLARATION

I HAVE READ THE CONDITIONS SET OUT ON THIS FORM AND AGREE ON BEHALF OF ALL PERSONS NAMED ABOVE TO ABIDE BY THESE CONDITIONS. I ACCEPT THE CHARGES FOR THE ACCOMMODATION AND AGREE TO PAY THE BALANCE BY THE 1st SEPTEMBER 2012

SIGNATURE: _____

Please return the completed form with your deposit or full amount whichever is applicable to:
 Grace Netherwell, 8 Acacia Avenue, Brentford, Middlesex, TW8 5NR.
 Telephone: 020 8847 3586

Festival of Fishkeeping

supported by



Practical Fishkeeping

Sand Bay, Weston-super-Mare
26-28th October 2012

For details of the Festival and accommodation reservations from:

Grace Nethersell on 020 8847 3586 or gracenethersell@gmail.com

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leisurebreaks



www.martynleisurebreaks.co.uk

Cichlid Wordfind

O	Y	R	H	V	G	T	C	I	V	N	O	C	T	L	U
J	A	C	K	D	E	M	P	S	E	Y	W	S	F	F	A
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F	W	I	O	K	E	Y	H	O	L	E	X	U	N	C	Q

Angelfish
Auratus
Blue Acara
Cockatoo
Convict

Discus
Eartheater
Electric Blue
Electric Yellow
Firemouth

Flowerhorn
Giraffe
Jack Dempsey
Keyhole
Kribensis

Oscar
Red Devil
Redfin Kadango
Severum
Sunshine Peacock

Uaru

This 'something different' comes to you courtesy of



**FEDERATION OF NEW ZEALAND
AQUATIC SOCIETIES (INC.)**

FOUNDED 1953

ISSN 1173-8375

NEW ZEALAND

AQUARIUM WORLD

EUROSTYLE

Are simply the most stunning pieces of aquatic furniture your living room could hope for. These extra tall aquaria offer large screen viewing. With top of the range external canister filters, T5 lighting and heaters as well as modern chunky cabinets of the highest quality, you might expect them to be high end price. We think you will be pleasantly surprised.



Total dimensions:

EuroStyle 80 - 180L

80w x 140h x 42d cm

EuroStyle 100 - 240L

100w x 140h x 42d cm

EuroStyle 120 - 300L

120w x 140h x 45d cm

Aquariums are available in Black or Oak and cabinets in the same matching colours. However, they can be mixed and matched if a Black tank on Oak cabinet is your preference.



Delivering large screen aquatics
to your living room

For more information visit www.aquaone.co.uk





All AquaStart aquariums come complete with a reliable, easy to maintain filtration system and built-in lighting.



Add one of our stylish cabinets in Black Ash or Oak finish and transform your aquarium into a stunning piece of living room furniture.

Total dimensions:

AquaStart 500 - 65L
50w x 121h x 34d cm
AquaStart 600 - 80L
60w x 130h x 31d cm
AquaStart 900 - 165L
90w x 134h x 40d cm

AQUASTART

AquaStart aquariums are the perfect introduction to fishkeeping, with tanks ranging from 28L to 165L. Whether you are looking for a funky bright coloured tank for the children's bedroom, a stylish tank for the kitchen worktop or a magnificent set up for the lounge, the AquaStart range of bow fronted glass aquariums is ideal.



The AquaStart 600 and 900 offer serious space for more or larger fish species and more imaginative aquascaping. Matching contemporary cabinets will add designer appeal to your home.

Aquarium dimensions:

AquaStart 320 - 28L
30w x 38h x 33d cm
AquaStart 320T - 36L
30w x 46h x 33d cm
AquaStart 340 - 40L
35w x 44h x 36d cm





Mr Ronnie Flinn Birtley Aquarist Society

Tragically, the North East lost one of its most respected aquarists at the young age of 48, ironically while digging a new pond. Ronnie was not only an outstanding aquarist / showman but also a friend to all young & old. If you saw Ronnie, you saw a smile.

This was borne out by the incredible support shown at his funeral, all wearing yellow his favourite colour & aquarists travelling many miles to show their respect.

Ronnie quietly yet almost single handed resurrected the Birtley Aquarist Society with a view to making it the best in the North, he was well on the way to achieving that.

His one ambition left was Best Exhibitor; after he died, his family took his fish to Scotland, achieved that and presented his partner Allison with the Trophy, he so deserved it.

R.I.P Ronnie, on behalf of every Northern aquarist,
thank you for sharing your life with us.

Bede Kerrigan. (S.T.A.M.P.S.)

