

FISH WORLD



Magazine®



aquarian

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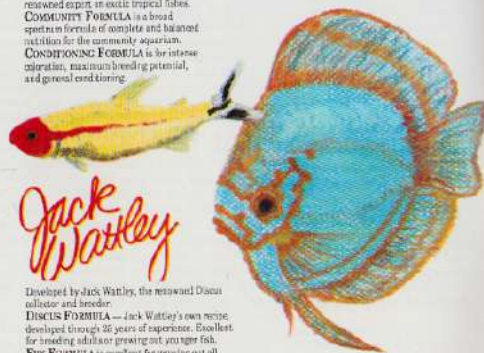
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For advice on any fishkeeping topic write to: Dr David Ford, AQUARIAN ADVISORY SERVICE, PO Box 67, Ellarke, West Yorkshire LS25 0SJ

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by Dr. David Ford



Q. I currently keep tropical fish and am interested in changing to marine fish-seahorses. I would be using a tank 30" x 15" x 12". Would this be a suitable size of tank for 2 or 3 seahorses, are they difficult to keep and can they be kept with any other marine fish?

A. Seahorses are very difficult to keep, the chemistry is no problem, it is the feeding, since they only eat live food that swims past them. Size of tank doesn't affect Seahorses (they don't swim much), but the bigger the better for water quality, of course. The fish can be kept with all community Coral fishes, but large boisterous species will upset them. There is a Seahorse Society: details from Seahorse Study Group, Peter Corser, 14 Knaves Hill, Unslade, Leighton Buzzard, Beds, LU7 2UD. For a book on the fish, see TFH publication M-537 'Seahorses in your Home', by Mildred D. Bellamy.

There is a European Association of Fish Pathologists, the UK member I use is Fishcare (Helen Bentley MSc) at 27/29 Vernon Avenue, Woodingdean, Brighton, East Sussex BN2 6BF, ring first on 0273 600981 to arrange shipment. Several Universities have the equipment to carry out PM exams by arrangement, such as the Institute of Aquaculture, University of Stirling, Stirling, Scotland FK9 4LA, again ring for arrangements on 0786 73171, my contact there is Dr. Randolph Richards MRCVS. There is an aquarium laboratory at the University of Plymouth, Drake Circus, Plymouth PL4 8AA where MSc students can do PM exams, ring 0752 264659 (my current contact there is Dr. Peter Burgess). Many of the Ministry of Agriculture and Fisheries Laboratories around the country also have PM facilities but whether they have the time is another matter, if there is a unit in your area it is worth asking. To DIY you really need a microscope and a book with information on preparation of slides, such as the Handbook of Fish Diseases by Dieter Uetengasser in the TFH series (No. [No. TS-123]. Another useful reference book is Textbook of Fish Health by Dr. George Past also in the TFH series (No. H-1043). The main problem with PM exams is that the fish deteriorates so rapidly. For a proper histological investigation the fish is bedded in wax, thinly cut and stained for microscopic study. Obviously an expert on interpreting the staining seen is needed (the Vets at Stirling are world-renowned for this knowledge). However, they state that if the fish has been dead over 20 minutes all the preparations (and it takes several hours) are wasted because the individual cells have broken down.

Reference John Pell's (Strood & DAS) letter in the last issue requesting more postmortem examination information. The best person to ask for a PM exam is a Fish Vet, because they have the knowledge and equipment required. Get to know the nearest Fish Vet to you. For the address contact the British Fish Veterinary Society, membership secretary Andrew Grant, MRCVS, Marine Harvest Ltd., Lochailort, Scotland (06877 255). There is also a World Association of Veterinarians specialising in fish diseases, for details contact the UK representative, Dr. Lydia Brown, FRCVS, Abbott Laboratories, Mill Leat Annex, West Gomeldon, Salisbury, Wilts, SP4 6JZ.

Aquarian Advisory Service

For histology, a fish must be newly dead, or sacrificed and preserved ideally in Bouin's fluid (75% saturated aqueous Picric acid plus 25% Formalin in 5% glacial Acetic acid) or at least freshly prepared 10% Formalin (a 1 in 10 dilution of 40% Formaldehyde solution). The fish must be cut open so the preserving fluid penetrates all the internal organs. In fact, very small fish are best cut into three or four parts with a razor blade. The fish must be soaked for 48 hours and then drained and wrapped in cotton wool, soaked in Formalin, and wrapped in a polybag so there is no chance of leakage if posted. It is illegal to send bottles of Formalin through the post because the chemical is toxic. Histology is the best PM exam because the sections can reveal everything about the fish, any parasites, any tumours or diseases, damage to gills from treatments (a common problem, the 'cure' kills the fish), even the water quality from the degree of mucus on body and gill. Such data is invaluable to edible fish farmers, that is why Fish Vets do the service. Without histology the fish can still reveal obvious causes of death, but again post death preparation has to be swift. If Formalin is not to hand, at

least wrap the fish in clingfilm or polythene and place in the freezer (must be quickly deep frozen not just refrigerated) to preserve the clinical signs. The fish may then be transferred, deep-frozen, to the pathologist at some later date. Note that once frozen, histopathology is no longer possible because the freezing breaks down the individual cells so microscopic staining reveals nothing. As John Pell mentioned in his letter, all the relevant details are also required, the water chemistry and aquarium stocks and husbandry. These should be noted immediately the fish dies, to recall later may give inadequate data. For fresh fish postmortem examinations by hobbyists, the best book for methods and techniques is Erwin Amlacher's Textbook of Fish Diseases (again TFH, No. PS-667). To understand the microscope work get Microscopy on a Shoestring by Owen Meyer, Northern Bee Books, W. Yorks. ISBN 0 907 908-10-1. Hope this all helps — but please don't put a dead fish in an envelope and send it to me (often happens), any postmortem examination is impossible and the postman objects.....

Dr. David Ford
Aquarian Advisory Service

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15	18	43.74	11	225	175	7,500
20	24	58.96	11	360	260	9,000
20	30	74.22	11	420	360	9,000
30	36	89.46	11	540	360	9,000
40	42	104.70	11	630	620	20,000
43	48	119.94	11	720	630	20,000

A GUIDE TO BUYING CATFISHES

by David Sands

Aquarium catfishes have always been popular amongst fishkeepers but never more so than today. Some of the larger aquatic establishments (with a wonderful array of the rare and beautiful catfishes) that I have visited in the past year, Dave's of Bolton, Kingfisheries, Mr. Fish and Lynwood are committed to supplying catfishes to the demanding public. In turn, the smaller establishments can supply the oddity. I once found a solitary *Corydoras pastazensis* in a small London Counties shop and it is still the only living specimen I can claim to have seen.

