

# FISH WORLD *Magazine*®



aquarian

## From the Chairman

With the first year of my term of office almost completed, I am sure all members can look back over the past twelve months with no little satisfaction — although those who know me will say I'm never satisfied!

Our continuing problem during the year was that although the Federation was involved in several major aquatic events, these often came along too close together for comfort, necessitating rapid decampment from one venue to another in order to keep "the Show on the Road".

Shoo-horned into our already busy Calendar was FishWorld '97, the new fishkeeping exhibition at which one of the innovations (and possible eye-openers) was the simultaneous staging of a Kai Show together with Junior and Open Shows — to say nothing of the British Open Fish Championship!

Two large garden Show engagements were BBC Gardeners World Live! and the Hampton Court Palace Flower Show where we again met the public wearing our water-gardening advisory service hats.

Then, for something entirely different, we saw the formation of the National Junior Fishkeepers Association whose members soon showed their mettle in bringing their fishes and other talents along to our Shows. This most encouraging development gives the hobby much hope for the future.

Having only just recovered from attending (in quick succession again) the British Aquarist Festival in Manchester and the Supreme Festival of Fishkeeping at Weston I had hoped for a bit of a rest but I'm already well into plans to celebrate the Federation's 60th Anniversary in 1998.

Take next May for instance: I can tell you now of two great events that will occur in Dunstable (and we've had the sense to plan them almost a month apart!). On the first weekend we will be staging the FBAS Diamond Jubilee Dinner which promises to be a glittering occasion when it is hoped fishkeepers and our friends in the trade will gather together to celebrate the occasion. Over the last weekend we will be holding Fishworld '98 at the Queensway Hall once more, so don't delay in booking space or making a note of both these dates in your 1998 diary.

Once again we have had magnificent support from the aquarium Trade for our activities and our band of workers have physically made it all possible for your enjoyment. On behalf of the FBAS Council, I thank you for your support too and wish you all a Very Merry Christmas and the Happiest of New Years.

Joe Nethersall, Chairman FBAS

## Dear Reader



As usual I am finding editorial writing to be its regular chore. It matters not whether it's too much or too little to write about, it still has to be done.

Looking back over the year, FishWorld has brought to you a fair mix of subjects aquatic with the added extra of something aimed particularly at the Junior age group of the hobby — these are the aquarists of the future. In June there was the emphasis on water gardening to coincide with the Garden Shows at which FishWorld attended. For something 'completely different' as they say, this issue sees more emphasis on indoor aquarium matters with a look at marines in particular.

On a personal note, I regret to say that I shall be standing down as Editor as from this issue due to pressure of work from other things. However, I hope to contribute to future issues of FishWorld in whatever way I can.

I take this opportunity to thank Aquarian for their generous sponsorship and our other friends in the Trade who have supported FishWorld, all those contributors who have sent in articles and news items to help fill these pages and to Catherine, of Haywoods by design, for making sense of it all in the small time I generally allow her. I am sure that the next occupant of the Editor's chair will continue to ensure that readers will find FishWorld equally (or even more) attractive.

Dick Mills, Editor, FishWorld

Contributors for the next issue should be in hand by January 31st 1998. Please feel free to send them to the usual address until advised otherwise.  
R.C. Mills, Editor, 10 Rasken Grove, Fareham Road, Slough, Berks, SL2 3DZ. (Tel/Fax: 01753 646134)  
M. Goss, Features Editor, 25 The Gowers, Chestnut Lane, Amersham, Bucks, HP6 6ER

Subscription Department —  
FISHWORLD MAGAZINE, 22 Flimsted Avenue, Wembley, Middlesex HA9 6DL  
(4 Quarterly Issues Mar., June, Sept., Dec.) £5.00 including P & P  
Overseas Subscription £15.00 including P & P.

Federation of British Aquarist Societies 1997  
The Editor accepts no responsibility for views expressed in any article which remains the opinion of the author. F&O  
Typeset and printed by Haywoods by Design, 16 Exford Avenue, Ashford, Middlesex TW15 2EP Tel 01932 765853

3

## CONTENTS

Chairman's Letter.....	1FC
Editorial.....	3
How About Tetras?.....	4
Memories of a Tired Old Aquarist.....	6
Pass the Salt.....	9
Supreme Championship.....	15
Pull Out.....	19
JUNIOR FISHKEEPERS.....	21
Letters.....	31
Tarquin's Green Guide.....	32
Hemichromis fasciatus.....	33
The 1997 Mid-Somerset Closed Show.....	35
Tyn-Tees Aquatic Festival '97.....	38
Corydoras aeneus.....	39
Keeping out the Cold.....	42
1998 Show Dates.....	44
Ask Dr. Ford.....	47

## How About Tetras?

by Terry Waller

I'm going to hit you with a couple of horrendously long names that you will find almost impossible to pronounce (even if the Editor copies them correctly!).

Hypessobrycon and Hemigrammus (see, Terry, I'm doing fine so far - Ed.) are the scientific names for two of the largest genera in a very large group of fishes that, for convenience, we call 'Tetras'. It is of course typical that two names of such length should represent fishes the majority of which rarely grow more than two inches although a couple do actually reach three inches.

'Tetra' is short for Tetragonopterinae (square-finned) and this Family of Characins contains many other genera than the two 'H's' we are going to consider. The FBAS lists about 140 or so species but if we include some closely-related, and similar-looking, fishes such as the X-ray Tetra (*Pristella maxillaris*), Neons and Cardinals (*Paracheirodon innesi* and *Pareiodon*), Silver Tips (*Hasemania marginata* or sometimes *Hemigrammus nanus*) etc., the total swells to nearly 180 known to science. Of course there are literally hundreds of undiscovered wild species and fishes sitting around in museums waiting to be classified. Shipments of wild South American fish, such as Bleeding Hearts, cardinals and Hatchetfish in particular are always rich in 'oddies' and are eagerly sought after by enthusiasts.

The Characidae, a huge Family of fishes, are found all over West Africa and South America. Our two 'H's' are however only found in South America with the vast amount of species located in Brazil, Venezuela and Colombia. The Characin Family has fishes growing to a metre or more, hunted for sport, down to less than an inch. Tetras are often called jewels of the aquarium due to their colours and indescences

and, apart from a little fin-nipping, are peaceful, active and interesting fishes that still offer a challenge to the breeder.

Tetras are carnivorous (think of a Piranha) which means they enjoy a diet containing meat. In nature, they feed off the water surface devouring insect life as it alights on, or is washed into, the water. The latter occurs with the rising melting snow flood waters which literally drown the insect life in the low bushes to provide an annual feast for the fish. Other larger Characins feed by biting lumps out of other fishes. A diet of flake food should be well supplemented with regular feeds of Ox-heart, *Daphnia*, *Tubifex*, Bloodworm and Mosquito larvae.

Water conditions for tetras should be warm, clean, well-aerated and tending towards the acid side. This can be achieved by adding some bogwood to the decor. If we intend to breed them we would also have to soften the water, use rain water or orthophosphoric acid.

An ideal Tetra tank would be 30" x 18" x 12", well-lit and with a temperature of 78°F. Filtration can be undergravel but use an internal power filter to back it up. Plenty of bogwood, some Amazon Swordplants (*Echinodorus* sp.), *Vallisneria* and *Cabomba* would complement a shoal of Neons or Cardinals, half a dozen X-rays, half a dozen Silver Tips, a pair of Emperors and a pair of Penguins (no, they won't eat the fish!). Given time, this will progress into that beautiful moving picture we are still searching for.

**Recommended by top aquarists**

For years many top aquarists have recommended the same brand of fish food — AQUARIAN.

They feed their fish on AQUARIAN because they've seen for themselves the difference it makes — better growth, less stress and longer life.

Every day they see that their fish thoroughly enjoy their food, feeding eagerly, leaving little waste to pollute the water.

As top aquarists they are happy to recommend Aquarian to other fishkeepers and to share the benefit of their knowledge and experience.

Take a tip from top aquarists — feed your fish on **AQUARIAN Flaked Fish Food.**

**aquarian**

© Registered Trade Mark © Copyright Petropar Petfoods



## Memories of a Tired Old Aquarist

by Wart Ellery

*Aquatic magazines have been around for donkey's years but they were not always the brightly-coloured sophisticated publications we see today. Early issues were rather lacklustre, both in appearance and content. A lot of this was, of course, due to the lack of printing expertise and 'easy' technology that is available today; the content is now much more complex and sophisticated and there is much more to write about.*

Years ago, there was no back-up from the trade outlets — only a few species of fish and very little on the equipment front. Skipping through some old editions, I find articles on building a fish-house out of polystyrene boxes, a pond feature out of an old oil drum and your next aquarium constructed from concrete (don't stand that on the sideboard!)

Breeding Cherry Barb's Easy Way states one article and backs it up with a picture of a pair of Checker Barbs! A nice picture of a *Leeri gourami* (inside down) shares a page devoted to breeding Convicts (they would have done better with an article on how NOT to breed Convicts!). All very mundane to us now but at the time these magazines were highly-respected and rightly so. Today, with so many species to choose from and the immense amount of equipment it becomes much easier to fill a magazine (Oh yes? Ed) or book.

Club publications come in all shapes and sizes, regular and irregular, legible and totally illegible, one-sheet Newsletter or much more elaborate efforts. I remember becoming East London A.S. Editor on a wave of promises, articles, help, casks etc all of which I ended up with ... on

my own. You inherited a green drum with a handle, a clapped-out medieval typewriter and a tin of syrupy black ink. It just didn't work. You got no articles, the typewriter had the 'h' and 'n' missing and all the duplicator did was leak black ink all over the place. So much for the power of the Press.

Looking through an old Southend magazine (which ran for years and years) I come across a two-page report on an Inter-Club at Witham (when nobody turned up) and an article on Black Pudding by Audrey, a delicacy held in awe East of Basildon.

Iford had a very posh-looking affair — glossy paper and pictures, the big plus about this magazine was the Page Three girl every month (no, not a Member's wife!)

Nowadays there are still Society newsletters to be found and with today's computers and printers some classy types are emerging. Articles are readily to hand courtesy of the Internet (even pictures) but eventually we'll all be reading the re-runs of everyone else's experiences with nothing original coming out. I'm glad I was around when it was all new — and I still hanker after the smell of that black ink!

## The New AQUARIST & PONDKEEPER

AQUARIST & PONDKEEPER is the foremost fishkeeping magazine for the specialist and beginner alike.