Art Tanks at the Dunedin Tank Parade

For the DAPS tank parade in September we decided to have three categories: categories; Best Fish, Best Tank, and Best Art Tank. The first two categories need no explaining, but the third was a new idea. Could members create a work of art which could hold live fish?

The specific judging criteria were:

Art Aquaria This section judges aquaria which are 'art works' rather than sustainable fish habitats. The only requirement is that the aquarium must contain living fish. The criteria for judging:

Overall artistic merit [50 points] In which is considered the overall look of the piece as an artwork: ie, the extent to which it challenges the Judges' thinking and/or excites the emotions.

Live components [30 points] In which is considered the health, appropriateness and overall condition of fish and live plants.

Execution [20 points] In which is considered how well the art aquarium is built, in terms of likely longevity and in construction detail. Although the primary recognition was for artistic merit, the category did give significant recognition for works in which fish could live for a while.

The response from members was varied. Liam entered a lovely tank, which was well over a metre long and which would have stood up well in the best Tank category. When we asked him why he'd entered it in the Art category Liam indicated the air curtain bubbling along the back of the tank: "That's not natural, but it looks great, so that makes it an Art tank." Lorna went completely the other way. Her tongue-in-cheek entry was a chocolate fish embedded in a bowl of coloured jelly. It looked terrific, and I'm told it tasted great!

The three place-getters were all very different from each other.

Shona took third place with an aquarium featuring plastic fish and mermaids (as well as a live goldfish).



This 'pop art' tanks caused hoots of approving laughter from members, many of whom stared at in fascination for some time. I enjoyed their reactions. The very people who would sneer at plastic ornaments in a normal tank enjoyed Shona's use of them in the Art tank.



Second place went to Thomas's Moor display. I think the Moor was the most artistically-creative entry. The wall-mounted, cut-out Moor had a live Moor swimming in its eye! I think Thomas only missed winning because of the transient nature of the display. He had us wait outside while he added the Moor, then removed it after judging.

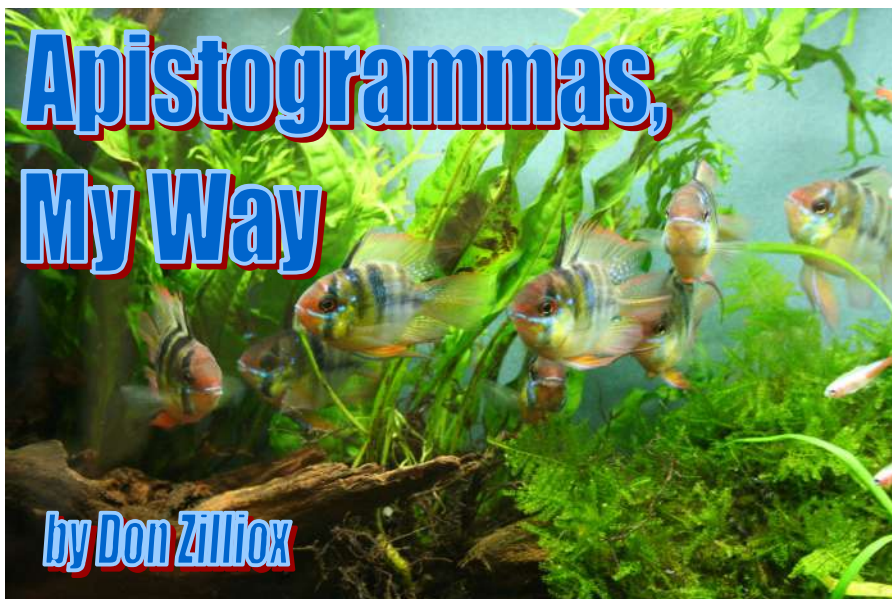
But this work certainly stimulated me to think what I could enter in the future.



Since I'd been an advocate for the Art category, I felt obliged to enter. I searched a second-hand shop until I found a dish of appropriate height. I glued in some pieces of glass I had lying around (spelling the word 'fish'), added some water, *Glossostigma*, and White Cloud Minnows, lit it from above with a halogen standard lamp, and it was done.

I was pleased that it won, but I suspect this year's competition will have got a number of members thinking hard. Next year will be tough!

Norman Evans, Dunedin Aquarium & Pond Society



Apistogramma species are a dwarf cichlid group that inhabits an area from northern South America to the northern parts of Argentina, which includes Brazil, Columbia, Ecuador, Peru and Venezuela. For the most part they inhabit soft water except on the slopes of the Andes mountains. They are always looking for a place to hide such as caves, crevices and areas of low overhanging plants with a few fallen leaves thrown in.