Firstly, you need to sort out what type of catfish will suit the size of the aquarium system you own. It is possible to keep juvenile specimens of "to be giants" providing the promise to provide a larger aquarium at a later date is kept.

Catfishes do break down between predatory and non-predatory forms and these two groups break down again into large and small forms.

For those fishkeepers with the average 2' to 3' long aquaria, looking for something to add to the community that will not promptly bite the heads of all the tetras and guppies, it is the small non-predatory forms that should be hunted down.

Everyone knows the little, harmless *Corydoras* by now. Some fishkeepers are happy to stick with a few 'trios of the common species, the bronze - its albino form and the peppered. Those who aspire to "state-of-the-art" levels are looking for the superb *Peruvian Corydoras Panda* downwards.

Recently importers have provided wild caught *Corydoras barbatus* which

needs no introduction whatsoever. *Panda* may have the wonderful eye mask and tail spot but *Barbatus* has the gold, the steel and the shape.

In this non-predatory group there are close relatives to the *Corydoras*, *Aspidoras*, *Brechi*, *Dianema* and the two smaller *Hoplosternum* species, *H. pectorale* and *H. thraurum*. These "armoured" catfishes are sheep in wolves clothing and can be kept with all but the finest fish.

If you are not sure when looking at a possible purchase - look at the mouth of the catfish in question. If it has barbels that point down in the *Corydoras* fashion you can be fairly sure that it is a harmless "sifter". In contrast, if it has forward sweeping barbels and a wide "open" style mouth - A La Polka dot catfish, *Pimelodus pictus* (still a lovely catfish providing you are keeping larger community fish such as barbs as gouramis), then it is likely to be the freshwater, tropical equivalent of old toothy JAWS.

Other small catfishes such as the banjos (*Bunocephalus*), the talkers and chocolate cats (*Acanthodoras* and *Platyodoras*) the very popular sucker mouths such as the bristle nose (*Ancistrus*) and the whiplash (*Rineloricaria*) are all ideal for the smaller community system but don't overstock. In a 3' tank, be happy with a couple of trios of *Corydoras* (if its *Panda* that is all you will be able to afford) and three or four oddies of the ones I have mentioned.

Larger, non-predatory forms such as the sucker-mouth "plec" - *Hypostomus plecostomus* and many *African Synodontis* are ideal if you own a 4' - 5' system but, with a few notable exceptions, they do tend to overcrowd the average community system.

If you want the big "slurp hounds" (as Robin Standen of Darwin Aquatic Centre used to name the monsters), then be prepared to shop around.

Dave's of Bolton had a few of the Sotanic Majesty Requests - *Mystus wykii*.

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A Guide to Buying Catfish

(continued)

This black beauty from Thailand waters has "display" aggression with a reasonable size (2") whereas the South American tiger catfish *Pseudoplatystoma fasciatum* (quite rare these days) can grow to 4" in aquaria. Big walking catfishes, the *Clarias* will mix in larger communities as will the

Do you need a public aquarium to house these giants??

Well, when they are of the modest size 6-8" you can get away with a 4' system, but you will not be able to keep anything else with them. Some fishkeepers break stocking rules but they always reap what they have sown. Once a big catfish attains 12", then it deserves to have a 5 - 6' length to cruise in.

How do you know if the catfish is OK before you part with your hard earned brass?

A good retailer will be obvious by the condition of his aquaria. It is difficult to aquascope retail aquariums that are forever being netted into, but a good shop will present a clean "water font". Check out Kingfisheries if you want a good guide.

A good retailer will tell you a bit about the fish - not life's answer to the universe. Do not be unfair, it is up to you the fishkeeper, to research the fish once you have decided on purchasing.

The retailer wants you to be successful - he is hoping for your return business and not just for fish - he needs you to purchase essential equipment, power filters, pumps and heater/thermostats etc., because it is difficult to continue selling only fish... It would put the price up considerably. He will give you good advice and "any problems"... there are no problems to the good guy, he doesn't mind if you have supported his shop in the true sense of the word.

It is not a priority for larger fishes to feed in the first few days of purchase. It is far more important that the fish be allowed to settle in its new environment - your tank. If the fish appears alert when you check it out (difficult if the catfish is as nocturnal as a bar), then you can be sure everything will go well. Inform the retailer if your aquarium is a new one (in the bacterial/biological sense this is an aquarium that is under 6 weeks old), because he may be able to help smooth the transfer out.

In my heady days at Aquarium World (which is now closed), we used to lend out hardy *Tilapia* telling the customer to stuff food down the toughest. After a few weeks, the tank would be more mature than Victorii, and we had a larger *Tilapia* on our hands. (Good idea eh?)

Look around - catfish buying has never been easier!

IMPORTANT NOTICE

As you will have read in 'From the Chairman' the Federation of British Aquatic Societies has had an enforced change of leadership, due to the ill-health of Chairman Joe Netherless. With immediate effect, all matters previously directed to him should until further notice be sent to:

COLIN RICHARDS
Beechwood Cottage, Long Grove Wood Farm, 234 Charridge Lane,
Chesham, Buckinghamshire HP5 2SG
(Tel: 0494 773094)

An Eye for an Eye

by Geoffrey Niswander

As breeders of fish, all of us end up with percentages of genetically defective fry. Congenital deformities are a simple matter to deal with - the fry are culled. I use these deformed, weakened fry for feeders in my cichlid community. These fry have no value to the species, would not make good pet store stock and for many of them, life would be a painful struggle. Culling it: the best answer for these defective fry.

But what about defects caused by injury? Fish that are normal until an injury results in some kind of defect? Common sense says that it would depend on the injury and the resulting defect. Some fish would need to be destroyed and put out of their misery. With others, that is not the outcome at all, because I know that many of us, at one time or another, have kept such fish off the side in a bowl or a jar. These fish generally are not worked and contribute nothing to the species. It seems that one such injury that is fairly common is the loss of an eye, judging from conversations I have had with a few of you.

As a new IBC (USA) member, my limited past spawnings have always been with pet store purchased *Bettas*. I look what I could get for "quality" fish and achieved varied results. I had never seen a double-tail and had really wanted to work with them since the day of my first spawn. So you could imagine how happy I was when my very first trio of doubletails, found through the IBC, showed up in the mail. After unpacking my new fish, I immediately spotted a fresh wound on one side of the male's head, resulting in some damage to that side, along with permanent loss of an eye. In other words, a now defective, half-blind fish, courtesy of the U.S. Mail.

I thought that was the end of any hopes I had of working with the trio. After all, who would attempt to work with a one-eyed fish? Even though the injury obviously occurred during shipment, the breeder was very apologetic, as he did

not have any more of the strain available at the time. Before this male had received this injury, he had been a gorgeous specimen, with desirable form and colour. As a result, it wasn't long before I wondered why I couldn't spawn a one-eyed fish.