As well as featuring a topical FREE Supplement every month, there's also regular features, reviews and Special Offers, too. Order your A&P to be sure of getting a copy — either through your usual bookshop or take advantage of our Subscription Offer.

Fill out the form below and return to: SUBSCRIPTIONS DEPT., ALL PUBLICATIONS LTD., CANTON HOUSE, WELLESLEY ROAD, ASHFORD, KENT TN24 3ET.

Rates: UK £25, Europe £33, Airmail — Zone 1 £52, Zone 2 £58

My remittance of ..... is included

Or Credit Card  ACCESS  VISA

No. .... Expiry Date .....

Signature .....

Name .....

Address .....

Post Code .....

STOP PRESS! • STOP PRESS! • STOP PRESS! • STOP PRESS!

## ANNOUNCING A MAJOR BREAKTHROUGH IN INTERNAL FILTRATION!



**NEW Trio**  
The simplicity and price of an internal...

...with triple action filtration like an external

TRIO IS A TOTALLY UNIQUE INTERNAL FILTER THAT CLEANS 3 WAYS:

- 1 MECHANICAL**  
Foam block traps larger particles of debris.
- 2 BIOLOGICAL**  
Ceramic nodules house dense populations of beneficial bacteria for efficient breakdown of waste.
- 3 ABSORPTION**  
Carbon granules absorb dissolved impurities to give the water a fresh, thorough cleaning.

New TRIO advanced internal filters have been specially developed to give increased performance using a 3-way filter action usually found in external. Trio packs more cleaning power into one simple and handy filter internal filter you can buy.

For simplicity, efficiency and price, Trio saves other internal out of their death.

So don't change your habits, change your internal filter.

Change up to TRIO.

**HAGEN**  
...For Pets

UK 01753 506000 (UK) 001 202 000 000 (INT) 001 202 000 000 (INT) 001 202 000 000 (INT)



TRIO 2000  
FOR AQUARIUMS UP TO 100 LITRES (27 GALLONS US)  
OR 10 LITRES (2.6 GALLONS US)

TRIO 3000  
FOR AQUARIUMS UP TO 300 LITRES (79 GALLONS US)

**Trio**  
3 FILTERS IN ONE AT A PRICE YOU'LL LIKE

## Pass the Salt

by Susan Humble

It all started about 8 months ago in Houston. We had been told not to miss this fantastic store ... Hawaiian Marine Imports. By sheer willpower (and a shortage of greenbacks we walked out with just a percula clownfish (*Amphiprion percula*) and a blue damoiselle (*Abudefduf caeruleus*). That was the beginning of an adventure into salt water aquariums; an adventure full of both tragedy and joy.

Our aquarium is an all-glass 30 gallon one which we put together. Its filter system utilizes two under-gravel Aqua Filters and a large Dynaflo with activated carbon. We chose Instant Ocean Sea Salt and gravel. For decoration and cover, we added a 12" piece of finger coral, two smaller pieces of coral, and several assorted shells — all duly boiled for an hour, soaked in Clorox for four hours and set in the sun for a day.

We try to maintain a constant temperature of 75° and a salinity of 1.20 to 1.23. We change a quarter of the water every month, siphoning the water from the bottom of the tank. We add 5cc of copper sulphate to the tank every month, turning off the Dynaflo for a couple of days during this treatment.

Shortly after getting the clownfish and the damoiselle home, we transferred our Scot (*Scotiophagus argus*) from freshwater to salt. We also inherited a damoiselle (*Dascyllus melanurus*) from a friend. This damoiselle lasted about one week before we traded him. He was without a doubt, the meanest fish that we have ever come across before or since. He dominated the Scot and the Scot was several times his size, chasing him into a corner and keeping him there.

It will take a lot to convince me that fish don't sleep. Being very aware of these more beautiful but expensive

fish (we had only had aquariums for two months before we were lured into the saltwater field) we check on them every morning — even before breakfast! The first morning we discovered the clownfish on the bottom of the tank. After a moment of initial panic on our part, we turned on the light for a better look. With the additional light, the clownfish began sluggishly to move around, all the while seeming to stretch, look around and complain about the early hours that his ridiculous owners kept.

About 3 months later, we added a Huma-huma-nuka-nuka a puao triggerfish and a *Chromipectes altivelis*, commonly known as a palakod grouper, panther fish or leopard fish. Up until this time we had been feeding almost nothing but flake food, feeling that it was a well balanced food. As a treat we would feed frozen brine shrimp. Now we had found a fish that would eat nothing but brine shrimp — the grouper! We tried every trick that we could think of, but nothing seemed to work. As our other fish were thriving on the flake food, we didn't want to feed nothing but the brine shrimp, so we finally traded the grouper back in after two months of trying.

As I said before, during the intervening two months our other fish thrived. The Scot grew in what seemed to be leaps and bounds. The triggerfish, now named "George" had a home — his own split level shell! If any enemy approached, he swam home in a split second. This was to present problems later but at the time it was beautiful to watch; a community in some ways very human. Being very territorial, the fish were daily bickering as each was sure the other's home was much the better place. Feeding time was mass chaos.

It would be hard to say who was at the top of the "pecking order" but there's no question as to who was at the bottom — a very paranoid Scot! The tank scavenger had somehow never learned to stand up for his rights.



## Pass the Salt

The next fish to be incorporated into the tank was a Queen Angel (*Angelichthys isabellae*). We have no special methods for adding fish to our tank. When we see one that we like, we observe it, have the owner feed it and watch how well it eats (this came after the experience of losing two fish because they wouldn't eat). If it appears to be healthy we take it home, float the bag for 10 to 20 minutes to equate the temperature, we then add about half a cup of the tank water to the bag, waiting 15 minutes between each of the two additions. Then we net the fish and add him to the tank, being careful not to add the water in the bag too.

Having wanted a Queen Angel fish for quite some time, this was our next purchase. True to their name, they do act like the "Queen of the Sea". This fish is a hearty eater but tends to dominate other angels and butterflies as we were to later learn. The Butterfly that we added next was quite small and being dominated by the Queen Angel fish, it eventually starved to death. During this time, the damoiselle stopped eating, whether because of the dominating Queen Angel or not we shall never know. There were no signs of disease, though we treated the tank with copper sulphate, it did not seem to help. It wasn't long before the clownfish also stopped eating and following the same course as the damoiselle, eventually died.

Not too much time later, we brought home a French Angel fish (*Pomacanthus paru*). This fish was also a hearty eater but he was also totally dominated by the Queen Angel. They usually lived out their days in a state of truce. However, when things got too bad, we tried one or both of the following methods: they usually succeeded for a short period of time. The first method that we tried was to remove the offender, the Queen, from the tank to an auxiliary tank (in this case one of my two quart casserole dishes). After a period of about two or three hours the fish was returned to the

tank. The other method that we tried was to shift the coral around within the tank, thus destroying territories and disorienting the fish.

Without a doubt the strangest thing that ever happened occurred one night when the Queen Angel was chasing the French Angel. The French jumped in order to get away, and hit the four inch brace which goes across the middle of our tank from front to back. It knocked him out cold. He floated to the bottom of the tank, head first, his pectoral fins rigidly sticking out from his body at a 45° angle. His gills did not move and we were certain that he had died. After about 15 seconds he began breathing again. It took him about 30 minutes to regain his bearings, but once he did, he was perfectly all right.

After we had had the French Angel for about a month we began to note white patches appearing on the pectoral fins. As it appeared catfanny like a fungus, that was what we treated it for with doses of copper sulphate and heat. We found in Straughan's book "The Salt Water Aquarium in The Home" that the best treatment was Sodium Sulphathiazole. We began an all out search for the water soluble powder in various drug stores. We were finally able to purchase some through a local fish store after he specially ordered it. During the two or three week period, the white patches began to spread and the Queen Angel became infected on the mouth. While glancing through a book on salt-water diseases in a local fish store one day, we found that what the angel had was not a fungus but a viral infection, lymphocystis. It is a little studied disease, not always fatal, but with no known cure. We were told to apply a 5% solution of iodine to the cysts and try to remove them with sterile tweezers. Having discovered all of this too late, the French died within the day. The Queen Angel is still alive and eating but no change has been noted in his condition since the treatment started. Though these cysts appear at first to be like a

(continued)

## Pass the Salt

catfanny fungus when they are removed from the fish, we noted that they are hard and round or oval, resembling small pebbles. We understand that the disease affects primarily Atlantic Angelfish and is not usually communicable to other fish. We have not noticed the disease on any of our other fish to date.

It seems as though every time we see a new fish he is far more beautiful than those we have seen before. This was true with our next two purchases, a *Platax orbicularis* commonly known as a brown bat fish, and a black triggerfish, *Odonus niger*. The black triggerfish immediately became known as Herman and just as immediately he moved into George the Hamu's home. Having your mother-in-law move in with you could not resemble the feelings that arose between Herman and George. The solution, remove the house and let them both find new lodgings! At the present time they are getting along remarkably well but it has taken two weeks. The bat fish is one of those truly remarkable fish that does not swim — he glides with all of the pride that he can muster. His vivid orange colour under a fluorescent light becomes a burnt orange.

At the same time that we purchased Herman and the bat fish, we also bought a copy of Straughan's book. We have both read it from cover to cover. He has some good advice but everybody does things in a different way, so don't follow along blindly. We have followed some of his suggestions concerning feeding. Here are the results. Instead of a diet of straight flake food, we are now including shrimp scallops, beef liver, live brine shrimp, frozen brine shrimp

and live baby mollies and guppies which we are raising for food. To feed the shrimp, peel and freeze it for two or three days. When you are ready to feed it, grate as much as desired and wash thoroughly. Herman and the bat fish have more than doubled their size in the two weeks that they have been on this diet. George and the Scot have also grown, though not so dramatically.

Be sure to vacuum up anything that has not been eaten by the end of the day so that it will not foul the tank.

We think that the joys greatly outweigh the tragedies, but whichever is the case, we have learned a great deal and probably will always have a saltwater aquarium. The greatest joy has come just recently. All of our fish have now become trusting enough to take food out of our hands, even little George!

In summary, here are some tips

- Buy a book for two reasons
  - to know when you have a sick fish and the treatment
  - to find out which fish can be combined in an aquarium before you buy them
- Try varying the food
- Try to keep the salinity between 1.20 and 1.25. If the salinity gets above 1.25 add fresh water. Salinity is not critical enough that it can't be lowered .02 instantly with no ill effects on the fish.
- Buy a magnifying glass to check for parasites. It's easier and more reliable than just the naked eye.