The water temperature is usually between 76°-78°F and mostly has a brownish tint. To keep as display specimens, normal tap water is adequate but for breeding I try to duplicate their natural habitat as closely as possible. A few years ago I did have some success without changing water conditions but lately have changed my methods.

For a group of six or eight young specimens I use a 10 gallon bare bottom tank. A slate bottom type can be used but you will be unable to "peek" from underneath to see if there are any eggs.

Begin with your regular fish tank water (RO can come later) as many will spawn in regular water. One bubble-up box filter, Java Moss/Java Fern, a sinking or floating yarn mop AND at least one 3" clay flowerpot for each Apisto must be added.

Each pot has a small opening cut into what is normally the top, just large enough for the male to squeeze through. If all the fish are small fry, cut an opening about the size of your "pinky" finger, which should be about the right size. One note about cutting into clay pots. You must use a hacksaw type blade called a "carbide-grit rod-saw," as a normal blade which is flat will split the pot if twisted ever so slightly and you will end up with 2 or 3 shards which become of no use at all!



Along with the fish, a few *Corydoras* cats can be added if so desired to clean up excess food if you overfeed. Make sure there are enough hiding places for everyone, as sometimes things can become a little violent.

Now come the hardest part. Just wait, wait and wait. If you purchased small fry, this can take almost eight months. Make your weekly water changes and feed live baby Brine Shrimp daily. My long time breeding adults still get live Brine Shrimp exclusively daily. About once a week they get small portions of frozen brine very sparingly so as not to foul the tank water.

When a female finally turns a bright yellow with deep black markings, that's a sign telling me there are eggs somewhere. If she stays half in the doorway of the flowerpot, it's a good bet the eggs are inside.

At this time you can look from below or, if that is not possible, just slowly lift the pot and check that way being careful not to disturb the area too much. If there are eggs I just replace the pot and try to remove all the other fish as quietly as possible. This just ain't easy, so take your time as usually all the others are forced up into a far corner and will return there if you miss them the first time. If you are lucky and all goes well, fry will appear in about ten days. If she eats the eggs, they most likely were no good to begin with especially with the first spawn. The eggs should be dark blood-red in color or they probably are infertile. If they are no good after a few times, now comes the RO water.

If you don't have a soft water unit you can purchase some at the supermarket IF they have a machine. Regular bottled water IS NOT soft water and "Hey Culligan Man" is no good either. I usually remove all but two inches of water and replace it with the same temperature RO water that brings the ppm down to about 20.

A few degrees colder will make the fish think the spring rains have come and may get an idea to spawn quickly. By adding the RO water, the pH usually drops close to 6 which is ideal. Go through the same process as before and just keep your fingers crossed.



I have had many different Apistos go through my fish room but have only been able to get a small number of them to spawn successfully, so as you can see they are not an easy species to work with.

At the last OCA Extravaganza in Cleveland, Ohio I purchased a trio of *Apistogramma gibbiceps* from my good friend "Little John" Wubbolt. I like this fish because of the black diagonal markings below the lateral line and its lyretail. The tail is not elongated as much as others such as *Dicrossus filamentosus* but can very definitely be noticed.



Anyway most Apistos that I have bred lay from 20 to 50 eggs at the most but one of the females is now leading a spawn of about a hundred small fry around the tank. I didn't think that any Apisto could have that many offspring at one time. To add to my amazement, she is barely 3/4" in length.

After spawning 20 or so Apistos I now learn something new. Some have a whole lot of fry!



When I purchased my first "Apistogramma" book in 1987 there were 40 species listed. The updated version of the same book in 1994 listed 50 different and now the latest new book, written by Hans Mayland and Dieter Bork and published in 1997, lists 69 species.

As you can see, new Apistos are being found almost daily. Of the 14 different I am working with now, three are not listed anywhere. Oops, I forgot about the Internet.



Check through your browsers and Club web sites and I'm sure you can find some that just were found last month. Or so it seems. The problem is that if you want the latest, you will pay through the proverbial nose unless you have a contact that can supply you with the newest findings as a trade. Like anything else, everybody wants the latest just to say they have it.

Start out with the old standbys and see if you enjoy them first before spending a lot of money just to have something new.

First published in [Some Things Fishy](#).
Newsletter of the Tropical Fish Club of Erie County



TRAVEL IN STYLE



When purchasing fish from your local Fish Shop or in fact anywhere in the UK, when it is cold we have to make provision for their transportation - often in a large bag with a towel or some type of insulation. Most of us take a polybox in the boot of our car, whilst others (like me) place the bag of fish under a blanket on the back seat.