I decided to put him through a recovery period followed by a sort of rehabilitation. Into a quart bowl and onto the top of the refrigerator he went, in the middle of the bushes, most kid-filled kitchen on the block. Daily water changes with increased salt kept his living conditions extra clean. The fish was lethargic and looked ill. He swam abnormally and would often turn to his blind side, bumping his wound into the side of the bowl. He had a difficult time eating food at first, even food was dropped only to his good side so that he would see it. In the beginning, he only managed to catch food in one out of every 4 or 5 attempts to do so. Also, he spent a lot of time with his blind side facing out into the room, so on many occasions I gave him gentle, one fingered nudges to force him to turn around to his good side, thinking that his one remaining eye needed maximum visual stimulation. He needed to get used to using his one remaining eye for the rest of his life.

Soon his wound began to heal well and without signs of infection. After only 2 weeks, he became much better at eating and no longer bumped his side into the bowl. He seemed to be somewhat adapted to having only 1 eye and although he looked downright clumsy, I thought he was ready enough to attempt a spawning.

To my surprise, the spawning ended up a total success, and it was very interesting to watch. Upon introduction of the pair into a ten gallon breeding tank, the first mistake I made was the use of a chimney to isolate the female. The male ended up in a corner of the tank with his blind side facing the female. He was unaware of her presence, although she was not of his. So, after about an hour of absolutely nothing happening, the chimney was removed, giving the female full reign of the tank. After this, what could be called a fairly normal courtship ensued.

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An Eye for an Eye

His first embraces were a disaster — he attempted to embrace with his blind side down and he usually lost hold of the female in mid-embrace, before completion. Upon his first completed embraces, he never saw the falling eggs, and they fell unseen to the bottom adding up quickly. It did not look at first, but soon he adapted and literally turned things around, embracing only with his good side down and completing all of them. He also immediately saw the falling eggs and collected them normally, placing them into the nest. It was nothing short of fascinating to see how quickly he adapted.

During the entire time he tended the eggs and resulting fry, he would swim while turning constantly to his good side in a circular fashion, search with his one eye for falling eggs or fry. While doing this, he always started just under the nest and he dropped slowly, spiralling his way to the bottom, and along the bottom he searched, his whole body tilted somewhat to his good side, tail up and head down, keeping his eye pointed to the bottom. Skimming along the bottom in this unusual way, he swam in slow, long arcs with his eye constantly shifting and looking over the bottom. In this way, he made quick work of any fallen eggs or fry.

Since this first experimental spawning, I have spawned this same male twice more, all three being successful. Fry from all these spawns are doing well and growing up. The male has adapted even more and has become an efficient, normal parent. This is extremely interesting, because when seen in his bowl he looks like a dummy, awkward fish. You would not guess he was capable of spawning. Although he does not look the part, I wouldn't hesitate to match his parenting skills against any normal two-eyed fish.

Which brings around the point of this essay. I have spoken with other IBC members who have told me that they too have kept one-eyed males. Like my own fish they were really nice specimens except for the missing eye. Detecting some resignation in their voices, I could tell that like myself, they wouldn't at first think of spawning a one-eyed Beta: "Too bad,

(continued)

'cause he's such a gorgeous fish'.

If you possess such a fish, no matter how bad and clumsy he appears in his bowl or jar, do not underestimate the fish's capabilities. Right now my guess is that you will be pleasantly surprised and that hundreds or thousands of fry are within your grasp with just a little more patience, understanding and thought on your part. The moral here, as always with Betas, is never assume anything about them.

Recently, I spoke with a breeder who told me about a doubletail who had lost both eyes due to an injury. Otherwise healthy and beautiful, the fish sits in a jar doing nothing. After my experience, I can't help but wonder about that fish. Deprived of sight, the fish is strong enough to survive. With some experimentation, it would be interesting to see exactly what the fish is capable of doing. Blind Cave Fish can spawn, sometimes there are forces at work in nature that man has little or no knowledge about. Right now, I don't believe such a fish could spawn. On the other hand, I didn't think a one-eyed fish would succeed before I tried it.

I would be interested in hearing from anyone with similar fish who have attempted to spawn them. I would also like those of you who have a beautiful, one-eyed, genetically superior male or female Betas to try to spawn them anyway. Since the loss of an eye seems to be fairly common among permanent, disabling injuries, perhaps the genetic qualities of these fish can be equally usable to us. Is my male the rule or the exception to it? I would like to find out, because if one-eyed fish can as a rule spawn successfully, we have all missed many genetically superior fry to assumptions. Any information and research I can obtain from all of you would be used on a future report on this subject.

Geoffrey Niswander,
91 Snow Pond Road,
Concord, NH 03301.

Courtesy of
IBC's Magazine FLARE! (USA)



See article on page 23

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**Little
Giant
Pumps**

Mexican Adventure

by Chris Cheswright

Coming back to those police, every morning whilst eating breakfast a bus drew up and was full of police with riot shields and sub-machine guns. We do not know why and there didn't seem to be any tension.

After Cotemaco, some additional fish were caught in the lake itself; we set off North toward Veracruz (the Southend of Mexico). We spent a few days here, the fish fare a lot better if not continually carted around and put into a hot van all day. We spent the time driving out and around the area, there are some nice rivers but we found little other than *Astyanax* (a characin), beautiful yellow finned *Pimelodonta*, *Bimoc* and *halleri*. There were also innumerable butterflyfish at these locations and some wonderful scenery.

On our way back to Veracruz one day we were diverted down a dirt track and came across a nearly empty irrigation canal. It was late but we stopped to have a look. The water was very warm, about 1 inch deep with 4 inches of mud. It was teeming! Here we found young cichlids (as yet unidentified), *Belenosox*. Pike Livebearers, some other livebearers and cockle-like molluscs and snails. A worthwhile, if lengthy, diversion.

Our journey took us up the coast, past the Nuclear power plant at Rio Verde. We stopped at a stream near Tacostempán (our plan was to do a long drive to Tuxpan) and here in a quiet pool found more cichlid fry, *Gambusia* sp. These did a good dying act when placed into a bag and our first *X. variatus* Platies. It was just past here that the rear wheel made an horrendous clanking noise and the brakes failed. We hobbled into Tuxpan and found the Hotel Reforma — a wonderful place in a not so wonderful town. Much of the next day was spent in conversation with Avis and the VW garage. The repair done, we drove inland and found more cichlids,

PART II

X. variatus, *P. mexicana*, *H. bimaculatus*, *Astyanax* and *Gambusia* sp.

We had to return to Veracruz to get Dave to the airport and after visiting a shanty town rubbish dump and reversing down a motorway (too long a story) we left him and went to rest.