Reprinted from "Bulletin of the Austin Aquarium Society"

11

# BTC

## Group

PERSONAL PRINT  
BULLSEYE TROPHY CENTRES



Federation of British Aquatic Societies  
FOUNDED 1928

**25,000sq ft Factory and 4 showrooms**  
with a Nationwide delivery service

**UK'S No. 1 TROPHY SPECIALISTS**

With a complete range of Cups, Medals, Trophies, Tankards, Shields, Plaques, Rosettes, Salvers, Crystal, Glassware, Silverware, Pewterware and Acrylic Encapsulation.

**ENGRAVING SPECIALISTS**

Our state of the art computerised engraving facility reproduces Logo's, Crests and Designs on to Metal and Glass

**PRINTING SPECIALISTS**

Our 8 colour fully automatic textile printer handles 5,000 shirts per day. We stock and print T-shirts and Sweatshirts, Poloshirts and Baseball caps.

**Showrooms at:**

97-99 Basingstoke Road, Reading, Berks RG2 0HA  
Tel: 01734 751363 Fax: 01743 751434  
180 South Ealing Road, London W5 4RJ  
Tel: 0181 568 1405 Fax: 0181 847 5150

3 Agincourt Villas, Uxbridge Road, Hillingdon, Middx UB10 0HX  
Tel: 0181 569 2604 Fax: 0181 569 2254  
127 Bath Road, Slough, Berks SL1 3UW  
Tel: 01753 578630 Fax: 01753 825679

**Exclusive Suppliers to the F.B.A.S.**

**Discounted Trophies & Free Engraving through the F.B.A.S. Discount System**

**Unbeatable Prices & Quality Guaranteed**

**Free Full Colour Brochure Call Chris On:**

# 0181 568 1405

## F.B.A.S. PUBLICATIONS

From Show Stands, by Mail Order, or at General Assemblies.

Booklet No. 1	CULTIVATED FISHES	£1.00
Booklet No. 2	THE SUNFISHES	£1.00
Booklet No. 3	SHOW FISH GUIDE Vol. 1 (inc. Binder)	£5.00
Booklet No. 3	SHOW FISH GUIDE Supplements	£1.00
Booklet No. 4	GOLDFISH STANDARDS	£1.00
Booklet No. 5	F.B.A.S. Constitution & Show Rules (NEW)	£2.00
Booklet No. 6	NATIONAL SHOW FISH SIZES (1996 edition)	£3.00
Booklet No. 7	F.B.A.S. YEARBOOK	£1.00
Booklet No. 8	FORMING A SOCIETY	£1.00
Booklet No. 9	Dictionary of Common/Scientific Names (F'water)	£2.50
Booklet No. 10	SCIENTIFIC NAMES & THEIR MEANINGS	£1.50
Booklet No. 11	PLANTS	£1.25
Booklet No. 12	Dictionary of Common/Scientific Names (Marines)	£1.25
Booklet No. 13	NISHIKI KOI (in colour)	£1.50
Booklet No. 14	ORGANISATION OF THE OPEN SHOW	£1.00
Booklet No. 15	REVISED CICHLID NAMES & SHOW CLASSES	£1.00
Booklet No. 16	RASBORAS	£1.50
Booklet No. 17	GOODEIDS	£1.50
Booklet No. 18	QUIZ BOOK 1	£1.50
Booklet No. 19	SYNONYMS OF FISH NAMES	£1.50
Booklet No. 20	LONGFINNED VARIANTS and OTHERS	£1.50
Booklet No. 21	TROPICAL SPECIES	£1.50
Booklet No. 22	TROPICAL SPECIES	£1.50
Booklet No. 23	TROPICAL SPECIES	£1.50
Booklet No. 24	TROPICAL SPECIES (soon)	£1.50
Booklet No. 25	QUIZ BOOK 2 (NEW)	£2.00
Booklet No. 26	SPECIES REFERENCE GUIDE	(Looseleaf £1.50 with binder £4.00)

Binders (for Booklets and Supplements) £2.50

**FISHWORLD MAGAZINE** see reverse for subscription Order Form

**HOW TO ORDER BY POST**  
Send cash with Order (add 25% to total cost for p & p, cheques made payable to F.B.A.S. please) to:-

FBAS Merchandising, Cham Jing, 28 The Mall, Binstead, Isle of Wight PO30 3SF

13

**YOU  
NEED  
FISHWORLD**

Written for Hobbyists, by Hobbyists

All Fishkeeping aspects covered

News of all events, new products

Society News

**STILL ONLY  
£5.00 per year  
(4 issues, post paid)**

Send Cheque/Postal order (payable to FBAS) to:  
FISHWORLD, 22 Flamsted Avenue, Wembley, Middlesex HA9 6DL

## 1997 FBAS SUPREME CHAMPIONSHIP

sponsored by INTERPET

This year's Final Round at the **Supreme Festival of Fishkeeping** saw the number of entries grow with no less than 84 pre-qualifiers, although only 68 ("Only 68!!" said the appointed judge, Chris Cheswright) actually got to the Show Bench. The Top Six in this year's Final were:

### FBAS SUPREME CHAMPION 1997

***Labeo lineatus*** 92 points owned by Paul Whiddett, Mid-Sussex A.S.

Judge's comment:

With such a clean fish, displaying well and showing excellent colour, I had no option but to point it highly. The fact that it is a large-scaled fish which showed absolutely no damage either only added to its overall quality.

### Runner-up

***Herichthys pearsei*** 91 points owned by Gary Thwaites, Erith & D.A.S.

Judge's comment:

Another large fish with no damage to body or fins. It had an excellent body shape and the colours were positively glowing.

### Third Place

***Synodontis angelicus*** 90 points owned by Haydn O'Grady, Swansea A.S.

Judge's comment:

Everyone knows that angelicus lose their spots as they mature but this one was an excellent exception with every spot intact, although the attractive mauve colouration had been transformed into adult brown/grey. I also like the way it was an active fish continually swimming around.

### Fourth Place

***Dormitator latifrons*** 89 points owned by Keith Sollitt, Bracknell A.S.

Judge's comment:

This was the big one of the Sleeper Family! It was a very clean fish which 'departed' extremely well, perched up on its pectorals. The rest of the fins were also held stiffly erect.

### Fifth Place

***Phallichthys amates pittieri*** 88 points owned by Tom Moyle

Judge's comment:

Another great 'poser' this time obviously not in the same size though. A very nice male of the species showing off excellent finnage.

### Sixth Place

***Leporella vittata*** 87 points owned by Gary Thwaites, Erith & D.A.S.

Judge's comment:

This excellent bottom-dwelling Characin was unfortunately down on colour, otherwise it would have featured higher in the awards, but congratulations to Gary for getting two in the top six.

FishWorld would express thanks to the Judges & Standards Committee for permission to publish the results and to Chris Chesright for making his comments available so quickly after a tough task.



The Tetra Aquoquiz contestants with Secretary John Pell (back left) and Roger Fossett (back right) and Matthew Fiddes (front left), Aquoquiz Champion

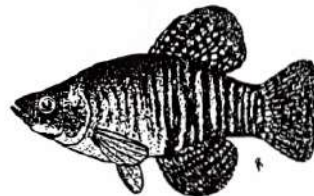


Peter Anderson (left) and Peter Cairns with their winning Society Furnished Aquarium

Supreme Championship Winner, Paul Whiddett with Jack Stillwell (left) and Richard Burton, Interpet.



### *Adinia multifasciata* (Girard).



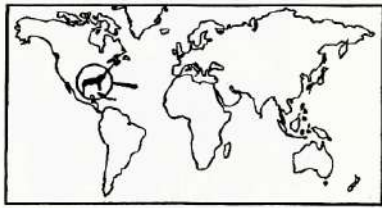
Common Names: Diamond Killifish.

Colour: Basic body colour greyish-green shading darker towards the dorsal contour, lighter towards the belly, belly yellowish, chin orange, flanks overlaid with 10-14 irregular pale pearly-blue vertical bars. Dorsal, caudal and anal fins darkish grey-green with pale blue spots, pelvics and pectorals pale yellow.

Characteristics: Body and fin shape as illustrated, dorsal and anal large and sail like when carried well spread, eye large and in healthy specimens bright. Females less intensely coloured than males with a greater depth of body in relation to their size.

Remarks: A smallish species which owing to its preference for brackish water should if possible be kept with fishes of like requirements. Exhibit in show class F.





Habitat:	Coastal regions, estuaries, salt marshes etc. from Florida to Texas in brackish water less than 300m in depth with algae and other vegetation.
Temperatures:	16°-26°C (61°-84°F) although specimens have been found in shallow water with temperature as high as 35°C (95°F).
Water:	pH 7.2 - 7.6. Alkaline, hard and brackish although the acclimatization of this species to fresh water is possible if the transition is made gradually.
Feeding:	Is not difficult as this species will readily consume both live (mosquito larvae is ideal) and dried foods although green vegetable foods should be on the menu.
Breeding:	A single species spawning tank should be used containing hard brackish water, this may be obtained by adding sea salt to ordinary tap water, or a diluted form of one of the proprietary marine mixes. Normal aquarium temperatures 26°C (79°F) are acceptable but a higher temperature of about 28°C (84°F) has been found more successful in stimulating the fish into faster and more intense spawning activity.



As you read this, we will be in the middle of the festive season and we, at the NJFA would like to wish you and your family a Very Merry Christmas and a Happy and Prosperous New Year. It is also an opportunity to send our Greetings, Best wishes and Thanks to our Sponsors, AQUARIAN, BULLSEYE TROPHY CENTRES, FEDERATION OF BRITISH AQUATIC SOCIETIES, INTERPET, ROLF C. HAGEN, TETRA and TFH PUBLICATIONS. Without their help and support, we could not have made a start at all with YOUR Association, let alone had the great success in its' inaugural year. The NJFA is going forward, positively, and if any other Company, Club, Area Group, Association or Federation would like to add their support, no matter how small or large, or in whatever form, please contact me.

