

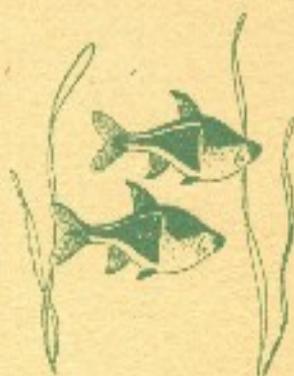
THE SOUTHEND, LEIGH & DISTRICT
AQUARIST SOCIETY

Vol. 5

No. 1

January, 1952

MONTHLY



JOURNAL

Editor: P. Blomfield, 90, Beach Avenue, Leigh-on-Sea.

Hon. Secretary: H. A. Giles, 72, Sandringham Road, Southend-on-Sea.

AVAILABLE TO MEMBERS ONLY

+

Metropole Aquatics

Proprietors: C. G. BROOKS — C. J. SAUNDERS

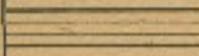
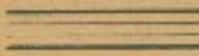


**534a, LONDON ROAD
WESTCLIFF-ON-SEA**

Telephone: SOUTHEND 45991



Stockists of Tropical and Coldwater Fish All Pet Foods and Aquarists' Accessories
--



SOUTHEND LEIGH AND DISTRICT AQUARIST SOCIETY

MONTHLY JOURNAL.

Vol. 5. No. 1.

January, 1953

The Society meets at 7.45 p.m. on the First and Third WEDNESDAY in each month, at:-

The Liberal Hall,
Clarence Road, South end-on-Sea.

EDITORIAL

Dear fellow members,

You will no doubt have noticed from your Programme for 1952 that there is to be quite a considerable increase in the number of Table Shows in comparison with last year. There are in fact to be nine - one on the first meeting in each month with the exception of July, August (Annual Show time) and December, and it is to be hoped that members will be less reticent about entering their fishes than in the past.

How often one hears someone say, when referring to the winner of a certain class, "I've got a much better fish than that at home". Well, more fool they for not bringing it along! Unless one has the specialised knowledge and the practised eye of a Judge, one cannot really say whether the "prize" fish of one's collection is indeed ... potential champion or not. We are singularly lucky in that we have among us, in Mr. Saunders and Mr. Barnes-Oake, two of the finest judges in the Country, and everyone, therefore, has the chance of having his fish classified and criticised by really expert opinion. Why not, therefore, enter all these which you think to be good specimens, and find out just how good they actually are? Don't say, "I don't like to, there's bound to be much better stuff on Show;" There may be; but you will gain immeasurably in knowledge, and on the other hand your fish may be even better than you thought.

Entry forms for Table Shows will be enclosed in the preceding month's Journal, and they should be handed in, completed, to the Show Sec: Mr Cartwer, on the evening of the show, together with the entrance fee of 6d per entry.

Yours most sincerely,

P. Blomfield (Editor)

CLUB NEWS

The meeting on Wednesday, January 2nd, was a Guppy Table Show, and while Mr, Willis judged the entries, We were priviledged to hear a talk by Mr Phillips, who is without doubt the leading Guppy breeder in the country,

Mr Phillips spoke of the steadily increased popularity of this lively little livebearer since its first introduction into Europe in 1908, and outlined the 13 different species for which standards are in being, of which all but onethe Robgon - are named simply from the shape of the tail. He said that a temperature of between 70 and 75 degrees was ideal, and that higher than this would tend to make them too active and shorten their life, and he stressed that they were most sensitive to water conditions and would be the first species to show distress if the water became foul.

He went on to say that "shimmies", to which Guppies seem particularly prone, was not necessarily a result of chill, unless all those in the tank were affected, but was more likely to be due to some individual trouble most probably caused by some fault in the water. The essential points in breeding good Guppies were the choice of the best male both initially and throughout the subsequent generations, the early segregation of the two sexes, constant feeding and long hours of light for ihe young to promote maximum growth, and the showing of one`s best in order to gain comparison with others which might be even better,

Finally, Mr. Phillips warned us that, for reputation for hardiness, the Guppy would not survive temperatures as high .as 100° or below 50° and that it required 65° before any actual breeding

Grey

1st Mr.Saunders
3nd Mr.Halfhead
3rd Mr B. Soffietti
4th Mr, Mash

Golden

1st Mr Mash
2nd Mrs Gibbs
3rd Mrs Prayle
4th Mrs Gibbs

Congratulaticns to the winners, and thanks Mr Willis for his judgement and to the good ladies who dispensed the good cheer which was so welcome on such a cold night,

ANNUAL DINNER AND DANCE

It would be a gross understatement to say merely that a good time was had by all at the London Hotel on Saturday, December 15th, ~ there were over seventy present, and opinion was almost completely unanimous that it was a really wonderful "do".

After a meal, which was every bit as good as we have come to expect at the London, and the toast of "The King", Mr. Barnes-Oake proposed a toast to our President, Mr. Saunders, and his wife, who most unfortunately was prevented from coming through illness, and his toast was presented as a wish for her speedy recovery, Mr Day, in proposing the toast of The Society, referred to the excellent work done by our ex-President, Mr Barnes-Oake, and also welcomed back to the presidency Mr. Saunders for his fourth "term" in five years; he said that we were indeed fortunate in having two such knowledgeable and influential men at the helm, and, in welcoming the many visitors present, said that they would witness a demonstration of the friendliness and goodwill that have done much to make the Society the successful and happy one which undoubtedly it is.

Mr, Blomfield then paid tribute to the ladies, not only those who were themselves keen aquarists but those who by their patience and tolerance made the hobby all the happier for their menfolk; and he had a special word for Mrs. Gibbs and her band of helpers who provided so ably for our inner comfort at our meetings.

Mr.Saundere then presented the prizes for the most Table Show points throughout the year, and the best Journal article, to Mrs. Gibbs and Mrs, Sullivan respectively, and then came dancing to Mr.Alf Bacon and his most accomplished little band. Mid-way through the evening we were entertained by three charming ladies singing in harmony, Mr. Roy George, whose silent impression of a woman taking a bath caused much amusement, and our own Mr, George Cooke, whose impromptu effort, which produced the best laughs of all, might well have been labelled "Gentlemen don't always prefer blondes".

There can be no doubt this was the best "do" we have yet had by the proverbial mile and one can only commiserate with those either could not or would not come, and hope that they will join us next year.

/cont....

~ 4 ~

Our Secretary Mr. Horace Giles is to be congratulated on a most successful effort, and our very sincere thanks are due, and are indeed warmly offered, to him for the immense amount of work he put into the organisation and fulfillment of a most enjoyable evening.

The following letter was received from Mr. W. J. Page, the Editor of Water Life, in connection with his judgement on the articles in our Journals for 1951, and to him we extend our sincere and grateful thanks.

Editor.