The next day we found a most enchanting pool after crawling under barbed wire. There were Parrots flying around and in the pool there were enormous yellow finned mollies, *Astyanax*, *bimoc* and cichlids with their fry, we could have just stood there and watched all day.

For the last few days we headed off to the North, swordtail country. Our first stop was at Ciudad Vales, the home of *X. nigrensis* a difficult fish to obtain. We could not find the location but did fish in the Rio Coy where it crossed the 85 road. The river has a high mineral content (being turquoise blue). The banks are very steep and it was very hot, Colin almost passed out here with the heat. I went down first and in one net caught *Flexipinnis vittatus*, *X. variatus*, *G. panuco* and *X. multilineatus*. What a catch! The *Flexipinnis* did not last long and many of the *multilineatus* passed away. That day also saw the catching of a lot of *Xiphophorus* further south on the 85 at El Rosal. These were found in only one pool along the entire length of the stream, it is often possible that you are at the right location but at the wrong part of the stream and so miss the fish.

Our last day saw us leave the heat and humidity of the coast and head inland and up into the mountains to Rio Verde. The next day we got up early and headed down a dirt track to Laguna Media Luna. We made it no further than the canal coming out but that was enough. Robbie and I snorkelled amongst the fish and managed to catch some large yellow finned mollies, the dominant dark blue ones remained elusive. We also caught

Mexican Adventure

(continued)

Platypunctata, *Araobolus toweri* and *Cichlasoma bartoni*. This was not difficult to do. Some *Fviratus* were also seen. We would have liked to stay longer but had a long journey back to Mexico city. As it turned out the roads were very good and we got back a little quicker than anticipated.

The next day we did the tourist bit and visited the Pyramids and bought souvenirs before we had to leave. I will return, I'm not sure about all the others.

Written by Chris Cheswright, dedicated to Ken Adams (of the shorts); Martine Mapes (who put up with us men for 3 weeks); Colin Osborne (who wasn't keen on the beer); Dave McAllister (who hasn't heard of speeds under 90 mph); Robbie Somers (who never slept in the van) and Keith Mower (who suffered us, a bad back and a not too healthy stomach and stayed up late every night in Veracruz to see the transvestites).

FISH SHOWS & CONVENTIONS 1994

DATE	SOCIETY		DATE	SOCIETY	
5 June	Erith & District A.S.	C (A)	14 Aug	Saltbury A.S.	W (B)
12 June	Stockton A.S.	FBAS	21 Aug	Glenrothes A.S.	FSAS
12 June	Granite City A.S.	USA		K.A.A.S. Open Show	FBAS
	Ilantwit Major	O (A)	27/28 Aug	Stoneleigh	Exhibition
	Merseyside A.S.	FNAS		C.N.A.A.	Festival
	North Bucks A.S.	F (B)	29 Sept	Bray A.S.	IFAS
	Redcar A.S.	NEFAS	4 Sept	Darlington A.S.	P (C)
	Skidmersdale A.S.	FNAS		Tameside A.S.	FNAS
19 June	Blyth A.S.	X.B.M (C)	10 Sept	Bristol A.S.	NGS
	Cannock A.S.	FBAS		Hounslow & District A.S.	Ag (C)
	Granite City A.S.	USA	11 Sept	Dunstable A.S.	AoIA
	Loyne A.S.	FNAS		Lincoln A.S.	VAAS
	Scunthorpe A.S.	YAAS	10/11 Sept	S.A.F. (FSAS)	Festival
	Walthamstow A.S.	FBAS	17 Sept	Plymouth A.S.	FBAS
26 June	Bournemouth A.S.	FBAS	19 Sept	Mid-Sussex A.S.	K (A)
	St. Helens A.S.	FNAS		Diloy A.S.	YAAS
	Tongham A.S.	AoIA		South Inch A.S.	USA
	Wokington A.S.	FBAS	24 Sept	Bristol Trap. A.S.	S (C)
2 July	Malzeau A.S.	FBAS		East London A.S.	X.C.O. (C)
3 July	Bracknell A.S.	Y (C)	25 Sept	A.S.A.S.	Convention
	N/West Cichlid Group	FNAS		Cramlington A.S.	FBAS
	South East London A.S.	FBAS	2 Oct	Hailfax A.S.	FNAS
	Scarborough A.S.	YAAS		Washington A.S.	FBAS
	Washing (K.O.)	BKKS		Wyke A.S.	YAAS
8/9 July	Hampton Loart (R.H.S.)	Exhibit.	9 Oct	C.S.G.B.	NGS
9 July	Malby A.S.	YAAS		Doncaster A.S.	YAAS
	Port Talbot A.S.	YAAS	16 Oct	B.A. & W.V. A.S.	FBAS
17 July	Sandgrounders A.S.	FNAS		Basingstoke A.S.	AoIA
	T.V. Gays A.S.	AoIA		Solway A.S.	FSAS
	Y.A.A.S. (Crowd)	YAAS	21/23 Oct	West Cornwall A.S.	Q (B)
24 July	Phoenix A.S.	FNAS		Strathclyde	Festival
	Potteries A.S.	L (B)	23 Oct	I.T.A.A. Open Show	FBAS
6 Aug	West of Scotland G.S.	NGS	29/30 Oct	B.A.F. (FNAS)	Festival
7 Aug	Robin Hood A.S.	AoIA	2-4 Nov	Weston Weekend	FBAS
14 Aug	East Dulwich A.S.	AoIA	13 Nov	Brodford A.S.	YAAS

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A BETTA Experience on Okinawa, Japan

by Bob Dozier (courtesy of Flamel, International Betta Congress)

It's good to be back in the good 'ol US of A! I couldn't wait to start breeding and showing fish again. Some of you may not know me, but if all things go well, you'll hear from me this show year in the spring. Anyway, aside from my experiences as a U.S. Marine on Okinawa, Japan, I thought some of you out there might be interested in the fish hobby, as I saw it there.

One thing that I was looking for and hoped to find was bettas. Primarily, I wanted some nice splendens to introduce and add vigor to our (USA) lines and any wild types, particularly those species that aren't available here. Unfortunately, all I found were your basic "bread-n-butter" pet shop quality fish. It even took 5 months to find a female betta and it was found among some unsexed bettas offered for sale at one of the local aquarium shops. There are betta breeders there, but I could not find anyone breeding show quality or wild type bettas. I did not see a single wild type betta anywhere. Some very nice cichlids and characins were available, but no wild type bettas, to include plakat. The bettas I did find came in varying colors including some "traditional CAMBODIANS" and some PASTELS and OPAQUES — a former passion of mine as some of you may remember. Some of the color was pretty good, but the fins were not the symmetrical show type finnage.