More and more young people are joining in the activities of Fishkeeping and the National Junior Fishkeepers Association. I do hope that YOU are becoming involved in some way, whether it be by writing in, entering the Competitions, or bringing your fish out for judging at a NATIONAL JUNIOR FISHKEEPERS ASSOCIATION fish show or your local Society or Club Open or Table Show. In celebration of the Federation of British Aquatic Society's 60th, Diamond Year, the NJFA will be encouraging all Clubs, Societies and Area Groups to put on Three Junior Classes in their Open Fish Shows comprising TROPICAL FRESHWATER EGGLAYERS, TROPICAL FRESHWATER LIVEBEARERS and ANY COLDWATER, together with a Best Fish in Junior Classes. Providing these are advertised and included in their show Schedules, copies of which are usually sent to the FBAS Trophy & Brooch Officer, it is hoped that the NJFA, in conjunction with our sponsors, will be able to provide Awards and Prizes. It will be important for the Show Secretaries to register the results back to the NJFA, as it is intended to extend the Junior Fish Show at the Supreme Festival of Fishkeeping at Weston in 1998 to include entries for an NJFA Supreme British Junior Champion. We look forward to seeing YOUR fish!

On this note, here is news from around the recent shows:

**Swansea A.S. Open Show**

Hold three Junior Classes B.Y.M.Y, O.Y.T.Y and U.Y.W.Y. As will be seen in the later news from FISHWORLD '97 the Weekend of Fishkeeping, I believe we may have a potential future Supreme Champion in this area. Robert O'Grady was the winner in all three classes and also took all of the other places with the exception of 2nd and 3rd in U.Y.W.Y which went to Gary Edwards and Abegale East, respectively.

**Mid-Shires Area Group Closed Show:**

The Egglayer Class was won by Andrew Ward with Victoria Crockford 2nd and 3rd. The Livebearers went to Victoria Crockford and the Coldwater to Michaela Smith. Their Highest Pointed Junior was Victoria Crockford and Andrew Ward's *Hypessobrycon herbertaxeloti* was awarded Best Fish in the Junior Classes.

Well done to all those who took part and keep up the good work. Here I must add an apology. Midd-Sussex A.S. did include Junior Classes in their Open Show, however, we at the NJFA missed this somehow. Just goes to show we are all human! Sorry John.

I would like to thank, once again, all of you who came to FISHWORLD '97 at Dunstable. There was something for everyone there and those of you I had the opportunity of meeting certainly seemed to enjoy it. Your Junior Fish Show on the Sunday was ONE OF THE HIGHLIGHTS, with a magnificent 85 entries on the beach, all of which were of an excellent quality. 21

CLASS	FISH	JUNIOR FISHKEEPER
E.Y.Fy	1st <i>Trichogaster leeri</i>	Elizabeth Porter
	2nd <i>Betta splendens</i>	Matthew Fiddes
	3rd <i>Betta splendens</i>	Robert O'Grady
G.Y	1st <i>Microgobius theringi</i>	Robert O'Grady
	2nd <i>Ancistrus lemniscii</i>	Ian Cank
	3rd <i>Synodontis angelicus</i>	Robert O'Grady
	4th <i>Pimelodus pictus</i>	Robert O'Grady
H.Y	1st <i>Corydoras caudimaculatus</i>	Elizabeth Porter
	2nd <i>Corydoras leopardus</i>	Robert O'Grady
	3rd <i>Corydoras sterbai</i>	Thomas Whiddett
	4th <i>Corydoras melanisticus</i>	Elizabeth Porter
J.Y.K.Y	1st <i>Rasbora hengali</i>	Angela Cank
	2nd <i>Danio devario</i>	Robert O'Grady
	3rd <i>Rasbora heteromorpha</i>	Robert O'Grady
L.Y.M.Y	4th <i>Brachydanio rerio</i>	Matthew Fiddes
	1st <i>Melanotaenia praecox</i>	Ian Cank
	2nd <i>Acanthopoma kuhlii</i>	Angela Cank
	3rd <i>Betta leonae</i>	Robert O'Grady
N.B.Y.W.Y	4th <i>Labeo bicolor</i>	Nicky Whiddett
	1st <i>Hypessobrycon erythrostigma</i>	Robert O'Grady
	2nd <i>Poecilia reticulata</i>	Ian Cank
	3rd <i>Poecilia reticulata</i>	Andrew Ward
O.Y.P.Y	4th <i>Platy</i>	Robert O'Grady
	1st <i>Poecilia reticulata</i>	Luke Powell
	2nd <i>Poecilia reticulata</i>	Elizabeth Porter
	3rd <i>Poecilia reticulata</i>	Robert O'Grady
Q.Y.R.Y	4th <i>Poecilia reticulata</i>	Angela Cank
	1st <i>Xiphophorus maculatus</i>	Angela Cank
	2nd <i>Xiphophorus maculatus</i>	Matthew Fiddes
	3rd <i>Xiphophorus helleri</i>	Robert O'Grady
S.Y.T.Y	4th <i>Xiphophorus maculatus</i>	Ian Cank
	1st <i>Zoogoneticus "orange crescent"</i>	Angela Cank
	2nd <i>Characodon auzax</i>	Angela Cank
	3rd <i>Xenopohorus captivus</i>	Angela Cank
U.Y.V.Y	1st <i>London shubunkin</i>	Angela Cank
	2nd <i>London shubunkin</i>	Ian Cank
	3rd <i>Bristol shubunkin</i>	Angela Cank
	4th <i>Oranda</i>	Hilary Porter

Highest Pointed Individual Junior Exhibitor was Best Fish in Junior Show as the: *Rasbora hengali*

WELL DONE! to all those who participated and our particular thanks to our Judges on the day; Chris Bramble, Jon Hill, Barry Jones & Les Pearce, with Ken Saxby, Chairman of the J&S of the FBAS, acting as a Senior Judge. Thanks are also due to Tina and Keith Dowell of Corby & District A.S. and Martine Mapes and Ken Adams of Southend, Leigh and District A.S. who gave of their time on the day of the show.

We would remind you again that as we reach you only once a quarter through this section of FishWorld magazine, it is not possible to respond to life and death problems with fish. If you have illnesses, please contact your local Club or Society, where expert help is at hand, or the aquatic outlet nearest you that you trust.

Leaving that aside, it is our intent to take up matters which do not require the most immediate of responses and reply here to letters, such as the one we have recently received asking us generally about the keeping of certain species of fish. Amanda Newsham from Cumbria has 2 male guppies, neon, beacon and lemon tetras and a dwarf catfish in her tank and would like information on these.

**National Junior Fishkeepers Asscn.**

(continued)

Well, here goes Amanda.

We have to make some assumptions to start with as you use common names of fish rather than the latin names, so *Poecilia reticulata* (guppy), *Paracheirodon innesi* (neon tetra), *Hemigrammus ocellifer* (beacon or head and tail light tetra), *Hypessobrycon pulchripinnis* (laman tetra) and *Corydoras species* (dwarf catfish) are generally all good community tank fish. They will live, as I am sure you have discovered already, well together and are adaptable to most general water, temperature and community tank conditions (moderately soft to moderately hard, 24-26°C etc). Obviously you should check with your aquatic outlet to ensure that their conditions are similar to yours, otherwise there will have to be a gradual change over period.

I have found that tetras and corydoras look better, and are happier, when kept in groups. Strange as it may seem, I always keep them in odd number lots, it seems to look better in the tank than even number groups. Dependent, therefore, upon your tank size, schools of say 5, 7 or 9 and so on, of each of the tetras mentioned, together with an odd numbered group of corydoras (not necessarily of the same species here, but it helps if you are going to attempt breeding, although they should be of similar size and needs). Again an odd number of male guppies would look nice, perhaps different colour fins, but it rather depends on what you want to achieve. An all-sorts mixture of males and females could see you over-run with "millions" of unwanted fish. Careful choice of a strain male or two with their appropriate females (obtained from your local Club OR Livebearer Society) and properly cycled, might give you some first class offspring for your Club's next Table or Open Show!

Feeding is not a problem as all of the fish listed will take most proprietary brands of flake food. I know that some people are happy to eat baked beans morning, noon and night, seven days a week etc., etc., however, try to give your fish some variety, particularly the frozen or freeze dried foods such as Tubifex and bloodworm and, as a special treat, lots of live summer foods such as Daphnia, mosquito lava and chopped earth worms.

If you would like to become more specialised with the fish which you have, it just so happens that all three tetras like similar conditions. To set up a tank with their "ideal" conditions and with a chance of spawning use dark gravel (I would suggest, for the more natural look, a dark brown river gravel rather than the "coloured" black variety which is available). Your water should be soft and slightly acid around the 3.4 DGH and 5.0-6.0 pH and preferably all continually filtered through aquarium peat (some bogwood in the tank and black water tonic or similar in the water will also assist here). A corner box air operated filter should be enough in a 500/650 mm tank. If your water is not around these levels already, PLEASE DO NOT TRANSFER YOUR FISH DIRECTLY OVER, you will have to make a gradual transition, otherwise you will shock your fish and most likely kill them! Temperature should be around 24-26°C. Place plenty of plant around the sides and back of the tank, particularly of the fine leathery types, giving them a free swimming space in the centre front. Lighting should be enough to keep the plants going but not too bright as the fish prefer it shaded.

Carry out regular water changes and condition your fish with live food and you may very well have some youngsters on your hands. If you note that spawning are taking place but fry are not appearing after about 5-7 days, it probably means that there is insufficient plant cover to hide the egg/fry and they are being eaten, therefore, you may have to remove the adult fish after you have seen a spawning (or fry and catch and maintain the eggs in a small dish).



**National Junior Fishkeeping Asscn.**

(continued)

Specific information about your fish is as follows:

**Poecilia reticulata (guppy)** Found throughout most of Central America. One of the most well known and recognised Tropical Freshwater fish. It is a livebearer, the male generally being more brightly coloured with the gonopodium in place of the anal fin which the female retains. Size varies depending upon type.

**Parachanna inasi** (neon tetra) Comes from the Putumayo river area of Peru, although it is now generally captive bred. The Male is more slender than the female. Size up to 4cm.

**Hemigrammus ocellifer** (beacon or head and tail light tetra) Comes from the coastal regions of French Guyanna, the Amazon area of Bolivia and Argentina. The swim bladder of the male looks more pointed. The females' is partially covered giving the appearance of being rounded underneath. Size up to 5cm.

**Hypessobrycon pulchripinnis** (lemon tetra) Comes from central Brazil particularly overgrown tributaries to the Tocantins. The anal fin of the male has a pronounced black edge where the female has little or no black. Size up to 5cm.

**Corydoras** species (dwarf catfish) Corys are known throughout South America with the greatest concentration being in the Amazon Basin. Some species have very exacting differences between males and females, however, generally looking from above, or head on, the female will have the more rounded body, the males having a slender shape. Also look out for the pectorals in the female being rounder, which enables the clasping of her eggs during spawning, than the males more pointed fins. Size depends upon type.