**Members' Contribution to
Society Magazine.**

I have read with considerable interest - from cover to cover, incidentally - the 1951 issues of the Society's magazine and feel that it strikes a bright note and yet fulfills the function of such a publication by both reporting the Society's domestic affairs and giving members the chance to record their views. The only weakness I can point to is in the number of different names of contributors. More articles, comments, criticisms and odd jottings seem to be called for from the members of a club of your size and standing; and if they are forthcoming next year your Editor, Mr. Blomfield, will be less harassed, and much happier.

My choice was not so easy to make but I selected the article from Mrs. Sullivan in preference to the contributions from Mr. Blomfield in the February issue, Mr M.C. Mash in the September issue and the series on Fish Anatomy by Mr R.V. Edwards.

The reason for placing them in this order is that I considered Mrs. Sullivan's material nearest to what one wants in a club magazine, i.e. something informative but not too stodgy and with a local appeal.

I think it a good idea to include outside contributions now and again but venture to suggest that if every member of the Society put pen to paper only once a year, recording something that has happened within their own experience as aquarists they will find that their Editor is forced to exclude outside material in favour of "home produce".

FISH ANATOMY

The fish, like all animals, expends energy in moving and carrying out its life functions, and to do this it must take in energy in the form of food. This is taken through the mouth, which you will remember is toothless and passed into the throat, where it is masticated by the eight pharyngeal bones - four on each side - which bite, not against one another, but against a bony pad at the base of the skull. It is then passed down the Gullet (OESOPHAGUS) in which the first process of digestion takes place,

The food then passes into the stomach, and it is interesting to note that, as the fish has no digestive juices in the mouth in the form of the saliva, digestion does not start in the mouth. To outward appearances the stomach is only an enlarged portion of the gut, but it has a different interior make up, and here various digestive juices or Enzymes are poured on to the food to reduce it to a pulpy mass, which is then passed into the Duodenum, Here, after a final submission to digestive juices, it passes into a winding intestine in which the now dissolved food is assimilated

Energy is obtained from this food, which in the case of say the Goldfish is mainly starches, or more accurately carbohydrates, which consist essentially of Carbon, Hydrogen and Oxygen in the relation of 6 parts of Carbon to 12 parts Hydrogen and 6 parts of Oxygen, These Carbohydrates, combined with the Oxygen which the fish "breathes", burn, as it were, to liberate energy, Carbon Dioxide and water.

The food, oxygen, carbon dioxide and water are carried about the body by the blood, which in turn is carried in the veins and arteries. The fish's heart, which is the central focus of all blood vessels, consists of only two chambers, -an AURICLE and a VENTRICLE, and, unlike the heart of the mammal, deals only with Venous blood instead of with both venous and arterial blood.

The blood flows from the VENTRICLE forwards to the Gills - in through the AFFERENT BRANCHIAL system and out through the EFFERENT BRANCHIAL system, and it is in the Gills that the gaseous exchange is carried out, i.e., the red corpuscles give up Carbon Dioxide and absorb Oxygen - the blood has now become Arterial blood,

/Cont.....

Some flows forwards to the head and thence heart through the SINUS VENOSUS, while the remainder flows towards the tail, branching off to the stomach, the intestines, the fins, and the two big PORTAL systems- the RENAL and the HEPATIC. In these systems the blood passes straight from the Dorsal Aorta to the Kidneys (RENAL) and Liver (HEPATIC) and back direct to the Sinus Venosus, whereas the vessels from the Stomach and Intestines take the food they have absorbed to the various body tissues before returning to the Heart,

The blood of fishes is not regulated to maintain a constant body temperature as in the case of birds and mammals, hence fishes are POIKILO THERMS (Cold blooded) and their temperature varies in accordance with that of their surroundings. Their blood does not contain so many red corpuscles and is not therefore so brightly coloured as that of mammals, and the flow is not so fast due to the small size of the heart.

The blood is returned to the SINUS VENOSUS from the body tissues not through veins but through SINUSES, which are spaces in the body tissues in the form of tubes without walls. One can see, therefore, the blood system is poorly organised in comparison with those of higher animals.

To be continued.....



FORTHCOMING EVENTS

Wednesday, January 16th:- Lecture by Mr. Creed - President of East London Aquarist Society.

Wednesday, February 6th:- Table Show BARBS (Entry form enclosed with this Journal), and talk by Mr. George Cooke on his experiences of Breeding various Barbs.

NEXT TABLE SHOW

Our next Table Show will be on Wednesday February 6th, and will be for BARBS. Enclosed with this Journal you will find an entry form for that Show - please take care of this form until you are ready to fill it in and take it along on the actual night, when it should be handed to Mr. Carter together with your entrance fee.

EXPERIENCES WITH APISTOGRAMMA RAMIREZI.

It was about two years ago that I saw the illustration in "Innes" of a pair of these brilliantly coloured Dwarf Cichlids, and when, only a month or two later, I saw a pair "in the flesh" in a London dealer's unfortunately not for sale - I was completely captivated and vowed that this was a species that I must ultimately acquire.

It was not until January last that I found some for sale, and I promptly bought four - they were barely $\frac{3}{4}$ " long - and, after the usual three weeks in "quarantine" they were given a well planted 24 x 12 to themselves and fed on copious quantities of live food, chiefly Tubifex and White worms, showing an obvious preference for the latter. Oddly enough, for Cichlids, they also developed a "sweet tooth" for Bemax, and the loud smacking noise they made when taking it from the surface in furtive pecks was a constant source of amusement.

After 3 months, two of them were obviously developing into really good specimens about 1½" in length, while the other two were not only lagging behind in size, but showed no indications of sex - in truth they were "poor fish". Both male and female of my "pair" showed the high elongation of the second ray of the Dorsal fin, the male was developing a bright red nose, and the female showed a light mauve colouration just forward of the vent, where a distinct bulge showed that she was carrying plenty of eggs. By the end of April the colouration of the male was magnificent, with his "peacock" eye, bright red nose, intense black vertical bars, and mass of tiny lavender spots on fins and body. Also he had begun to resent the presence of the other two fishes, and showed it by constant bullying, so much so that they had to be removed,

That evening I placed a flat piece of Bath Stone in one of the most thickly planted corners of the tank, and the following afternoon found the two Ramirezi, with small white breeding tubes much in evidence, busily sucking away at the surface of the stone - I had already scrubbed it very thoroughly, but this apparently was not sufficient. That evening, April 29th, they spawned in normal Cichlid fashion,

/Cont....

the female placing her eggs in rows on the stone with the male following closely behind her fertilising them, and when they had finished, the male took up a position just above the eggs, which were light brown in colour, alternately "fanning" vigorously with pectoral and ventral fins and pecking at them with his mouth apparently as a cleansing action.

The fishes obviously resented any close interest in their subsequent proceedings, and became most agitated whenever anyone approached the tank. The male took to chasing his mate away, and finally, on the third day after spawning, he dashed my hopes by "scoffing the lot" !

A second and similar spawning took place 18 days later, but this time, as the male persisted in chasing the female away from the eggs, she was removed. The male promptly lost all interest in the "clutch" which within a further 24 hours developed a grey mildew.