There were no "pet shops" there per se. The various shops tend to more or less specialize. Pet shops will basically sell dogs and/or cats and their supplies. If you wanted fish, you had to go to an aquarium shop, which also might sell birds. The standard "pet shop" with many different

varieties of "pets" were very rare. Aquarium shops there are spread out and vary from poor to very good, as we know them, and have a pretty good selection of supplies. Some speciality items, like diatom filters and reverse osmosis filters are unknown and impossible to get, except by mail order from home. This was unfortunate, because the water was extremely hard and alkaline. Some breeders had a difficult time controlling and establishing specific water tolerances for breeding. There were some breeders of beautiful discus there that would clearly love to have stable, soft acid water.

As a rule, the aquarium shops didn't sell marine fish or invertebrates because it's too easy to get them directly from the coral reef surrounding the island. Okinawa is a semi-tropical jungle island, 67 miles long, 19 miles wide at the widest, 2 miles at the narrowest, and surrounded by coral reef. The southern half is pretty much urban with one major city, Naha, the capital. Some cropland is on the southernmost tip. The northern half of the island is mostly jungle or cropland and has the only other major city, Nago. Many small islands are all around the main island. Half of the year the weather is extremely hot and humid. Only during the winter months of January and/or February will it sometimes cool to the low 60s/high 50s. You can see many wonderful marine aquarium fish directly from the shore and in tidal pools at low tide. Snorkeling and scuba diving reveal a marine aquarist's dream. When my family came to visit me over Christmas, I took them to one of my favorite spots, Hedo Point, where we climbed down the coral cliffs to the shoreline. We saw live coral and many different types of beautiful, small reef fish. Many people there had marine tanks where they collected their own fish and invertebrates.

Fresh water fish were available, but they were not always the variety or in some case the quantity of home. I

A Betta Experience

made it a point to visit the local shops often, looking for that special or wild type betta. A couple of shops had some really nice cichlids, and one (which was the best pet shop that I found) had some beautiful discus, my other fish love, which he and a friend bred. There were a fair number of angelfish available and plenty of "bread-n-butter" fish. One young angelfish I saw was striking. It was a young, gold angel that had horizontal rows of orange spots. It was nice! The cost of living there was very high and the prices for many tropical fish were, in some cases, 2 to 3 times what we would pay in the States, particularly for large cichlids and the suckermouth catfish.

I spent some time looking for what I could find swimming wild. As I mentioned earlier, the marine fish are everywhere, since the whole island is surrounded by reef. Many breeding colonies of Mozambique cichlids can be found thriving in the ditches and guppies live in runoff streams. I did not do any fishing in the few rivers or lakes (which were not easy to get to), so I can't — with any authority — report what was living in them. Most of the local population fished the reef, so I couldn't observe what, if anything, was caught from the fresh water sources. Also, the water along the rivers and the lakes was not clear enough to see very far into it to be able to observe the aquatic life. Maybe someday someone who has the time might be interested enough to go do a fishing expedition on Okinawa. My workload precluded me from being able to do that kind of work.

I did have a couple of tanks set up there; they were geographical plant tanks, easy to maintain. As mentioned earlier, I am glad to be home, with my family and back to my breeding program for bettas and discus. It's amazing how much of your life you put into your hobby and what you can

(continued)

miss doing. I've been watching the show results in FLARE! with interest and I hope that very soon I can add my name to the list.

BERT PUTS 'EM RIGHT!!

Watching the horse-racing on television recently, Bert Stern of Haringey A.S., was astonished to hear the well-known racing correspondent, John McCrirkick, express his surprise and delight that race-course premises were used in-between meetings for other purposes — in this instance, a wedding reception. Bert took up his pen and lost no time in writing to John telling him of the number of years that such a practice had already been established — at Sandown Park, Kempton Park and, of course, the Annual Show at Doncaster — for aquatic events, in our case. To his delight, he received a nice letter back from John who now stands a little humbly corrected.

Incidentally, before the letters flood in, we do know that football/rugby grounds are also used for non-sporting events such as Dinner-Dances and Boot Fairs!

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NEW LOOK FOR WESTON

The Federation of British Aquatic Societies has held several very successful annual weekend events at Weston-super-Mare but for 1994, there will be a change in its overall format.

This year, there will be a Society Tableau category in the competitive side of things. However, this will be different to the Tableau competitions seen at other aquatic festivals; we want to get back to the true Tableau designs which attracted so much interest in the past and so entries will only be accepted on the understanding that they must be entertaining, informative and permanently staffed — to give information about fishkeeping (and about the exhibiting Society of course!) By making these stipulations, we hope that each Tableau will be a truly worthwhile Society activity; of course, any Fish, Aquascope or Furnished Aquarium forming part of the Tableau will be judged as separate entities if desired, as well as for their own contribution towards the Tableau's overall effect.

The Federation is making an extra night's accommodation available on Thursday 3rd November (together with an evening meal and the following morning's breakfast) completely FREE OF CHARGE for two members from all participating Societies, in order that Tableaux can be constructed well in time for the opening public days of the event.

Societies will be asked to design their Tableaux with the following definite objectives in mind: **Information** each Tableau to be staffed by its Society members, all the time the Show is open to the public, to explain its special features and to publicise the Society. **Entertainment** innovative designs will be welcomed, even ponds. **Overall Theme** of each Society's individual choice, which reflects fishkeeping as they wish to represent it.

22

You Can't Beat A Day at the Seaside

The KAAS Convention was held on Saturday 19th March at Margate. Fortunately the weather was kind, a clear blue sky with a bit of a breeze, only to be expected at the seaside. The organisers, members of the Kent Association of Aquarist Societies, had sprung a last minute surprise on some people by moving the venue, but most visitors arrived in time for the start of the event, held in the Beulah Court Hotel. Based on a previously tried and tested format, the event included formal lectures, an Inter-Club Quiz, a Fish Auction plus a lot more informal drinking and socialising between guests (luckily overnight accommodation was provided).

The programme began with a trip along the River Amazon, a slide presentation by Dutch importer Ton Coymans, of a visit he had paid to the other end of the supply line — his South American collector/exporters centred around Manaus. Fish collecting (just the transportation of already caught species) is an arduous business involving several days of torturous travel in primitive boats, unless you're lucky enough to meet Dr. Herbert Axelrod en route and hitch a lift back to town in his private plane Views of jungle rivers and their aquatic (and often human banks-dwellers too) were quite memorable, despite Man's best efforts at building roads, any cleared area of jungle gets 'back to original' status within three years. Of course, characins and discus were much in evidence but even though we may be quite familiar with hundreds of species, you got the feeling that there was still a lot left to be discovered.