**SUPREME WEEKEND OF FISHKEEPING**

Weston report by Elizabeth Porter

At this year's Supreme Festival of Fishkeeping, at Weston-Super-Mare, there were many more activities for junior fishkeepers. These included the **N.J.F.A. Junior Fish Show**, organised again this year by John and Liz Fell, the **Junior Tank Race** and the **New Junior Aquaquiz** sponsored by Tetra.

Courtesy of Paul Davies, all Junior residents at the Pontins Sand Bay Complex, were given the chance to adopt a fish, in order to compete in the fish show. Well done to all that entered and special congratulations to Angela Cank aged 12 of Hallon, Cheshire, who as well as collecting numerous prizes, won Best in Show with her *Rasbora heteropis*.

The **Junior Tank Race** was won this year by Hilary Porter, aged 12, Kerry Graham and Samantha Moore, both aged 11, all from Seascale Junior Fishkeeping Society, who went on to compete in the adult competition finals, coming 4th overall.

The first ever Junior Aquaquiz was held this year and after the preliminary round, six finalists remained. A gruelling round of questions from Roger Foggitt followed and the **1997 Junior Aquaquiz Champion's** title was awarded to Matthew Fiddes, aged 16, from London followed by runner-up Elizabeth Porter from Seascale, all competitors received a goodie bag, courtesy of Tetra.

A good time was had by all and everyone at Seascale Junior Fishkeeping Society would like to thank everyone at Weston and the F.B.A.S. for making it so enjoyable, we hope next year will be as great a success.

Many thanks for that report Elizabeth and I can hint to everyone now that the **Supreme Festival of Fishkeeping for 1998** will be something special as the **Federation of British Aquatic Societies** celebrates its "Diamond Year". So start saving the pennies now! On the **FISHWORLD NJFA Section Competition front, DID YOU MISS OUT? UNITED KINGDOM JUNIOR CHAMPIONSHIPS** — It needed a bit of working on and caught many of you out, but the well deserved winners were: **Angela Cank, Ian Cank, Tamara Epps, James Hanlon, Michael Hawkins, Daniel Pidcock and Andrew Smith.**

**National Junior Fishkeepers Asscn.**

(continued)

Well done to each of these winners, all of whom have by now received tubs of fish food (courtesy of HAGEN) and Tamara, Andrew and Daniel have also received holdalls (thanks to TETRA) and Powerheads (courtesy of HAGEN). If you weren't one of the lucky ones, or you didn't even try, why not have a go at this quarter's Junior Section competition, **FISHING FOR WORD II.**

**FISHING FOR WORDS — II** Sponsored by Rolf C. Hagen and Tetra

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

What remains?

The **NJFA** is kicking off the **Federation of British Aquatic Societies' 60th year Anniversary Celebrations** with a special **WORDSEARCH** featuring **DIAMOND** in the grid (in more ways than one). Also in the grid are other precious stones, metals and minerals. They are **ALUMINIUM** (please excuse the American spelling as it is the only way it would fit in the grid) **AMBER, BRASS, BRONZE, COBALT, COPPER, CORAL, EMERALD, GARNET, GEM, GOLD, IRON, JADE, LEAD, OIL** (this was not intended to be there but was found once the grid had been completed) **ONIX, OPAL, PEARL, PEWTER, PLATINUM, QUARTZ, RUBY, SILVER, TIN, TOPAZ, ZINC, ZIRCON.** The grid also contains the name of our two sponsors **HAGEN** and **TETRA.** CAREFULLY draw a line around each of the words in the grid, enclosing only the letters used. When you have done this, you might find something has revealed itself, write down what you find, in the space provided below the wordsearch, and send this whole page to:-

National Junior Fishkeepers Association, Fishing for Words - II, 44, Lakewood Drive, Wigmore, Gillingham, Kent ME6 0NS

Entries must be received by 17th February 1998. The first three correct entries out of the bag will each receive a **HOLDALL** and **FISH FOOD.** The next seven correct entries will each receive tubs of **FISH FOOD.** Winners names will appear in future edition of **FISHWORLD.**

Please complete the following so we know where to send the prizes, shall you be a lucky winner:

SURNAME: \_\_\_\_\_ FORENAMES: \_\_\_\_\_  
ADDRESS: \_\_\_\_\_  
\_\_\_\_\_  
NJFA MEMBERSHIP No: \_\_\_\_\_  
COUNTY: \_\_\_\_\_ POSTCODE: \_\_\_\_\_ DATE OF BIRTH: \_\_\_\_\_

If you haven't joined the NJFA yet and would like to, please complete the Membership Application Form, on the reverse of this page and your details will be passed onto the Membership Officer.

**NATIONAL JUNIOR FISHKEEPERS ASSOCIATION**

If you would like to join the National Junior Fishkeepers Association, and are aged between 8 and 16 inclusive, then please fill in this Form and return it, together with a Stamped Addressed envelope to:

The Membership Officer, NJFA  
22 Flamsted Avenue, Wembley, Middlesex HA9 6DL

Surname: \_\_\_\_\_ Forenames: \_\_\_\_\_

Address: \_\_\_\_\_  
\_\_\_\_\_

County: \_\_\_\_\_ Postcode: \_\_\_\_\_ Date of Birth: \_\_\_\_\_

I am/ I have been/ I have not been a member of a local Aquarist Society or Specialist Fish Society

What is the name of the Society? \_\_\_\_\_

My Parent/Guardian is/ has been/ has not been a member of a local Aquarist Society or Specialist Fish Society

What is the name of the Society? \_\_\_\_\_

Would you like information on: Local Societies \_\_\_\_\_ Yes/No?

National Specialists \_\_\_\_\_ Yes/No?

What species, or genera, of fish are you interested in: \_\_\_\_\_  
\_\_\_\_\_

Is your fishkeeping in: Aquaria: \_\_\_\_\_ Ponds: \_\_\_\_\_ Both: \_\_\_\_\_

Which other associated aspects of fishkeeping interest you? \_\_\_\_\_

Water Lilies:  Filtration:  Plants:  Fish Shows:

Fish Exhibitions:  Other (please specify): \_\_\_\_\_

Signature of Parent or Guardian: \_\_\_\_\_ Date: \_\_\_\_\_

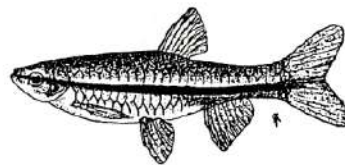
(\*delete as appropriate)

FOR OFFICIAL USE

Date Received \_\_\_\_\_ Membership No. \_\_\_\_\_

\_\_\_\_\_

**Rasbora einthovenii (Blueker).**



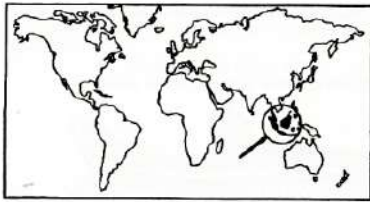
Common Name: Brilliant or Blue-line Rasbora.

Colour: Basic body colour brown with yellowish tinge and a bluish-mauve pearly lustre on the flanks, a bluish-black stripe runs from the snout through the eye to the caudal peduncle continuing on to the central rays of the caudal fin, this stripe is bowed ventrally and has a reddish-gold line running along the dorsal edge, scales edged with black, eye golden. Fins clear, dorsal and anal with a blackish streak on the outer parts of the anterior rays, caudal pale yellow with dark central rays. Males may display a hint of pale yellow in the dorsal fin.

Characteristics: Body and fins shaped as illustrated. Caudal moderately forked with rounded lobes, rear margin of dorsal convex, anal and pelvics broadly pointed, pectorals pointed.

Remarks: A snellish active species ideal for the community tank where it will shoal if kept with a number of fishes of its own kind. Exhibited in show class J.





<b>Habitats:</b>	Quite widespread being found in Borneo, Malay, Sumatra and Thailand, in clean clear water due to the high rainfall in their region which floods their environment.
<b>Temperatures:</b>	22°-25°C (72°-77°F) cooler can be tolerated i.e. 19°C (66°F) providing the change is carried out gradually. Temperature may be raised to 27°C (81°F) for breeding.
<b>Water:</b>	PH 6 - 6.8. Soft and acid, although a neutral PH will be tolerated if carried out gradually. Old water is preferred to new and violent changes in water conditions should be avoided.
<b>Feeding:</b>	As this species is extremely active their feeding should be little and often, when they will accept almost any food offered.
<b>Breeding:</b>	As this species lays non-adhesive eggs it follows that the use of plants etc as a spawning medium are not required unless shelter is required for the females to seek refuge. The base of the aquarium should be clean and covered with a layer of marbles or clean round pebbles, the water should be shallow 100mm maximum and the tank long enough (about 600mm) to permit the fish to run.

## LETTERS

Dear Sir

It seems to be popular opinion nowadays that Aquarist Societies are not what they used to be with regards to membership numbers, cancelled Shows and Shows taking place on the same day.

It is the latter which I would like to pass comment on as this must lose certain Societies benching numbers and funds. This year alone, dates that clashed and affected myself (and my Society) were:

**Alden AS & Wyke AS — 07 September 1997**  
**Olley AS & NACG — 21 September 1997**  
**Leeds AS & Halifax AS — 05 October 1997**  
**Doncaster & Washington — 12 October 1997**

Surely such double bookings, some of which are in close proximity to each other, could be avoided. If the relevant governing bodies such as the YAAS, FBAS, FNAS could communicate with each other and Member Societies and Affiliated members, we would all benefit.

We all have the same aims in mind — to promote the hobby. So, with a little more help and communication from all concerned, everyone should prosper a little better.

If we don't help each other, no-one else will.

Alan Holmes, York A.S.

Editor's Note:

Alan has put his finger on a problem that crops up year after year, although it must be appreciated that any Society putting a new (and first) Show into the Show Calendar often has to look hard for a suitable, non-competing gap — and also one that fits their choice and availability of venue.

At least one of the organisations that Alan mentions produces a quarterly list of updated Show dates (covering all Shows, not just those of its member Societies) which is circulated to all known Societies throughout the year, together with details of a Show Schedule Labelling Service. The latter provides any Society with a set of mailing address labels of nearest Societies within a feasible radius who would be likely to attend their Show. However, like all good ideas, these services stand or fall by the support they receive.

The onus is on Societies to support such schemes by providing any updated information, especially on their Show dates, as soon as it becomes available and then Alan's last line needn't be so doom-laden as it appears.