On June 13th they spawned again, and both parents were left in the tank which was covered almost completely to avoid disturbing them. After three days 37 eggs were discerned, and as the male appeared to be eating them, both fishes were removed; there were finally 9 left and these took the form of a brown ball with a tail, which vibrated and wriggled intermittently; this wriggling went on for four days before, with their numbers reduced to five, they became free swimming.. The usual infusoria, micro-worm and brine shrimp feeding eventually resulted in the rearing of three sturdy little Ramirezi, two of which are now about 1¼" in length and beginning to show their magnificent colours.

Since then I have tried to rear a subsequent spawning by removing the stone complete with eggs, and placing it in a separate tank with a stream of fine bubbles from an aerator playing on the eggs, but after two days all the eggs, although fertile, had been attacked and killed by the same grey fluffy mildew.

From August to November the parent pair have been in a community tank with a large number of Barbs, and not only has the female shown no sign of building up a new batch of eggs, but both fishes have been rather "off colour", as though not happy with the water conditions,

/cont.....

Recently I heard that they prefer soft water with a pH value slightly on the acid side, so on November 31st they were again placed in a 24 x 12 with suitable flat stones and some 5 gallons of water, made up of half well-filtered rain water and half mature tank water, and they were fed frequently on an exclusive diet of white worms. Not only did they show an obvious liking for the change of water, but the female in two weeks was fairly bulging with roe.

They spawned on the 11th December on the largest of the stones, and again it was the male who appeared to take charge of the "clutch". I purposely refrained from any too close observation to avoid disturbing them, but sometime during the 12th the eggs were removed to a deep pit in the gravel in the darkest corner of the tank and the male was observed to be constantly on guard over them. Two days later they appeared to have lost all interest, and a thorough search failed to reveal any sign of eggs - the blighters had scooped them again!

It is now New Year and my male is on his way to the fishy Valhalla with dropsy, so further attempts will have to be abandoned until I can locate another really good male,

=====

LATEST ADDITION TO THE LIBRARY

We are extremely grateful to Mr. E. Baker for his most generous gesture of a gift to the Society Library of the latest edition of "Innes". There is much new information in this edition both in the fish and the plant sections, and the volume will be greatly appreciated, and is sure to be in constant demand. Very many thanks, Mr. Baker.

----- Editor.

=====

FURTHER ADDITIONS TO THE LIBRARY

We are similarly grateful to Mr. M. C. Mash for a further increase in our Assets as far as the Library is concerned in the shape of the complete volumes of Water Life for 1949 and 1950, and the Aquarist for 1950. He has had these most beautifully bound, and is deserving of our very grateful thanks.

LIBRARY. REPORT, 1951.

by:-, M.C..MASH (Hon Librarian)

Fellow -bloodworms (sorry) ! Book worms

The year just ended has been a successful one with the Library. Not only has it paid its way in so far as the purchasing of current periodicals with the income from the loan of books, but we have a small balance which might be used to add new publications as they come on to the market (as shown on Balance Sheet),

Current volumes of 'Water Life' and 'Aquarist' can now be borrowed if available, and the Committee hope that Members who do so will return them promptly so that other borrowers can follow in their wake and ensure a rapid circulation, which will mean a corresponding larger income.

The policy of the Committee is to use the income on the loan of books entirely for additions to the Library.

This year (1952) there will be an innovation in the form of lists on which you may add your name to the queue awaiting favourite volumes.

Appended is a list of the books now in the Library:-

On loan at 4d per volume.

Water Life (Vols, I-VII), Seven volumes- First Series.

Water Life (New Series). Two volumes.

Aquarist (New Series). One volume.

Sladas Monthly Journal (Vols, I & II).

Innes Coldwater Fishes,

Innes Exotic Fishes, Two volumes.

Love and Life in the Aquaria,

1001 Questions.

Tropical Aquaria,

Fishponds and Home Aquaria,

Keep an Aquarium.

On loan at 3d. per book.

Tropical Fish Keeping.

Freshwater Fishes,

Fishes of Britains Rivers and Lakes.

Flowers of Marsh and Stream.

/Cont.....

British Marine Life.
Fish Keeping (Vol. I, Part 3).
The Bog Garden.
Water Plants.

Current periodicals will be added as we get them bound, The stock of F. B. A. S. Show Standards and Guppy Standards have now been exhausted, but we hope to obtain some of the new editions very shortly, and these will be on sale to Members. We still have a quantity of Goldfish Varieties on sale at 3/6.

A Happy New Year and good reading, Any Complaints?

ENTRIES FOR BREEDERS' CLASS - ANNUAL SHOW 1952.

Mr. F. Walker - *Hasemanian marginatus* spawned 13/13/51
Mrs. Webster ~ Swordtaile born 2/1/53
Mr. P. Blomfield ~ Cherry Barbs spawned 18/13/51
Mr. P. Blomfield - Tiger Barbs spawned 28/13/51

The Cup for the Breeders' Class at our Annual Show, kindly donated by our former President Mr. M. W. Barnes-Oake. is at present held by Mr. E. Smith,

A shoal of 6 fishes from the same spawning constitutes an entry, and our Judges of last year commented most favourably on the large number of entries in this class. Let's make it an even bigger one this year!

=====

Members who knew Mr. George Baker will be grieved to hear of his recent death. Many of us recall his unobtrusive and friendly manner and tall slim figure, and it is unfortunate that we saw so little of him, for his generally poor health, resulting from his war service, prevented him from being a more active member of the Club, as he would so much have liked to have been.

=====

TROPICAL FISHKEEPING WITH A DIFFERENCE

by R, E, Cooper .

Once upon a time there was a man who had some tropical fish in a tank in a garden. It was rather a large tank as tanks go, fringed with flowering bushes, that drooped over its edge, and handsome clumps of stately reeds swaying their plummy heads in the wind. On the surface of the water were waterlilies, white, pink and blue, but the latter, quite unusual in their colour and unique because they had come from the land of the Pharaohs, were very soon stolen. Duck weeds there were in plenty, and a little fern like plant called AZOLLA, which in the autumn time took on a glorious red hue. Fish lived among the waterlily stems and played and chased through them as fish do; they fed well, multiplied, and waxed fat.

But one day there came to the water's edge two men who carried a string of scythe-blades joined end to end, and they cut all the water lily stems and the rushes that grew at the verge. After them came other men carrying large hollow earthenware vessels and a large net, it had to be large because the tank was over fifty yards across! They proceeded to net all the fish, the men with the hollow vessels paddling along the verges gathering stray fish into the vessels, which they also used as floats. It was a tremendous harvest, and when the catch was heaped upon the banks there were fish of all sizes, some up to 3 feet in length.

The chief "fisherman", bronzed with the blood of eastern peoples said to a white man standing by, "Sahaib, this is good water, may I contract for it for the next season?" For that was the way of it. And in a day or so many little fish were put into the tank to grow big during the year, to provide food for the people!

The tank was in a garden; the garden was in Burma ,,,,,, and as far as I know has since been spoiled by the Japanese; the Sahib was me; I had the tank made.