The lunch period was given over to the Inter-Club Quiz; this developed into a fierce battle eventually won by South-East London A.S. who beat 'Colisa chuna' the Dutch team into second place with Strood A.S. coming in third. A return match in November when KAAS visit Holland should prove interesting.

A brief but splendid audio-visual experience introduced the second programme presented by Brian Walsh from Darwin A.S. (and recently appointed Chairman of the FNAS — congratulations Brian!) This covered successful fishkeeping and, if the slides of Brian's fish-house are to be believed, he's got it cracked as some of the plants growing in the warm humid atmosphere rivalled some of the plants previously seen in the genuine Amazonian jungle! A self-confessed characin fancier, Brian has also wide experience of breeding these South American species and again his slides gave plenty of information and encouragement to less adept viewers. He rounded off his presentation with another audio-visual extravaganza, the CD music and electronically-intermixed artistically-selected slides backing up the strongest plea yet for worldwide conservation of both environment and animal life.

Following the Fish Auction, 'day visitors' took their leave of the proceedings and so missed socialising the night away (yes, those hard-drinking Dutchmen did actually turn in before some of the natives) and look back on a friendly, informative and satisfying day. KAAS Chairman, John Edwards and his team, including Convention Manager/Quizmaster Dave Goodwin, Quiz Scorer/Adjudicator Adrian Dempsey and Raffle Organiser Pat Edwards, are to be congratulated on another annual event made successful, as ever, by sheer hard work.

Note: Readers may care to know that a second FBAS Quizbook is in final stages of preparation for FREE issue to Societies. Coincidentally, it is based on Dave Goodwin's questions so there's plenty of opportunity to get 'gemmed up' for next year's KAAS Convention.

23

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The OTHER Side of the Glass – A Fish's View of Showing

by A. Loach

Morning is dawning as I see a bright light break through the curtains at the far window. Back in my wotery world, I see Mrs. Guppy giving birth to more offspring – will she ever learn? I swim back through the Cambomba watching the old Corydoras pulling an elusive bloodworm from the gravel then suddenly lightning strikes.

Two brilliant flashes and the rectangular sun fills my home with a "Grolux" light. The light dims as my owner adjusts the glass roof of my house and curses. "I must get a new tube for this tank". A green tube appears and starts to suck everything into its vortex. Two new Guppy fry disappear as my owner coughs and swallows some of MY water. The hurricane continues as Amazon Sword and Vallis are uprooted and disappear from view, enclosed in a warm hand. A moment's peace before two cotton covers on sticks appear moving rapidly towards each other in jerky movements. They snap up the old Corydoras who locks his pectoral fins in defence – more cursing from my owner as the covers reverse and the Cory swims to safety.

Gradually, I see some of my neighbours disappear, then the covers are coming for me – I twist and turn taking refuge by the radiator, the gravel rises up beneath me, earthquake fashion and I am trapped by the glass as the covers rise and I travel through the cold air then dumped, gravel and all, into the yellow bin.

The bin darkens and I find myself being lifted through the air with water splashing all around me. Everything stops and there is a thud. Mechanical noises, a second thud and then the bin starts to vibrate. "That is the car starting up", said an older, wiser Corydoras. "Back on the road again".

For the next fifty minutes we are tossed around as we head uphill and down dale. Then an almighty bump and more curses "Ruddy roads – why do I pay my road tax if they don't fix the

roads?" More vibrations for a few more minutes and then silence.

The lid opens onto a new show hall. I give my owner the runaround for a few seconds – it's harder for him to catch me while I'm in a circular bucket. I relax and let the cotton caves lift me into a small, empty home, black carpet, black girders in the corners and barely enough room to turn around in.

I settle down eventually, only to find my view obscured by a J cloth rubbing up and down. Then my neighbours move in – a long thin Khuli on one side and a small, colourful Neomachelious on the other. Owners rush around frantically, then a loud voice booms out "Clear the hall please". This is repeated four times over the next five minutes and then it goes quiet.

An hour and a half later, a bearded gent appears eating mints, breathing all over me and asking for more tea. He stops, looks in, finds a portrait of a famous relative and writes something down. He continues looking and writing for some two minutes then moves on to examine my neighbour. Later, he returns, placing a blue sticker in the opposite corner to the one that says "LB" – "What does it all mean?"

A cry of "Salad's ready", and the hall empties before filling up with owners and other people staring in. Comments fly around – "I've got one twice that size at home" and, "It got twenty for size last week".

A moment of thunderous applause and then quieter, polite clapping as my owner returns clutching tinned food for me and a certificate. A great cheer goes up and owners run frantically around the hall with water splashing everywhere from our glass containers.

Another flight through cold air follows and a reunion with my fellow travellers. Calls of see you next week and the vibrations start up as the car roars into life.

An hour later and my surroundings look familiar, but I'm trapped in a bag looking at my fully restored and replanted home – at least its getting warm again and I'll soon be able to eat that tin of food I've just earned for my second place.



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CLUB NEWS



Gloucestershire A.S.

On my travels as an aquatic consultant (based in Stroud, Gloucestershire) I have been approached by many aquarists wishing there was a Society in the area; well, they won't have to wait much longer for the birth of the **GLOUCESTERSHIRE AQUARISTS SOCIETY** is imminent.

The Society will be open to all age groups and its main aims will be to promote continued interest in the hobby, assist and give advice for the successful breeding of both freshwater and marine fishes, to offer a full advisory service to members and, in our view the most important aim, to help members achieve total enjoyment from the hobby.

Meetings will be held on the **first Tuesday of every month**, with the inaugural meeting on the **7th June**. There will be many events throughout the year, including Lectures, Slide-shows and Quizzes, day trips will be arranged to a variety of venues, including national shows, public aquariums, large retail premises, other Societies etc. We will also be producing a bi-monthly Newsletter. A second, more information meeting may be held each month at, say a member's home or at the Society's main meeting place but these additional meetings will be decided at each official monthly meeting.

Clive M. Norris, Gloucestershire A.S.

For more information, contact myself on **0453 755450** or Andy Ramsbotham on **0452 621069**. The first meeting will feature a Slide lecture, 'The Water Garden – Problems and Pleasures'.

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CLUB NEWS



Northant District Catfish Group (N.D.C.G.)

The above group was set up in July 1993, which is part of the Catfish Association of Great Britain (C.A.G.B.).

Meetings are every **Third Thursday** of the **Month** and they also run a Catfish Helpline and Advisory Service.

For further information regarding any of the above:

Michael Emerson (0604 642679)

Cannock & District A.S.