Individuals can obtain a current list and details of the Labelling Service by sending a SAE to:

**Show Dates, 22 Flamsted Avenue, Wembley, Middlesex HA9 6DL**

Erith & District A.S. would like to thank our friends on the Isle of Wight for a thoroughly enjoyable weekend. We look forward to next year's event and we promise to look after your **lavatory seat**.

We would like to thank all our friends for attending our **Open Show** and for making it such a success, we do hope that you all enjoyed yourselves. We would also like to thank all the Judges and Officials of the FBAS for giving up their time to come.

We look forward to seeing you all again in the near future and we hope that you will all come to our **Open Show** in 1998.

'Blackie'

31

### Hemichromis fasciatus

(continued)

and DH of 120ppm, with one heaped teaspoon of non-iodized table salt per gallon. I use medium size Wonder Rock, a baby-saver filter and a large flower pot in the breeding tank. The parents carefully scrub the flower pot clean, inside and out, before spawning commences. The eggs are carefully laid inside the pot, on the bottom. Eggs are beige to ivory in colour and about the size of a grain of natural gravel.

The young hatch in about two to four days, but are not free-swimming for almost a week. During this time the male guards the WHOLE TANK, taking time out to move gravel, making several slate-bottom pits. One word of caution at this time, DO NOT put your hands in the tank once the eggs or fry are present. The male will race across the tank to attack the invader. He isn't afraid of a thing at this time. The female spends her time fanning her young and moving them from pit to pit during the day. When evening approaches, she moves all her fry back into the pot for safe-keeping.

Young fry are capable of eating newly-hatched brine shrimp immediately. Finely ground beef heart and Tetra-Min flakes can be introduced when the fry are about two to three weeks old. They are transparent at first with only their dark eyes and a black line running from eyes to tail, visible. At about three weeks of age, they turn dark gold above the line and ivory below it. Black transverse bands appear after several months turning into black spots at maturity. The growth rate is equivalent to that of *Cichlasoma octofasciatum*. They can be safely sold when they are around three to four months old.

As with all large cichlids, it is best to buy them in groups of at least six unsexed juveniles, letting them choose

their own mates. It has been my experience that a pair must be approximately four and a half to five inches long before they will spawn. A young mated pair will have 600 to 1000 fry in a single spawning which they will take care of until the fry are quite large enough to manage on their own. This is about the time I usually remove the parents or the fry from the tank.

Aggressiveness comes naturally with these fish. However, when kept in a community tank containing equally aggressive cichlids, they do very well. Their favourite pastime is challenging and chasing their tankmates. This provides entertainment for their owners, especially when they challenge a fish twice their size.

*H. fasciatus* can be maintained in a slightly alkaline to acid water. They prefer a temperature of 76 to 78° except when spawning. Being middle-to-top-dwellers, they don't hide among the rocks and are outstanding additions to our tank. They are very curious and will come up to the front of the tank to WATCH YOU when you are watching them at close range. Caution must be taken when adding a new fish to their tank, however once established they resent any and all newcomers (other than cichlids) and will attack them unmercifully if the introduction isn't done with discretion.

In spite of their aggressiveness, *H. fasciatus* are such unusual and beautiful cichlids, that they are well worth keeping if you have the room. Words cannot adequately express the pride one feels every time friends look into your tank and say "What type of cichlid is that?" It's one of the most beautiful fish I've ever seen."

## The 1997 Mid-Somerset Closed Show at the Countryside Cavalcade

Report by Karen Toleman

The 1997 Mid-Somerset Closed Show loomed closer; this year was to be something of an experiment. The show was still to be held in conjunction with the Countryside Cavalcade, a country show involving a steam fair, heavy horses, fur and feather, crafts, antiques and much more. In previous years we had been sited on a balcony in a large building overlooking the craft fair. This year we were to occupy the newly refurbished Mendip Hall, a ground floor location.

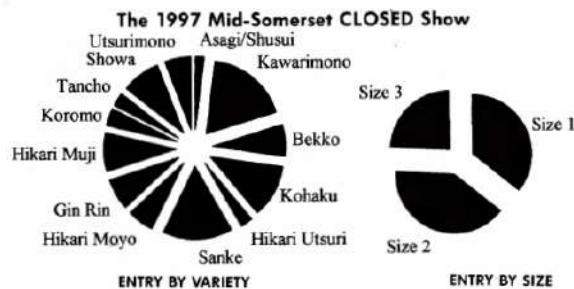
When my brother, Mike and myself arrived on the Saturday morning, the sun was shining and the weather set fair for the weekend. The advantages of the new venue soon became apparent as we could drive into the hall and unload the fish straight into the vat. Everyone felt that setting up had been easier, especially the trade stands and those responsible for getting the water into the vats. The water quality proved to be better than it had every been on the balcony. The vats had been filled on Friday afternoon and left to stand without aeration until benching commenced under the auspices of Ian Prior, our bancher for the day and a B.K.K.S. trainee judge. The new sky lights provided good natural light in which to view the koi.

The show vats and information table took a fairly central position to one side of the hall and our show was well supported by dealers of koi and koi related goods. The koi dealers were Bath's Water Garden and Koi Centre (Fondlife), Aquatore from Bristol and Koi Southwest. I was pleased to see that club members Stuart and Meanie who started selling select hi grade koi from well known Japanese breeders (by appointment) this year under the name of Hanooumi Koi; also dry goods at competitive prices. Other stallholders included

Wessex Bonsai Society who were promoting their organisation, giving regular demonstrations in pruning, wiring etc, and selling off end of season bonsai stock. Collect-a-Card sold cigarette and other card collections, some framed, covering many interests and including koi portraits by Keith Siddle. Mr. Erotokritos of Collect-a-Card kindly donated a framed Nishikigoi Premier Collection by Keith, which is to be auctioned at the A.G.M.; further details are to be found in the October section magazine, Splash. Teezzer carried a huge selection of beautifully designed koi tee-shirts and sweatshirts, while The Nishikigoi Collection at Country Homes of Beckington had a fine display of decorative and useful gifts for the home including koi plaques, sculptures and clocks.

The information table held the usual collections of magazines and information, with videos running throughout the day, and was manned by members giving information and advice when required. A good selection of donated prizes ensured interest in the raffle. Prizes included the books *Nishikigoi Still Waters*, *Koi Kichi* (both donated by the authors) and subscriptions to *Nishikigoi International Magazine* as well as koi foods, Japanese ornaments and lanterns and many other prizes.





**KENT ASSOCIATION of AQUARIST SOCIETIES**

**1998 CONVENTION**

Saturday 22nd March  
 Smithy's Hotel  
 Eastern Esplanade, Margate

Tel: 01643 221980 for accommodation

**Programme**

- Welcome
- Guest Speaker
- Coffee break
- Quiz
- Guest Speaker
- Fish Auction and Raffle
- Evening Buffet
- Guest Speaker

Advance bookings to Allan Best, 73 The Fairway, Rochester, Kent ME1 2LT  
 Tel: 01634 408656

For Friday and/or Saturday overnight accommodation at the hotel, please contact them direct

**The 1997 Mid-Somerset Closed Show (continued)**

Philip and Beryl Rolfe had used one corner of the hall and constructed a lovely garden, complete with plants, pond and fish. From there they ran a fish tombola and an extremely popular children's competition based on a questionnaire concerning pond life, nature and kai. The prize vouchers donated by Watermarque were very well received, and in the absence of a PA system on the first day, Yeovil Town Crier Bruce Trigger, did a marvellous job in presenting these prizes and calling the raffle for us.

In all 103 fish were entered under three sizes (up to 9", 9" to 16" and over 16") and were judged by senior judge Nigel Williams and trainee judge Wayne Eady. Together with Ian Prior, they stayed on all day talking to section members and interested members of the public, answering any questions they were asked; finally leaving around 7pm. A special thanks must go to them for their dedication and time spent in travelling and

judging for the promotion of the hobby and the B.K.K.S.

The title of Grand Champion was awarded to a lovely Kohaku owned by Eddie Aiston. Eddie has worked very hard for the club and it was good to see the title go to such a deserving winner. Our tanks to Eddie and to the rest of the water quality team who worked so hard throughout the show, particularly Chris Tyrk who worked both days and stayed overnight. Also to Peter McDowell for night duty and to Derek Elliott who worked tirelessly to keep the vats in pristine condition. As a result of their efforts, the fish remained in good order, with very few showing any sign of stress, throughout the show there were no casualties.

Through our affiliation with the F.B.A.S., each exhibitor had the opportunity of a free jar of Laguna colour feed donated by Hagen and Interpet donated a keep-sake trophy, sweatshirt and tee-shirt for the owner of the Grand Champion.

**The results are as follows:**

<b>Supreme Champion</b>	Kohaku	Eddie Aiston
<b>Reserve Champion</b>	Utsurimono	Peter McDowell
<b>Best Size One</b>	Sanke	John Butler
<b>Best Size Two</b>	Sanke	Philip Rolfe
<b>Best Size Three</b>	Kohaku	Peter McDowell
<b>Ladies' Trophy</b>	Gin Rin	Julie Woods
<b>Unique Kai</b>	Hikari Muji	Mike Newman
<b>Best Doitsu</b>	Shusui	Peter McDowell

Finally, thanks must go to Colin and Stephanie for their dedication; the organisation and paperwork being a phenomenal task and to all those whose hard work makes the show possible. There is already talk of next year's show being bigger and even better! To those who have never been the Countryside Cavalcade, make a note in your diary now, 12th and 13th September, 1998. There is so much to see and do, even for those poor souls who have not yet been converted to the joys of koi appreciation!

See you next year!

**Tyne Tees Aquatic Festival '97**

Written & submitted by Mrs. J.A. Bell, Tyne Tees Area Secretary

Sunday August 24th 1997 - 07.00am - a dull, grey, still morning in the car park of The Park Hotel at Lynemouth. Surely, once in full swing, in third Tyne Tees Aquatic Festival would not also be dull and grey!

Inside the Hotel, the traders were busy setting up their stands. This festival is well supported by local Aquatic Traders and this year was also attended by Aquarian in the respected figure of Dr. David Ford.

Dr. Ford's well known voice was much in evidence during the afternoon as he organised a regional heat of "Aqua Champ", which was won by Mr. Alan Race of WASP. Dr. Ford also gave a most interesting lecture on developments in the Waltham laboratory.

Several amateur fish breeders also attended the Festival, selling a wide variety of homebred fish. Local breeders are also able to sell their fish from the Tyne Tees affiliated Society Stands, which are scattered around the



Festival. These societies are invited to enter a Themo Tank competition, the theme this year - an Amazonian Biotope. After judging by Dr. Ford, WASP was successful with an outstanding exhibit.