Editor* 8 ncto,

Mr. Cccp^r is not an Aquarist in the sense of the word as we know it, he is an extremely influential Horticulturalist, who spent some time in the Far East, We are grateful to him for this little fishy story -which, to say the least, is somewhat out of the ordinary.

EDITOR'S NOTE

Mr Cooper is not an aquarist in the sense of the word as we know it, he is an extremely influential Horticulturalist, who spent some time in the Far East.

We are grateful to him for this little fishy story- which to say the least, is somewhat out of the ordinary.



As you receive this Club Journal you are probably one of many Enthusiastic Aquarists — SO ARE WE, and believe in giving our fish the very best attention before sale so that we can feel proud to show them to you.

We supply many proved varieties of foods suitable for Tropical or Cold Water Fish, together with Plants & Accessories. An intrest is taken in your problems as well as your Custom and we will Help and Advise in both.

We do not claim to be a Large Concern, but we Endeavour to Equal all for Service & Fairness.



MEET YOUR FRIENDS FOR A LOOK ROUND & CHAT

AT

THAMES AQUATICS

(B. LOVEGROVE)

48, YORK ROAD, SOUTHEND-ON-SEA, ESSEX

WHERE YOU WILL BE WELCOME AND MAY FIND JUST WHAT YOU WANT

IN

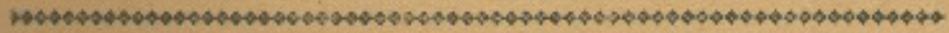
Tropical or
Cold Water Fish

Garden Ponds
Made & Stocked

Plants & Accessories

Aquariums of all sizes supplied
Immediate Aquarium Repair Service in Emergency

Servicing of Aquariums in your
own Home at Moderate Charges



SERVICE

CIVILITY

SATISFACTION

CROSS & YOUNG

Aquatic, Pet & Aviary Supplies



We invite you to inspect our selection of **TROPICAL FISH**. (The largest stock in the district), consisting of 30 Aquariums containing 50 different species including our specially home bred Angel Fishes, one of which took 1st Prize in the 1951 Southend Aquarist Society's Show.

*Goldfish, Shubunkins & Coldwater Catfish.
Budgerigars & Singing Canaries
Guinea Pigs, White Mice Etc.
Cages, Sand, Bird Seeds &
all Pet Foods.*



COMPLETELY FURNISHED AQUARIA . . . PLANTS, EQUIPMENT & ACCESSORIES
REGULAR SUPPLIES OF TUBIFEX & DAPHNIA

1-5, Nelson Drive, Leigh Road

(BETWEEN CHALKWELL PARK & CORONA CINEMA)

Telephone: LEIGH-ON-SEA 77721

ISSUE NUMBER 2 for MARCH 1952

is not available at the moment

Should anyone have a copy that we can borrow to scan we would be most grateful in addition any old photos or other information on the Society would be gratefully received.

contact [mailto:peter.capon@yahoo.co.uk?subject=archive copies of SLADAS old magazines](mailto:peter.capon@yahoo.co.uk?subject=archive%20copies%20of%20SLADAS%20old%20magazines)

We would also like to have any information on the Society before WWII when it was known as Southend Aquarist Society.

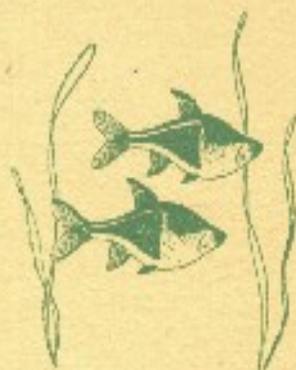
THE SOUTHEND, LEIGH & DISTRICT
AQUARIST SOCIETY

Vol. **5**

No. **3**

March 1952

MONTHLY



JOURNAL

Editor: P. Blomfield, 90, Beach Avenue, Leigh-on-Sea.

Hon. Secretary: H. A. Giles, 72, Sandringham Road, Southend-on-Sea.

AVAILABLE TO MEMBERS ONLY

Metropole Aquatics

Proprietors: C. G. BROOKS — C. J. SAUNDERS

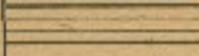
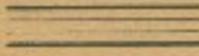


**534a, LONDON ROAD
WESTCLIFF-ON-SEA**

Telephone: SOUTHEND 45991



Stockists of Tropical and Coldwater Fish All Pet Foods and Aquarists' Accessories
--



SOUTHEND LEIGH AND DISTRICT..AQUARISTS' SOCIETY

MONTHLY JOURNAL

Vol.5, .No.3.

March, 1952

The Society meets at 7.45 p.m. on the First and Third WEDNESDAY in each month, at :~

THE LIBERAL HALL,
Clarence Road, Southend~on-Sea.

EDITORIAL

Dear fellow members,

I imagine that you too, like me, must have become aware, during the last couple of weeks or so, of a certain something in the air; a gradual thawing of the marrow; a balminess in the atmosphere; an awakening desire to leap out of bed in the mornings (no? Oh, very well then); -but say what you will, Spring is at hand, the Season of live food is upon us. Away with the Bemax packet, the Brosiam jar, and out with the Daphnia net, the garden trowel. Soon the countryside will abound with bricklayer and bank-manager, delving and falling into the stagnant peels of yestermoth in search of the elusive "flea", and the remoter fastnesses of the garden will reverbrate to the "Tally-hoes" of eager worm hunters as some rudely awakened Lumbricus breaks cover from the compost heap.

I wot of one self-styled Aquarist whose boast it is ~ boast, mark you - that he feeds his fishes on nothing but Bemax;! I asked him how he'd like it if his wife dished him up nothing but c porridge month after month, and he merely shrugged and said ".Thats! different, these are only fish!" I could quite joyfully have strangled him with his own Vallis, Varility and happiness of our fishes; and their health - to say nothing of our own - will be the better for a regular ration of live food. I'm not recommending you to a course of Cyclops soup or Tubifex fritters, but an hour or two round the local pond or even at the bottom of the garden, - all the proceeds, including the fresh air, will be free (a rarity indeed these days), and one might even find one's own virility improved - after all, it is Spring!

Yours most sincerely,

P. Blomfield, (Editor).

CLUB NEWS.

by the Editor,

On Wednesday March 5th at the Liberal Hall I had the privilege of expounding to a gratifyingly large gathering my views on the Furnished Aquarium, and it must be admitted that this was partly a spot of propaganda, not only to help to improve the general standard of those tanks whose sole purpose is to beautify some corner of the home, but also to encourage Members to enter these in our Annual Home Aquaria Competition.