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contact

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BUCKLAND

COMMUNITY CENTRE

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on

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Further information from:

Mr. V.B. Hunt

Show Secretary

Tel: (0705) 618148

Washington Aquarist Society & Pondkeepers (W.A.S.P.)

ANNUAL

OPEN SHOW

on

2nd October 1994

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for further information



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BOOK REVIEW by Pate Cottle

CORYDORAS by Werner Seuss



This book was first published in German in 1992. In September 1993, the English text edition was published, although it must be said that at present supplies are still awaited. During the transition/hypesetting, the opportunity was taken to update a few of the recently named fishes. Thus those *Corydoras* enthusiasts with the original German text will now find that *Corydoras C4* is named *Corydoras virginiana*.

The first few pages are devoted to an explanation of classification of catfishes and to some of the technical terminology. A couple of pages on the keeping of *Corydoras* in the community tank is followed by some twenty pages describing the breeding of the *Corydoras* species. Conditioning of the adult fishes, all aspects of feeding, courtship display etc. are covered in detail. Care of eggs and raising of fry for some forty different species are featured.

Pages 37 to 210 contain descriptions and either line drawings or, more often, coloured pictures of each of the named (and as yet unnamed) species of *Corydoras*. One page at least is devoted to each species and contains such information as shape of head, basic body colour, a description of the Caudal Dorsal and other fins, general appearance and a small map of the location of the place of discovery. In many cases where two species are very similar in appearance, a colour picture of the two species side by side is provided, e.g. *Corydoras amblicus* and *leucomelas*, *Corydoras arcuatus* and *narcissus*. In my view, this book also goes quite a long way to solving some of the problems encountered by judges (and possibly some exhibitors!!!) regarding the

differences between *C. latus* and *C. geryi* and throws in for good measure, *C. C5* and *C. bolivianus*. No doubt the argument will continue until we give them all the same show size.

The last few pages give an "old names to new" list and the bibliography.

Currently, Herr Seuss has over 100 tanks containing some 70 species of *Corydoras* and he has successfully bred no less than 30 species. The photographs of his "fish house" shows that this clearly is a book written by a real *Corydoras* aquarist for the *Corydoras* enthusiast. Not only has he collected many of the species, he has successfully kept and bred them — few can claim that.

A definite must for your reference library.

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Improving the Breed? The Task of Perfecting a Betta Type

by Gene A. Lucas, courtesy of FLARE! and Freshwater & Marine Aquarium magazines

One of the most frequent questions a *Betta* breeder hears is, "How can I breed superior RED substitute YELLOW, DOUBTAIL, PASTEL or whatever) *Bettas*? This is a frustrating question to answer, since the genetic mechanisms for each type are different and no simple, single answers are available. The experienced breeder is often forced to use the technical vocabulary of genetics to try to explain something but this turns out to be frustrating to the beginner. Obviously, no one can be well-satisfied under those circumstances.

I'd highly recommend that a serious breeder get a copy of a beginning level textbook on genetics and to use it to "fill in" or "flesh out" information acquired in brief explanations. Text books are expensive these days but libraries usually have them (especially college and university libraries) and copies might be available through used book outlets. For example, our local Planned Parenthood organization holds an annual fund raising sale of donated, used books and there are always several copies of assorted genetics texts at extremely reasonable prices. Such books may have sections that seem formidable but anyone with normal intelligence and willingness to do some reading will find plenty of interest or assistance. But, I was going to tell you how to develop a strain of *Bettas*, wasn't I?

First of all, I think I'd suggest that a beginner obtain some of the best stock around to start with, then attempt to develop that. I often find people who have a favorite fish they may have picked up in a shop somewhere that they would like to use to establish their superior strain of, say, REDS. At first glance, the fish may seem spectacular ... so why not use it? I'll try to explain later, but first let's take a look at the natural steps in the

process of "improvement". The first step should be to determine what the goal is. The International Betta Congress (IBC) has established standards for colour types and our example colour, RED is the first of the "Dark-bodied, Solid-colour" classes. Such fish are to be, as near as possible, a single colour. Any traces of other colour are regarded as faults. Though no fish actually match that goal, many come close and it is obvious that progress toward that end is possible.

Breeders may not feel inclined to breed to some organization's standards, but everyone else who is serious is doing so and, at present, IBC is the only organization sanctioning regular *Betta* shows. Potential buyers are likely to want stock that will contribute to the improvement of their own and their goal will probably be to win *Betta* shows, which usually translates into IBC shows, or at least shows judged by IBC standards.

You might feel that you are not attempting to improve your *Bettas* because you have an interest in showing but, if not, how many would every know what you did? You might supply local aquarium shops with *Bettas* but shop owners need to buy wholesale and sell at competitive prices. This means they will probably retail at prices much lower than show quality *Bettas* command. For example, one of our REDS recently brought \$36.00 at an IBC auction ... and he didn't even win his class in the Show! You'll find that producing outstanding *Bettas* is more work than you thought and you'll probably prefer to be rewarded with at least some recognition for your efforts. You can bet that it will primarily be *Betta* people who give it. Shop *Bettas* usually end up in the community tank, fish bowl or jar of someone who is not in contact with *Betta* people, so any

Improving the Breed?

admiration they have for your fish will be lost to you as, most likely, will be your strain if you are not maintaining it yourself. Obviously, you'll probably be wiser to find out what the standard is, then see how well you can do in matching it. Remember, standards often suggest ideals. They may be theoretically attainable, but difficult to actually duplicate, therefore, the one who comes closest is the most successful.

The ideal RED *Betta* would be one that is covered with bright, cherry red colour all over, including the head, and has no adulterating colour such as black scales or fin edges, or streaks and spots of metallic (iridocyte) colour. Many excellent *Bettas* approximate this but none are actually perfect. In addition, the fish should have large, fully developed fins with no bent or curled rays and the fins should be sturdy enough to resist injury. The fish should have good "department", meaning it should be vigorous and willing to "display" (spread fins, swimming posture, etc.) in response to seeing a neighboring *Betta*.

The currently recognized quality stocks have been worked continuously by a succession of expert breeders who have had access to the best strains around. These strains have already been selected for superior colour, finnage, size and department. Often many generations lie behind a stock that possesses special combinations of traits at the present time. The variations from wild type required in a good RED stock are as follows:

1. The extension of red to cover all of the fins and body of the fish. In wild stocks red occurs only on parts of caudal, ventral (pelvic) and anal fins. The variation exists in *Bettas* and is inherent so it is possible to produce a stock with it. I call it "Extended Red" and generally deal with it as though it were a simple trait which, unfortunately, it isn't!