In each case the fish are also shaded from the light and can travel in a calming situation. None of these ideas is any good if you are travelling by public transport or even walking!

If you live in an extra-cold climate like Denmark, then the normal plastic bag that all fish shops use in this country would mean your fish will be suffering by the time you even got them to your car.

So, when I purchased fish in an aquatic retailer in Denmark with my son, I was pleasantly surprised by the type of bag the fish were put in.



As you can see it is foil-lined, and not only keeps the fish safe but warm as well.



However, all the other remaining safety features - like floating and mixing some of the aquarium water within the bag to acclimatise them before release into their new home - which you do when looking after your fish here, are still a must.

SHOW & EVENTS DIARY 2012

(full details can be found on FBAS website www.fbas.co.uk)

FBAS ASSEMBLY 2pm (tel:01424 431016)	2/6/12
B.K.A. Charity Auction	3/6/12
BRACKNELL A.S. Open Show	10/6/12
DERWENTSIDE A.S. Auction	10/6/12
SHEAF VALLEY A.S. Evening Auction	11/6/12
CATFISH STUDY GROUP Meeting	17/6/12
A.M.G.K. (Goldfish) Open Show & Auction	23/6/12
UNION OF SCOTTISH AQUARISTS Open Show & Auction	24/6/12
BIRTLEY A.S. Open Show	24/6/12
FBAS MIDDLESEX Open Show	1/7/12
WEST LOTHIAN A.S. Auction	1/7/12
YAAS OPEN SHOW	1/7/12
N.W.CICHLID GROUP Auction	1/7/12
GOLDFISH SOCIETY OF GREAT BRITAIN Meeting	7/8/12
CATFISH & LOACH Show and Auction	8/7/12
N.E.GOLDFISH SOCIETY Open Show	15/7/12
N.E.Y.G.B.K.A. Killifish Show & Auction	15/7/12
CATFISH STUDY SOCIETY Meeting	15/7/12
SOLWAY A.S. Tri-Specialist Show	15/7/12
S.C.C.R.S. Open Show	15/7/12
PORT TALBOT A.S. Open Show	21/7/12
CLUB 2000 Open Show & Auction	29/7/12
GT MANCHESTER CICHLID SOCIETY Auction	5/8/12
FRIENDS OF YORKSHIRE Open Show & Auction	12/8/12
PERTH A.S. Open Show & Auction	12/8/12
THREE COUNTIES A.S.Open Show	12/8/12
CASTLEFORD AS. Auction 7.30pm	15/8/12
BRISTOL A.S. (GOLDFISH) Open Show	18/8/12
CATFISH STUDY GROUP Meeting	19/8/12
D.J.A.Y. Open Show	19/8/12
DERWENTSIDE A.S. Open Show	26/8/12
FBAS ASSEMBLY 2pm (tel:01424 431016)	1/9/12
NORTHERN GOLDFISH & P.S. Open Show	8/9/12
FED. SCOTTISH A.S. Auction	9/9/12
RYEDALE A.S. Open Show & Auction	9/9/12
HOUNSLOW & D.A.S. Open Show NEW VENUE	15/9/12
CATFISH STUDY GROUP Open Show & Auction	16/7/12
GOLDFISH SOCIETY OF GREAT BRITAIN Open Show	22/9/12

PRESTON & D.A.S. Convention	23/9/12
BASINGSTOKE A.S. Open Show	23/9/12
FAIR CITY A.S. Open Show & Auction	30/9/12
GT MANCHESTER CICHLID SOCIETY Auction	30/9/12
SHEAF VALLEY A.S. Open Show Auction	30/9/12
BJA CONVENTION	5-7/10/12
SCOTTISH AQUARIST FESTIVAL	7/10/12
BRITISH LIVEBEARERS ASSOCIATION Convention	11-14/10/12
KIRKALDY A.S. Auction	14/10/12
CATFISH STUDY GROUP Meeting	21/10/12
S.T.A.M.P.S. Auction	21/10/12
FESTIVAL OF FISHKEEPING	26-28/10/2012
BIRTLEY A.S. Auction	4/11/12
N.W. CICHLID GROUP	4/11/12
AQUATICS LIVE! Olympia	10-11/11/12
BRADFORD A.S. Open Show & Auction	11/11/12
S.C.C.R.S. Auction	11/11/12
CASTLEFORD A.S. Auction 7.30pm	21/11/12
FBAS ASSEMBLY 2pm (tel:01424 431016)	1/12/2012
CATFISH STUDY GROUP Christmas Party	9/12/12
HOUNSLOW & D.A.S. Christmas Party	12/12/12

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