The whole essence of a good tank is that it should present a picture, and as such should conform to certain basic rules of art; e.g. the picture should be complete, and the eye of the viewer should be confined within the limits of the tank; the length should give the impression of being in two sections of unequal proportion, the larger one providing the main theme and "centrepiece", and the smaller one being complimentary to it; the colour effect should be composed of the three basic colours, red, blue and yellow, with an even distribution of each, and no one predominating at the expense of the others (blue and yellow, of course, being apparent in the varying darkness and lightness of the green of the plants); and the general arrangement of the shapes in the tank - the rocks and plant clumps - should blend harmoniously and be of a reasonably complimentary size with one another. It is essential that a fairly well defined "design" should be apparent instead of a haphazardly arranged assortment of individual plants and rock work.

From a competition point of view the "picture" is divided into 4 main groups for pointing, each group being allotted 25 points: Fishes, Plants, Design, and Technique. Fishes, - 12 for quality, 8 for size and 5 for selection; care should be taken not to overcrowd, and four or five different species will usually give a better effect, than a large number of different pairs. Plants must be in good condition, and here again from 5-7 varieties is better than an assortment of all the varying types one can muster; 15 points go to quality, and 10 to selection. In the Design section 10 points are awarded for originality, and here care must be taken, in an attempt to make up an arrangement which is "different", not to produce an incongruous effect; Harmony counts 5 points, and here a pleasing blend of both colours and shapes are looked for;

/cont.....

a further 5 points each are given for Permanency and for Realism, and here one's tank should give the impression of having been set up and growing naturally for some time, and of being able to maintain the same pleasing design and condition for months and not just temporarily. In Technique, 8 points are given for the method of planting and arranging the plants, 7 for choice of Rockwork and 5 for Compost, and one should strive to obtain Rocks and Gravel or Sand which, while not necessarily of the same composition, do have a matching tendency rather than a direct contrast; finally Clarity of water gains 5 points, and this can only be obtained by ensuring that the gravel is most carefully washed and that the glass front and ends of the tank are completely clear.

Opinions vary on the density of planting which should be used, but personally I am inclined to heavy planting while at the same time not completely covering the back of the tank, so that some portions of this, which is painted black, show and help to give, in my opinion, an impression of depth; one should, however, completely cover the hard straight line formed by the gravel at the back, as this, if in view, at once tends to catch the eye and make the back seem even nearer than it really is.

Well, I hope that I may perhaps have encouraged more members to enter for our Home Aquaria Competition and the Furnished Aquaria Class at the Annual Show, the former will take place during June, and the two judges will of course call at your home only when it may be convenient.

Even if you are not lucky enough to win, it's a deal of fun re-arranging the tank, and anyway your "picture" might turn out to be even better than it is now, which is all to the good.

The Table Show which was held on this same evening was for Swordtails and Platies, and the results were as follows:

Swordtails:

1st Mr,Conner 2nd
2nd Mrs, Gibbs. 3rd
3rd Mrs. Gibbs.
4th Mr.Connor,

Platies

1st Mrs Sweetenham,
2nd Mr. Sykes.
3rd Mr, Mash.

/Cont,,,

Our congratulations to the winners, and also our very sincere thanks to an Anonymous member who has very generously promised to the Club Library two copies of each of "Water Life" and "The Aquarist" for the whole of the current year - a magnificent gesture, this. Finally a raffle for two young Tiger Barbs, bred by Yours truly, was won by Mr. Scragg, and our thanks are given to Mr. Carter and his aides for the arranging of the Table Show, and to Mrs, Giles and Mrs,Harris for the usual good cheer during the interval.

THE HOME AQUARIA COMPETITION,

This competition is held annually, and three awards are normally made to the first three best efforts. This year, however, while the award of the Giles Cup for the winner and a Cup for the second placing will be as before, there will be a further award, not as a third prize, but to the tank whose owner has not gained a place in a similar competition before, and which, in the view of the Judges, is the best effort taking into account the experience of the member and the length of time he or she has been a member of the Club. This prize is designed to appeal to new members, and it is hoped that there will be a good response.

The Judges, who will be announced later, will call at members' homes during the month of June, and competitors will be asked to state on the entry form at what times and on what days it will be convenient for them to call. Entry fee is 3/6 per tank, and more than one tank may of course be entered,

A detailed list of the points awarded will be published in the Journal, so that you will be able to see which features in particular caught the Judges' eye.

FORTHCOMING EVENTS.

Wed, April 2nd. Table Show - Angels and fighters. ("An entry form is enclosed in this Journal ~ please fill in the appropriate CLASS, DATE and details and hand it to Mr, Carter, Show See, together with your entry fee 6d.per entry-on the actual evening); and a talk by **Mr. R, DuBoisson on Characins.**

Wed, Apri 16th. Visiting Lecturer,

FISH ANATOMY

SWIM-BLADDER AND NERVOUS SYSTEM

by: Roy V, Edwards,

One of the organs which makes itself most apparent when anything goes wrong is the swim-bladder. Primitively, the air-bladder, to give it its correct name, was an upward extension of the gullet, and served as an accessory breathing organ - a sort of primitive lung. In fact from a close study of the Lungfishes of South America, Africa and Australia it is possible to see how the breathing apparatus of the higher animals came about, and it is particularly interesting to find that in the Goldfish the air-bladder and the gut are still connected. Recent investigations have in fact shown that it may still have to some extent a function as a breathing organ, and the fact that it is still connected to the gut explains why, when a fish is constipated through poor feeding, the air-bladder becomes affected in time and the fish appears "heavy".

The air-bladder consists of a membranous sac situated below the vertebral column at the centre of gravity of the fish and has two lobes, an anterior and a posterior lobe - the posterior being slightly the larger. It contains Oxygen, Nitrogen and a trace of Carbon dioxide, which are obtained when the fish gulps down air from the surface of the water. Besides serving as a reservoir for oxygen, the air-bladder serves at least two other purposes:-

- (a) By the adjustment of its contents the fish is able to alter its total specific gravity and thus float at any level in the water without effort.
- (b) As mentioned in an earlier article, attached to the air-bladder at the Anterior end is the last bone of the Weberian ossicle (Part of the ear), so that it also plays a part in the auditory apparatus.

The nervous system is the simplest found among the Vertebrata the main centre of nervous action being the brain, which is a long flat bag consisting of three divisions - fore-brain (PROENCEPHALON), mid-brain (MESENCEPHALON), and hind-brain (MEDULLA OBLONGATA).

From the fore-lobe the Olfactory nerve runs forward to the nasal organs, and on either side there is a large Optic

/Cont.....

lobe from which the Optic nerve passes to the eyes. Below the Optic lobe lies the INFUNDIBULUM, to which is attached the important Pituitary body (this secretes hormones - chemical substances which stimulate various organs to carry out their functions). Behind and above the Optic lobes is the CEREBELLUM, which is responsible for the co-ordination of muscular activity in response to stimuli received from the sense organs, and below the Cerebellum lies the MEDULLA OBLONGATA which passes back into the Neural canal of the vertebral as the spinal cord.

From the brain run ten pairs of Cranial nerves, eight of which serve the head, and the other two serve the gills, lateral line and gut. A pair of nerves is given off, one above and one below, on each side along the spinal cord at each vertebral segment, and these nerves divide and re-divide into branches to serve all parts of the body.