Judging of the FBAS Open Show starts at 11.00am, so exhibitors arrive early. Jaded by the early start necessary to travel from all over the country, they stagger in, weighted down by tanks and boxes containing exhibits for the 38 classes.

**BEST IN SHOW** was a Sail Fin Characin (*Crenuchus spilurus*) owned by Bob Street. This fish also won Class 'C', the FBAS Championship Class. The Three Rivers Championship Class was won by I. & A. Canon with a Spotted Headstander (*Chilodus punctatus*).

The prizes were presented with his usual charm by FBAS Chairman Joe Netherell, who had made the long journey from London, accompanied by Paul Corbett who had travelled from the Isle of Wight. The successful exhibitors received armfuls of food most generously donated by Aquarian and Tetra.

It certainly was not dull and grey inside the Festival - children's artwork hung on the walls beside fish silhouettes to be identified and the Festival's Logo Barb to be counted. Hopeful competitors stuck pins into a world map in the "Where on Earth?" competition. Snakes from the "Coast to Coast" Reptile Display twinned themselves around some brave visitors. Glass was manoeuvred into shape in tank building demonstrations and everywhere was the main attraction - **FISH!**



**The Spawning Habits of *Corydoras aeneus***

by Richard Senour from T.V. Cats Magazine Spring 1994

For some months I have been trying to observe the spawning habits of my *Corydoras aeneus catfish*. As I have interpreted the literature, there are two schools of thought on how fertilization occurs. This, combined with the fact that only 30 to 40% of the eggs are fertilized, aroused my curiosity. To say "sit and watch" is an overstatement. Even a shadow passing the tank has proven sufficient to stop the activity for many minutes. I have watched from four to five feet away, and the process of cleaning and courtship continues, but not an egg is deposited. Leave the area for five minutes and 20 to 30 eggs will have been deposited!

Accurate records have enabled me to estimate that spawning occurs about every 38 days in my aquaria. This period could stretch to several months were it not for some artificial stimuli. Massive changes of water have proven sufficient to promote breeding, and some aquarists have said that this must be done weekly. A 90% change of water on the 32nd to 34th day after the last spawning has proven sufficient to induce spawning four days later. Another stimulus I have found successful is the addition of a power filter. As the fish love to play in the turbulence of the output, they appear to get sexually aroused and spawning often commences. The disadvantage to this method is that the intake tubes make attractive spawning sites, and some eggs will be pulled into the filter. The eggs are sufficiently adhesive, however, that the inlets may be virtually closed by masses of eggs despite the current. Such stimuli are probably related to heavy rainfall and periodic flooding in the natural habitat, and the three to four day lapse between stimulation and spawning may be related to the time it takes a stream to clear. A natural occurrence led me to pursue these methods when several warm days were followed by a sudden cold spell, and the heat was off. The tank temperature dropped from the usual 76°F to 71°F and spawning took place almost immediately.

Separation of sexes and introduction of one or another to the aquarium first has been of no benefit in my experience, and group cohabitation has appeared to be the most reliable and easiest spawning method.

In the second paragraph I mentioned that 38 days was the normal spawning interval, in my tanks. If spawning is interrupted, or if the pairs are broken up during a rest period, a much smaller spawning will take place in about 17 days, and I have found only about 10 to 15% of the eggs will hatch. The parents must be removed after spawning, as I have recorded several instances where they were left in the spawning tank and eaten on the second or third day; no fry resulted in these instances.

Recently both my bronze and albinos overcame their umbrage and allowed me to watch their spawning activity closely. I noticed that two distinct methods were used. After the intensive cleaning and inspection, I saw a male deposit sperm on the side of the aquarium. He then made frantic efforts to drive a female to this location. In the meantime a female was depositing eggs on a leaf, and a male did not follow her. I observed the plant closely to see if a male would fertilize them later. I also noticed this same female approach a male and drive him to the bottom where she nuzzled him several times quite



## The Spawning Habits of *Corydoras aeneus* (continued)

violently in the area of the ventral fins. She then swam to the plant leaf and eggs were seen emerging and being clutched between her ventral fins. She appeared to clean the plant thoroughly and then deposited a clutch of 8 to 12 eggs. This activity continued for three hours, some females being successfully driven to the permitted site by the male, and others appearing to take the sperm of the male and fertilizing their own spots.

Contrary to what I have read, massive doses of methylene blue have destroyed eggs for me, and three drops per gallon of a 5% solution is sufficient to prevent fungus, provided the aquarium is kept in total darkness. After 72 hours the coverings are removed to let the light in, and a horde of large fry are seen. Fine sifted or egg layer dry food is devoured readily. After approximately 10 to 14 days a period of extreme distress may be noted. At this time it is recommended that one or two airstones be added to the filtering system, as the development of the air-utilizing system is underway. It is only necessary to provide this increased aeration for three to five days. At the end of this time a few fry will be seen surfacing regularly, but the majority will not surface until 12 to 14 weeks old. Why this situation occurs and distress has not been noted at a later date would only be conjecture on my part.

After hatching has occurred a great number of eggs appear to remain intact and look as though they are fungused. Upon close inspection a small hole is noted. Eggs that are left in this condition appear to be in the areas where the male milted the site and drove the female to the site. The areas where the female cleaned and deposited the eggs revealed clear,

opened egg casings similar to those of *Aphyosemion* species when they hatch. The only explanation I have is that perhaps the latter may hatch somewhat earlier, although the eggs with holes will remain for several days and appear to get whiter. I do feel that the eggs with the holes attribute to the common belief that only 30 to 40% of the eggs hatch. My experience has been that an estimated 90% hatch would be low. The majority of infertile eggs were in the areas where the male placed sperm on the site and drove the female to it.

When spawning has taken place in tanks containing coarse gravel, 100% losses have occurred. Attempts of artificial incubation in the cichlid manner have met with 100% failures.

Adult *Corydoras* cats which have been employed individually as bottom feeders or scavengers have been noted to take part in group spawning activity and pairs extracted from the groups will spawn individually, although not with the regularity of group activity. I have noted that the average yield per female is 60 fry at the age of 60 days, with no apparent losses.

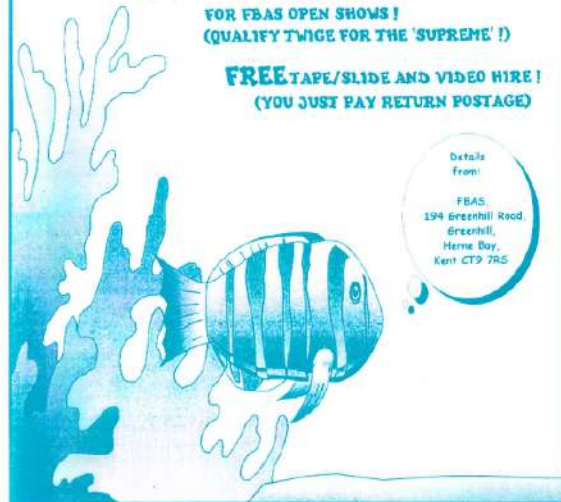
In summary, I would conclude that two basic spawning methods are used, with the females who appear to take the sperm of the male having a slight percentage advantage in fertilization. I also feel that the 30 to 40% fertilization rate is excessively low. I would also have to state that infertility through inactivity is erroneous, and that a learning process is transmitted through group activity, and that this education is utilized later as pairs. Water hardness is apparently not critical, as my pairs have been transferred from water of pH 7.3 and 245 ppm to water of pH 7.5 and 25.7 ppm with no change in the spawning period.

## GREAT FBAS 60<sup>th</sup> ANNIVERSARY OFFERS TO ALL SOCIETIES IN 1998

**2 YEARS' FBAS AFFILIATION FOR THE PRICE OF ONE!**  
(JOIN IN 1998 for £12.00 - RENEW IN 2000)

**TWO CHAMPIONSHIP GLASS TROPHIES FOR FBAS OPEN SHOWS!**  
(QUALIFY TWICE FOR THE 'SUPREME'!)

**FREE TAPE/SLIDE AND VIDEO HIRE!**  
(YOU JUST PAY RETURN POSTAGE)



Details from:

FBAS  
194 Greenhill Road,  
Greenhill,  
Herne Bay,  
Kent CT9 2RS

## Keeping out the Cold

When it's Summer and the pond and everything in and around it is looking its very best, it may be difficult to project your mind a few months ahead to imagine what the pond might be going through during the cold dark days of Winter. However, the pond should be protected against the rigours of cold weather that undoubtedly will arrive sooner or later.

Of course, it is widely appreciated that water in the pond freezes from the top layers downwards (ice being lighter, or less dense, than liquid water), otherwise our pond fish would be in a very sad state if the reverse was true. This has led most people to believe that there is therefore a safer, warmer layer of water at the bottom of the pond where the fish can safely (and snugly) rest up during the winter. However, this may not necessarily be the height of luxury that we expect it to be, in fact, there may not be as much warmth in the lower layers as we had first hoped for.

A lot depends on the depth of water in the pond, with obviously those of deeper depths providing theoretically more warmer waters. This strategy is somewhat dispelled by the fact that many ponds now have filtration systems operating all year round where the movement of the water may well create an evenness of temperature throughout the whole pond with only minimal differences between top and bottom layers; then there is the argument that maybe the fish don't necessarily spend all the winter dozing on the pond floor but move around to a certain extent even in the depths of winter — this is probably more of a factor in Koi ponds where the physical size of the fish creates more water movements than would, say, a semi-energetic Shubunkin.

To get this area of consideration out of the way, and it depends very much on your own viewpoint on this matter, it could be said that moving the pump's position (any submersible one, that is) as near to the returning

water from the filtration system as possible — to lessen winter water movement in the pond — is a reasonable action to take. You could, alternatively, decide to turn off the pump for the whole winter season for the same reason but then it should be borne in mind the 'start-up' period then required to get the filtration system matured again once its operation is re-started in the Spring.

Keeping the pond warm, or relatively ice-free, is the main task which occupies the pondkeeper at this time of year and actions taken range from the simple to the sophisticated with a proportionate amount of cost being involved.

Ice brings darkness and danger to the pond for those above and below: any large sized-pond can become dangerous to animals or anyone tempted to walk on its surface whilst the fish below all manner of things are developing to cause stress and possibly ill-health later.