(continued)

2. Reduction in black. The "b" gene (for blond or bright) may either reduce the amount of black pigment or in some way be involved in transforming some of it to red. Whatever the case, the "b" gene is a simple recessive mutation and is one of the easier ones to deal with genetically.
3. The limitation of spread of the metallic colour. This seems to be a matter of attempting to exaggerate the normal rather than the variable form of the gene(s) affecting iridophore distribution. The goal is to minimize it or even to eliminate it as a trait in the stock.
4. There is a gene which is bred into most domestic *Betta* types which is responsible for long, large fin growth.

Other traits such as doubletail are, so far as is known at this time, unrelated to the others so fish can have them or not.

The first required to produce a new type is to have the genetic variation available. The assorted traits just discussed most likely arose and were preserved in separate stocks and, eventually, had to be brought together into a common one. This involves making crosses between strains possessing one or more of the variations, then breeding from their progeny, carefully watching for re-combinations in later descendants until, finally, getting fish with the desired combination. This can be a frustrating, time consuming and frequently expensive process!

Since the basic mutant combination already exists for REDS there is little point in replicating the process. In established strains, long effort has already gone into the improvement of the separate variable elements of the stock ... increasing the red, reducing the black and metallic colours and improving finnage, size and other variable and responsive traits. While

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Improving the Breed?

(continued)

these existing strains may not be perfect, satisfying results are more likely to accrue from attempts to produce another original RED strain.

There is a degree of difference in the level of technical knowledge required to generate a new type by combining mutants into new combinations and breeding for improvement in already established types. Anyone can do the latter. All that is required is a watchful eye, patience and perseverance. Assuming good stock is available, spawn should be obtained as soon as possible (I imagine most breeders have had the experience at some time of bringing home a pair of fish then losing one of them before they had been set up in a mating). When a successful spawn has been obtained, the young should be reared carefully. *Bettas* are particularly prone to looking bad and fail to develop well if not well-cared for. They will begin to show differences quite early. Most breeders prefer the larger, more aggressive, earlier developing fish. These should be placed in jars early. This allows them to develop finnage without the damage they might suffer if they were sparring with their siblings in a rearing tank. It also allows other individuals to "come forth" and increase their own rate of maturation.

Most colour develops earlier in RED. Young REDS are often disappointing because the red looks poor and other colours, especially the metallic (GREENS and BLUES) seem much too prominent. In good strains the red will continue to develop in depth and richness while gradually concealing more and more of the undesirable colour. This is more noticeable in body colour than on fins, therefore the fin colour should be scrutinized more carefully. Other problems with the fins of reds are tendencies for colour to be "thinner" (more transparent) toward the extremity, or to be edged in black. Both faults seem to become less notice-

able as the fish mature but it is wiser to avoid using those with more obvious faults of that kind. The best approach is to pick out several of the best fish of the spawn, then give them time to mature. Use those that are the best at maturity, keeping in mind that the best ones may not be the same as the ones which looked best earlier. This should be done for every generation and, in fact, needs to be done to avoid "losing ground" ... actually having a good stock deteriorate. This is artificial genetic selection but is, as I suggested before, a simple process. Locking new mutations there is little else than can be done but, assuming the assorted elements respond to selection, there is opportunity for making really effective progress.

Colours such as red, yellow and black are which I call "dull" colours at their best with a minimum of metallic colour. I would particularly avoid making out crosses to stock having such color as it seems to be extremely difficult to get rid of again. On the other hand, I wouldn't hesitate to cross out reds with yellow, dark bodied bi-colors or blacks that do not have blue or green bodies. I suspect that subsequent generations might produce significant improvement in some of these other types.

In the case of many of our favorite *beta* types, basic stocks are already available. No matter how genetically complex they may be, they exist. The "improvement" process merely requires continued selection in the right direction. The process of actually producing a new color type is somewhat more complicated so I'll save it for another discussion. For now, if you are a beginner I urge you to get some high quality stock and start breeding. Get involved in showing and auctioning of fish. You'll get excited, I guarantee, when you start picking off some trophies and getting letters asking if you sell your *betas*!



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Your attention PLEASE!

An extract from Fin Fax,
(a publication of The Delaware County Aquarium Society)

We need to focus attention on an unremitting problem with excessive **NOISE** in the meeting room. We are fielding complaints about distracting conversations that compete with the Speaker and the Auctioneer for attention. At best these diversions are discourteous, and at worst downright rude. Sure, the parties that are engaged in conversation are enjoying themselves, but others within earshot who are attentive to the Programme Speaker or to the swift bidding action of the Auction are being impeded from enjoying the events for which they come. Also, the Speaker and Auctioneer are hampered in performing the duties for which they have graciously volunteered. By making their job more difficult, we are showing a real lack of class.

We try actively to promote the social aspect of our Club, but not at the expense of the other functions of our meeting, like the Programme and the Auction. We need to strike a better balance. The lobby offers the obvious solution in alleviating from the meeting room the chatter that interferes with the business-at-hand.

The Board has debated this issue and realizes that the problem often lies with our own. We are going to have to assume a leadership role in curtailing the noise and we need the co-operation of ALL Board Members in this task. It will not be easy to turn the tide of the past decade, but we are growing, and the noise is growing too. The Board must set a new standard by good example.

No, we don't want to be a club of stuffed shirts. We need an element of humor and a bit of craziness. All we are asking is that the integrity of the Club's other functioning elements — those elements which are the reason many people come and join — be

respected. When the room is dark and the Speaker is presenting a Programme, we ask that you LEAVE THE ROOM if you are not interested in the subject and prefer to talk with a friend. While the Auction is underway and bids are being tendered at a feverish pace, please LEAVE THE ROOM to talk if you are not interested in participating. Otherwise, keep the necessary talk or occasional comment at the level of a whisper. Please do so out of courtesy to others who are active in the event happening at the time.

We DO have a social break after the Programme's Q & A session and before raffle winners are announced (preceding the Auction). At this time, we ENCOURAGE everyone to hang out, mingle, get to know one another and carry on for a quarter of an hour or so. Also, before and after the meeting DO discuss, debate and digress to your heart's content. But PLEEEASE keep cool when other things, like the Programme and the Auction, are going on.

At times, we are victims of our own success. The fellowship and camaraderie that generates good feelings and creates a positive atmosphere in which for us to meet, also creates the chaos that pulls at the structure of our meeting. One thing generates growth, and the other limits it.

Let us be made aware of this problem and work together to correct it. The Club will be made better by the effort.

Editor's Note: There must have been very strong, westerly, trans-Atlantic winds recently for Brian Walsh suffered the same effect at Margate! I personally feel sorry for both the Speaker and the Organisers when this sort of disruption takes place.

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