Nerve fibres are of two kinds, sensory and motor:-

- (a) Sensory:- convey stimuli to the brain or other major nerve centres from sense organs,
- (
- b) Motor:- control muscular response, Actions which are automatic, e.g. passing food through the gut, are controlled by the Sympathetic Nervous system which is entirely separate. There can be no doubt that fishes do feel pain ~ their normal instinctive reactions are in every way similar to those of higher animals, and they too register the secondary phase of nervous shock in extreme casea.

To be continued.....

WOT. NO CHANGE?

A little man with only his nose and fingers showing over a wall has whispered to me that our good ladies who provide the refreshments at our meetings are having trouble over their inability to supply small change for the tea and cakes. Would members please try, therefore, to bring along some coppers, threepenny bits and sixpence on Wednesday evenings, - it's a bit hopeless when the ladies are asked to change notes for the odd "cuppa and bun".

EXPERIENCES WITH THE CHERRY BARB

by: P. Blomfield

The Cherry Barb (*Barbus titteya*) hails from Ceylon and is one of the smaller types of Barb, adults in full growth being from 1½" - 1¾" in length; they are omnivorous feeders with a great partiality for the soft forms of Algae, and although they obviously appreciate various forms of live food, I have found that they grow sturdier and quicker if the bulk of their diet consists of good, nourishing dried food ~ Bernax seems particularly suitable; they are peaceful community dwellers, although rather retiring and given to haunting the more thickly planted areas of the tank, and somewhat individualistic in that they do not normally swim in shoals.

The sexes are very easily distinguished; in the adult fish, the males are a warm cherry pink, which extends over the fins, and at times of excitement during spawning and feeding, and when they are in tip-top condition, this colour deepens into a magnificent crimson, which, when the fish is at some angles to the light, reflects a faint green fluorescent glow. The females do not show this "cherry" colouring; they have an unbroken dark brown line running down the centre of the side from just behind the gills to the caudal peduncle, and above this is a warm rusty brown deepening-towards the back, while below the line the colour pales to almost white under the belly; the dorsal, anal and caudal fins are flushed with red.

In the males this central line is not continuous, but is made up of a series of rather faint brown "comma" marks, and it is this difference, which becomes apparent between the 6th and 8th week after hatching, which makes early sexing possible.

I bought my first pair of "Cherries" in August '49 and was extremely fortunate that they were not only very good specimens but also seemed to have a strong natural affinity towards one another. They first spawned in November of that year, but no fry resulted; however, they soon got into their stride, and during 1950/51, I raised the following broods (excluding those thrown out as runts, slow growers etc):- January - 30: March - 53: May ~ 70: August ~ 81: March - 40: April - 95: June ~ 74:

From this time the parents were rested, and a selected pair from the brood of May '50 were mated; they have so far given: September - 32: December ~ 60: January '52: 33, and are being "spoon-fed" with a view to a further resumption of marital bliss in the Spring,

/Cont.....

The parents are kept together in a Community tank between spawnings, and are only used when the female shows by her "keel bulges" that she is full of roe, and the male is in full colour and paying her more than the normal amount of attention. A 20" x 9" x 6" tank (in a cupboard) is thoroughly sterilised, a light sprinkling of boiled gravel is spread over the bottom, and four or five large clumps of Hygrophila, weighted with lead, are introduced to give a heavily planted effect, - this plant is most useful in this respect, as its fairly large leaves act as excellent egg-catchers, while also allowing the fishes plenty of swimming room. The water used is half fresh tap water and half mature from the Community tank, and the fishes are placed in the tank at night with the temperature at about 76 ~ 78°,

Early in the morning a fifteen watt bulb is switched on over the tank, and a single sheet of newspaper placed on the cover glass below the bulb to give a rather dull, diffused illumination. Spawning invariably commences within an hour, and takes the form of the male constantly "chivvying" the female from behind and below while she wriggles quite slowly around the plant stems and leaves. At intervals varying from a few seconds to a minute or more the male comes alongside the female, usually near the surface, they press their sides together and then break apart with a pronounced flick; at this moment one and sometimes two eggs are expelled, and they fall and adhere to the first object they contact. Spawning usually continues for two or three hours, with occasional rests of a few minutes as if by mutual arrangement, and I have never seen either parent pay any attention to the eggs while spawning is in progress.

The young hatch in about 48 hours at this temperature, and it is a further 3 to 4 days before they become free-swimming; during the pre-swimming stage they are found mostly lying on the bottom, although occasionally some can be seen hanging on the plants or glass in the manner of other fry; they are quite large, and as seen as they are swimming I commence feeding with dried egg powder squeezed through a handkerchief; after only three or four days they will take micro worms, and after a week to ten days brine shrimps and finely chopped Tubifex. After two weeks the whole tank is lifted into a large, well planted growing-on tank and the babies gently "flooded" into their new home. In 7-8 weeks, given plenty of space and frequent feeding, they should be ¾" long, and at this age are easily sexable.

=====

THE NOT SO MERRY WIDOW.

By Mrs.K. Outing.

One hears so many theories on how to get fishes to spawn, that I thought I might record a method I used on some Black Widows last April, - an unorthodox method it is true, but as it happened a most effective one.

My female at this time was very plump and seemed in fine condition, so I put into a 24 x 12 planted with clumps of Elodea and Hygrophila her together with one male in mature water, and awaited results.

The male was definitely keen to become a papa, and did his utmost to instil a little enthusiasm into his mate by constant nudging, showing off and sly nibbling, but she maintained a cold aloofness which clearly indicated, that she considered herself rather above "that sort of thing" .

Something obviously had to be done to encourage things a bit, so I put in another two males; but alas this subtle compliment to her wiles fell on stony ground, and although all three "Widowers" flirted round her like flies round the proverbial honey-pot she remained in her corner playing hard to get.

Having lost some of my patience by now, I decided to give the boys a hand, so I filled two enamel jugs, one with hot water ~ it was fairly steaming too - and one with cold from the tap, and took up action stations. Starting with the hot, I poured about a quarter of a pint over her, and she promptly dashed down the tank pursued by her three suitors and took up position as before in the opposite corner; then came a similar douche from the cold jug, and off she went again; this time she wasn't allowed to reach the other end before the hot water came into action again to head her off, and this went on for some minutes - each time she showed up she got an alternate "splosh" of either hot or cold. The males seemed to love this fun and kept after her in true appreciation of my assistance.

At last I noticed a change in her attitude; she began to flit rather coyly through the plants, and sure enough they started to spawn, and what a spawning it was ! Five days later there were swarms of tiny Widows swimming happily around - I think 600 would have been a conservative estimate, and I felt like having my two enamel jugs mounted. But alas, came disaster! A well-meaning friend, from whom I had begged some plants, called next afternoon when I was out and dumped a big.....

/Cont.....

batch of assorted plants into the first tank he noticed in the fish house ~ he couldn't have known that what appeared to be an empty tank actually housed hundreds of wee Widows; the plants were later moved, and some two or three days afterwards the number of fry began rapidly to diminish; an extra strong light and a close inspection revealed the horrible truth - the tank was simply swarming with Hydra.