The prudent pondkeeper will have kept the pond clear of falling leaves in the autumn and thus bypassed the problems of decomposing vegetation occurring the coming weeks and months. These decompositions firstly consume oxygen and also provide excessive nutrients which would otherwise have been welcomed by early season algae as soon as warmer water temperatures and lighter conditions return next year. The next by-product of decaying materials is the accumulation of toxic gases which if trapped beneath a thick layer of ice again will cause problems. Here again, leaving the filtration system running throughout the winter may help

## Keeping out the Cold

(continued)

disperse such gases but don't depend on it, especially if you have lessened the water movement by the actions previously described. But back to the ice.

Keeping a pond free of ice can be quite easy with small ponds as a frame covered in bubble-wrap is all that is needed — plus maybe a few heavy bricks (or pegs) to keep it anchored in place lest winds blow it over the neighbour's fence! Naturally a periodic inspection of life beneath the wrap is recommended, even if it means you have to brave the elements outside the comfortable lounge for a few minutes.

Not every inch of ice needs to be cleared from the water surface just a small area so that the pond can be ventilated. One recommended method, for ponds with sloping, rather than vertical sides, is to allow the pond to freeze over then lower the water level to a few inches below that of the now stranded ice sheet perched between the banks.

By far the most popular method is by using a floating pond heater. These are merely aquarium heaters with a collar of expanded polystyrene (styrofoam) to keep them floating very much in the fashion of a fisherman's float. Of modest power, these heaters keep an area of open water of around 12" x 18" (30.45cms) diameter.

A similar effect is created by a Thermadome, a slightly larger diameter 'igloo' looking moulding of polystyrene which floats on the water surface. A

hidden line inside the dome is attached to a sunken weight (a plastic basin container included in the kit) which again keeps the device in place by retain an amount of warm air over the surface the ice is kept open and any trapped gases can escape through a small ventilation hole in the top of the dome.

A rather different approach is taken by the Ice Preventer. Here a float supports a submersible water pump which circulates warmer water from the lower layers of the pond (we're back to that theory again) up and around the float's circumference thus keeping an ice-free area at the water surface.

If your pond is not too prone to icing up, it may be sufficient to simply shield it from any cold winds by a simple windbreak, fence or hedge. Venturis, used in Koi ponds may also help to ventilate and keep any area free of ice.

The ultimate, of course, is to keep your pond completely ice-free by installing a swimming-pool type gas-boiler heating system (be careful that only non-toxic metals are used in the heat exchanger). This will ensure that with a complementary bubble-wrap cover, or plastic covered surrounding pergola, your pond will gently 'steam' during the cold weather and almost induce you to put on your swimming attire and join your fish in their ultimate luxury.

### The 10 most popular names for pet Goldfish in Britain

- |            |            |
|------------|------------|
| 1. Jaws    | 6. George  |
| 2. Goldie  | 7. Flipper |
| 3. Fred    | 8. Ben     |
| 4. Tom     | 9. Berry   |
| 5. Bubbles | 10. Sam    |

From Daily Mail 16 October 1997



through the oceans of the world

LONDON'S ULTIMATE EXPERIENCE OF UNDERWATER LIFE WORLDWIDE...

From freshwater streams to the deep Pacific Ocean. From sharks to octopus, from piranhas to jellyfish. Thousands of specimens in over 40 stunning displays.

deep beneath County Hall

now open

A DEEPLY IMPRESSIVE DAY OUT ... WHATEVER THE WEATHER!

OPEN DAILY FROM 10AM-6PM (CLOSING TIMES EXTENDED DURING HOLIDAYS)  
 TEL: +44 (0) 171 967 8000 INTERNET: <http://www.londonaquarium.co.uk>  
 LONDON AQUARIUM LIMITED, COUNTY HALL, RIVERSIDE BUILDING  
 WESTMINSTER BRIDGE ROAD, LONDON SE1 7PB  
 Just a few minutes walk from Waterloo and Westminster tube

UP TO £2 OFF ANY FOUR ADMISSIONS MONDAY TO FRIDAY (EXCL. BANK HOLIDAYS)

# The range top aquarists recommend



To stay healthy and active fish need a range of nutrients. The best and easiest way of providing these is in a complete balanced diet such as those in the AQUARIAN range.

- AQUARIAN Flakes – A range of highly nutritious diets, for all tropical, marine and coldwater fish.
- AQUARIAN Tropical Granules for all community fish.
- AQUARIAN Tropical Floating Sticks for larger tropical fish such as Cichlids and Oscars.
- AQUARIAN Floating Pellets for all goldfish.

ALL AQUARIAN PRODUCTS ARE THE RESULT OF EXTENSIVE RESEARCH AND DEVELOPMENT WITH:



FOR FREE HELP AND ADVICE on all aspects of fishkeeping, write to the Aquarian® Advisory Service,  
 PO Box 67, Elland, West Yorks, HX5 0SJ.



## 1998 SHOW DATES

(Rule Codes: A=A of A; FB=FBAS; FN=FNAS; FS=FSAS; I=International Goldfish Standards; N=NEFAS; U=USofA; Y=YAAS)

08.03.98	N.E.F.A.S. (N)
21.02.03.98	YORKSHIRE AQUARIST FESTIVAL, Doncaster (Y)
28.03.98	EASTLEIGH A.S. (FB)
05.04.98	ABERDARE A.S. (FB)
12.04.98	OLDHAM A.S. (FN)
19.04.98	MERTHYR A.S. (FB)
	ROBIN HOOD A.S. (FN)
26.04.98	SWINDON A.S. (FB)
02.05.98	SOUTHEND & L.I.J.A.S. (to be confirmed) (FB)
	FBAS DIAMOND DINNER (DUNSTABLE)
10.05.98	CORBY A.S. (FB)
17.05.98	CAST BE (FN)
	I of W.A.S. (GROCKEMANIA)(FB)
24.05.98	HALTON A.S. (FN)
30.05.98	FISHWORLD '98, DUNSTABLE (FB)
07.06.98	ERITH A.S. (FB)
14.06.98	BRACKNELL A.S. (FB)
	TAMESIDE A.S. (FN)
28.06.98	ST. HELENS A.S. (FN)
	YORK & D.A.S. (Y)
11.07.98	PORT TALBOT A.S. (FB)
18.07.98	BOURNEMOUTH A.S. (FB)
26.08.98	MERSEYSIDE A.S. (FN)
02.08.98	YORKSHIRE KODI SOCIETY (BKKS)
09.08.98	GRINSBY & CLEETHORPES A.S.
	SALISBURY A.S. (FB)
23.08.98	GLENROTHES A.S. (FS)
06.09.98	ALDEN A.S. (YAAAS)
	GRAMLINGTON A.S. (FB)
12.09.98	HOUNSLOW A.S. (FB)
13.09.98	MID-SOMERSET (BKKS)
	SILKINGTON A.S. (FN)
20.09.98	WID-SUSSEX A.S. (FB)
27.09.98	DARFVEN A.S. (FN)
	FAIR CITY A.S. (USA)
04.10.98	HALIFAX A.S. (FN)
	LITTLEHAMPTON & BOGNOR A.S. (FB)
24/25.10.98	BRITISH AQUARIST FESTIVAL, MANCHESTER (FN)
30.10/1.11.98	SUPREME FESTIVAL OF FISHKEEPING, WESTON SUPER MARE (FB)

### Note to Society Show Secretaries:

The above dates are those available as FishWorld went to press. For the latest, most accurate dates and venue information (together with Trophy Allocations, where applicable), please refer to the Quarterly Supplement issued by the FBAS giving details of Shows around the country. The Show Supplement is available, price 50p post paid from:

### Show Information,

Dept FW, 22 Flomsted Avenue, Wembley, Middlesex HA9 6DL  
 In order to provide the most complete service to all Societies, please communicate your Show Information to the same address.

## aquarian by Dr. David Ford aquarian

**Q.** Please could you let me know why I can't keep any Sucking Loaches that keep the tank free of debris. I have a four foot tank, the pH is correct. The only fish that I have are only community fish. I have two pieces of bogwood, plus other ornaments.

G.B., Gwent

**A.** You have not told me much about your aquarium and if you can't keep Sucking Loaches alive, then something must be wrong.

Perhaps you have a gravel based Loaches and catfish are not happy on gravel, they need sand. Perhaps you have an undergravel filter? If so, this pulls all the dirt into the Loaches's environment with consequent bacterial problems. Use a separate filter system.

The best sand for the base is the Early Learning Centre Play Sand at only £1.99 for a 10 kilo bag – just rinse it well before use.

Sucking Loaches are a good community fish for the aquarium but their job is not to 'keep the tank free of debris'. Feed the Loach properly, give meaty items such as prawn, earthworm and fish fillet and also leaves of scalded lettuce, boiled peas, sliced cucumber. Plus Aquarian flake or tablets to ensure the supply of essential amino-acids, vitamins and minerals.

**Q.** I have taken your advice in the past and have Early Learning Centre sand in the tank. My problem is that all the 'muck' sits on the top of the sand and causes a right mess when it's feeding time and my bottom dwellers stir it up. I have mainly Clown Loaches.

I change either 10% a week or 20% every 2 weeks and always Hoover the sand. However, most of it seems to return the next day – almost as if the water changes encourage more muck. I get it all out and then it's back.

I am thinking of removing the sand and replacing with gravel so that the muck will fall to the bottom of the tank and not get stirred up. I can then use a gravel cleaner to remove.

A.F., Birmingham

**A.** Sand is better than gravel for bottom living fishes. If you must have gravel, a black one brings out the best colours in the fish – a white one makes the fish develop a 'washed-out' appearance, all to do with camouflage of course.

Another advantage of sand is that dirt is pushed to the top for removal, in gravel it falls into the gaps where it develops bacteria that feed back onto the fish – you can always see this in catfish with long whiskers, they are always shorter over gravel.

If the dirt is a nuisance, you are overfeeding – fish only need 2 or 3 flakes a day each. They can eat continuously, digest what they need and excrete the rest, so all you do is pollute the tank via the fish.

To really clean-up, use a wide bore hose (1cm or more) and just suck everything, sand included, into a bucket (by suck, I mean siphon, prefill the tube with water – don't actually suck, the fish swim in their own loal). Swirl the sand under a running tap until it overflows clear water and then dribble sand back into place.



**NEW**

FROM

# aquarian®

## **An exciting range of Granules, Floating Sticks & Floating Pellets**

Now you can give your tropical or coldwater fish a choice of superior nutrition – AQUARIAN Flakes or the exciting new range of AQUARIAN Tropical Granules, Tropical Floating Sticks or Goldfish Pellets.