One or two Club members actually witnessed, with me, the action of Hydra catching the fry, and there is no doubt that the fishes while exploring the bottom and sides of the tank for food do bump into the tentacles of the Hydra and become enveloped. We actually salvaged only a very small percentage of the fry, and only eight were finally grown to a reasonable size.

This little account is not intended to be an indication of how to spawn Widows, but if anyone is impressed by the danger of Hydra in a breeding tank, then this humble effort may not have been unavailing.

=====

THE PLATY BREEDERS ASSOCIATION.

The above Association has now been formed, with its aims to improve the present varieties of Platies and to investigate the possibilities of further Platy -Swordtail Hybrids. Any of our Club members who wish to join this new Association are invited to write to the Secretary, Mr.D.L.CANN, at:-

44, Westham Drive, Pevensey Bay, Sussex,

VIVE LE MASH.!

We are much indebted to our very good friend Mr, M. C.Mash for his donation to the Society Library of a bound copy of the complete volume of "Water Life" No, 6. February to December, 1951.

While on the subject of the Library, - there are one or two members who have had books (including a copy of "Innes") well over the allotted time. This is hardly playing the game, and their return is requested, **Ed,**

"SOME PLANTS FOR THE BEGINNER"

by: Mrs. P. Sullivan.

For these beginning an Aquarium, plants are most important, and in my opinion one should start with the right ones and then later take up the more fancy types.

The most important, and I think the most beautiful, is *Vallisneria spiralis* - tall, graceful and grass-like, it is one of the best workers and its roots help to purify the soil. When planting *V. spiralis*, care should be taken to keep the crown at the surface of the sand. Another species, *Sagittaria*, can be distinguished from *Vallisneria* as the latter has two or three equal stripes down each leaf in varying shades of green. *Sagittaria* is long lived, and some aquarists say that these two plants will not prosper in the same tank, but I have never had any trouble in this respect. *Myriophyllum* is a plant of delicate beauty, having fine leaves which make a perfect maze for egg-layers and is most useful for Gouramies or other fish which use the top of the tank for spawning. Like another fine leaved plant, *Cabomba*, it is useful for hiding the young of live-bearing fishes, and in this same category can be placed Hair Grass, which always looks so green.

The learner should stick at first to the most useful plants, and then gradually introduce the more decorative specimen plants to his tank.

Finally do not use Bladderwort for spawning unless you are able to keep an eye on your tank. The leaves are so fine that the young get tangled up and are unable to free themselves. If you must use it, ensure first that the fine leaves are well opened out.

S.L. A.D.A.S. "OF-FISH-IALS"

by: M.C.MASH.

In Saunders, C. J. we've a wonderful President,
And Westcliff may boast of their schoolmaster resident.
Tho' handicapped physically his humour ne'er flags;
Talking fish till he drops, he'll continue his "gags".
Vice-Pres. Edgar Day possesses no vice;
He's lately been busy at "shaking cut rice".
His masterful voice can be heard at our sales,
He bashes the hammer like driving in nails.

/Cont.,.

- 36 -

Barnes-Oake, Maurice, Mr.-our worthy advisor,
Just keeps himself busy in making us wiser,
Excelling at judging and breeding exotics;
Profound is his knowledge and varied his topics,

A glutton for work is our friend Horace Giles,
At clerical duties he "eats up the miles".
His happiest time is when writing "yours truly"
To numberless letters, - assisted by Julie.

Jack Brooks is our miser, ~ he banks all the money,
We know it's not much, and we're not being funny
Suggesting he buys some equipment, by thunder !
Twill keep him from thinking of fleeing "down under".

Our Magazine Ed, Peter Blomfield to wit,
Fulfills all requirements, he's made quite a hit
At bringing out Journals exact to the day;
He deals with our "guff" in a masterful way.

I must mention Carter-related to "Nick",
W.H. his initials; at building he's slick.
He plans table-shows with the "touch" of a master,
The leaky tanks leak more when "touched", and must faster,

Excursions he plans and a coach he will book:
You'll guess I refer to our wee Georgie Cook.
At scheming our outings he cannot be beaten.
He "chalks up" coach-wheels while the lunches are eaten,

R, DuBoisson, Esquire, publicity man,
Frequents every tavern according to plan.
One day, without doubt, he'll take Holy Communion
To fix up a deal for the old Norwich Union,

Myself - I'm the bookie-the bibliophile;
My books will uplift and prove fish-lore worthwhile.
So gather round "soaks" and just chuck out your wages;
In spending, you'll gain sleepless "knights" with the "pages".

So here we are ladies and gents, for your pleasure;
We seek your assistance, and time (if it's leisure),
To help run the Club in a manner befitting
It's excellent standing. Now on with your "knitting".

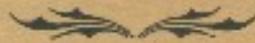
=====



As you receive this Club Journal you are probably one of many Enthusiastic Aquarists —
 SO ARE WE, and believe in giving our fish the very best attention before sale so that we
 can feel proud to show them to you.

We supply many proved varieties of foods suitable for Tropical or Cold Water Fish,
 together with Plants & Accessories. An interest is taken in your problems as well as your
 Custom and we will Help and Advise in both.

We do not claim to be a Large Concern, but we Endeavour to Equal all for Service
 & Fairness.



MEET YOUR FRIENDS FOR A LOOK ROUND & CHAT

AT

THAMES AQUATICS

(B. LOVEGROVE)

48, YORK ROAD, SOUTHEND-ON-SEA, ESSEX

WHERE YOU WILL BE WELCOME AND MAY FIND JUST WHAT YOU WANT

IN

Tropical or
 Cold Water Fish

Garden Ponds
 Made & Stocked

Plants & Accessories

Aquariums of all sizes supplied
 Immediate Aquarium Repair Service in Emergency

Servicing of Aquariums in your
 own Home at Moderate Charges



SERVICE

CIVILITY

SATISFACTION

CROSS & YOUNG

Aquatic, Pet & Aviary Supplies



We invite you to inspect our selection of **TROPICAL FISH**. (The largest stock in the district), consisting of 30 Aquariums containing 50 different species including our specially home bred Angel Fishes, one of which took 1st Prize in the 1951 Southend Aquarist Society's Show.

*Goldfish, Shubunkins & Coldwater Catfish.
Budgerigars & Singing Canaries
Guinea Pigs, White Mice Etc.
Cages, Sand, Bird Seeds &
all Pet Foods.*



COMPLETELY FURNISHED AQUARIA . . . PLANTS, EQUIPMENT & ACCESSORIES
REGULAR SUPPLIES OF TUBIFEX & DAPHNIA

1-5, Nelson Drive, Leigh Road

(BETWEEN CHALKWELL PARK & CORONA CINEMA)

Telephone: LEIGH-ON-SEA 77721

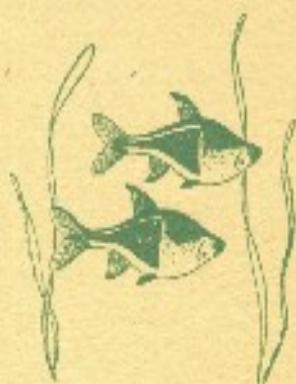
THE SOUTHEND, LEIGH & DISTRICT
AQUARIST SOCIETY

Vol. **5**

No. **4**

APRIL 1952

MONTHLY



JOURNAL

Editor: P. Blomfield, 90, Beach Avenue, Leigh-on-Sea.

Hon. Secretary: H. A. Giles, 72, Sandringham Road, Southend-on-Sea.

AVAILABLE TO MEMBERS ONLY

Metropole Aquatics

Proprietors: C. G. BROOKS — C. J. SAUNDERS

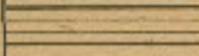
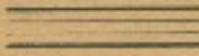


**534a, LONDON ROAD
WESTCLIFF-ON-SEA**

Telephone: SOUTHEND 45991



Stockists of Tropical and Coldwater Fish All Pet Foods and Aquarists' Accessories
--



SOUTHEND LEIGH AND DISTRICT AQUARISTS SOCIETY

MONTHLY JOURNAL

Vol. 5. No. 4.

April, 1953.

The Society meets at 7.45 p.m. on the First and Third WEDNESDAY in each month, at:~
THE LIBERAL HALL,
Clarence Road, Southend-on-Sea,

EDITORIAL, Dear fellow members,

One often hears it said that the general standard of home-bred Tropical fishes is steadily deteriorating, that the green of the Swordtail is not the green of yesteryear, that the "red" of the Platy is fast becoming of more "conservative" hue, that fishes generally are not up to the sizes of those before the war, - probably they seemed larger then because some of us were smaller - but whether one agrees or not, much can and should be done to improve our stock; some of the mixed-up-and washed-out colours that are to be seen among the live-bearer species alone are deplorable, wholly as a result, of thoughtless and indiscriminate cross-breeding. Can it be that we try to do too much?

It has been suggested that the idea of concentrating on just one species for a whole year has much to recommend it. Excellent, say I? Better to be a breeder of a few really good quality Zebras for instance, than a mass-producer of a variety of nondescript, undersized nonentities.

Study the example of that eminent Walsh Aquarist Mr. Dai Tiscus who, rumour has it, in his underground fish-house in the Crypt of 'Coryne, has perfected Angels to such a degree that they are now referred to as Archangels! Why not set out to improve one particular species? Once your improved stock gets around, others will be able to maintain the high standard, and our hobby will have benefited greatly from your efforts.

Yours most sincerely,

P. Blomfield. (-Editor)

CLUB NEWS

by: The Editor

The meeting on Wednesday March 19th was devoted entirely to Barbs, and in addition to a Table Show we were treated to a lecture by Mr. George Cooke, who has had a great deal of experience and success with many of the Barb species, A novel addition to this talk was a partitioned tank containing nice pairs of Cherry, Tiger, Chequer, Nigger and Shuberti Barbs, with which a good idea could be obtained as to relative size, colour and sex differences.

Mr. Cooke praised this family as being sociable, hardy and relatively easy to breed; he recommended the purchase of at least 6 young fishes of one particular species so that at least one good breeding pair would result, and stressed the importance of conditioning the adults, with which ultimate breeding was anticipated, on a variety of foods, of which a large percentage should be chopped earthworm ~ this feed was in his opinion the finest for bringing fishes into first class condition. His method of spawning was to place the pair in 4" of filtered mature water in a 24 x 12 tank with a clean glass bottom, at a temperature of about 73°, in which was a large clump of plants weighted with lead, then a further 1½" of fresh tap water was added and the temperature slowly raised to 78 - 80°.

The male would invariably begin driving the female in a very short time, and the parents were removed immediately after spawning. The eggs hatch in 24 ~ 48 hours, and once the fry were free-swimming infusoria was used for no more than the first week, after which time micro worms and brine shrimps were given. Mr. Cooke spoke for a short time on the method of culturing these foods, suggesting oatmeal as a medium for the former, and for the latter a table spoonful of household salt dissolved in a 21bj am jar of water and kept at about 70°. Fry, he said, should be fed frequently so that their stomachs were permanently bulging, and he particularly stressed the need for giving the youngsters plenty of space in which to grow if good sized adults were to be expected.

Finally Mr. Cooke mentioned the peculiar type of tail fin rotting to which baby Tiger Barbs in this area have been so prone, and while he could not say with any certainty what was the cause, he thought it possible that some water condition or infusorial affliction may be responsible, particularly in view of the fact that using aeration and, more important, filtration from the very early stages seemed to prevent the occurrence, where much

/Cont. ...

experimentation with this use of chemicals had failed. He concluded by stating that Barbs definitely favour very clean conditions, and he invited any members who wished, to join him in a small informal group to continue the study of this particular family of fishes.

The results of the Table Show were as follows:-

- | | | |
|----------------------|---|--------------------------|
| 1st. Mr. E. Smith | - | <i>Barbus tetrazona.</i> |
| 2nd. Mr. E. Smith | - | <i>Barbus tetrazona.</i> |
| 3rd. Mr. E. Smith | - | <i>Bar bus ticto</i> |
| 4th. Mrs Sweetenham. | | <i>Barbus tetrazona.</i> |

We congratulate Mr.Smith on "Scooping tha pool", and Mrs. Sweetenham, who in doing extraordinarily well for a new member, and our thanks go to Mr.Cooke for his grand talk, and to Messrs. DuBoisson, Carter, Giles and other willing helpers for the organisation of the show as a whole.

On Wednesday, April 2nd, Mr.DuBoisson gave us a talk on his experiences with Characins, and in particular on his efforts to breed Beacons, He opened by saying that Characins, with some well known exceptions, had been found to be rather difficult to bread in this country, and that while fishes of this type, being of pure stock, should breed true to nature, difficulty was bound to be met due to the unnatural conditions under which we had to breed them, - confined space in tanks, still water, lack of natural food etc.

Mr.D, B. stressed that one should not take as "gospel" all the instructions and observations made in books on the breeding habits of fishes, rather one should observe one's fishes closely and form one`s own conclusions. He had been told, when he purchased his first pair of Beacons, that they would, never breed sucessfully as they were continental fishes and would have been "doctored" in some way, but he had of course found, that this was entirely untrue. He then want on to recall some of the snags he had encountered in the rearing of Beacon fry after spawning - which he had no trouble in organising in a 24 x 12 tank with a clear bottom, one large clump of weighted plants, 4 inches of water (two thirds mature and one third fresh from the tap) at about 75°, His first two spawnings resulted in large quantities of white eggs, and in order to eliminate the possibility of this being caused by a bacteria or fungus, a weak solution of Methylene Blue was resorted to on all future occasions, and this resulted in what appeared to be 100% hatching of.....

/Cont. . .

all eggs laid. His next unfavourable observation was that after hatching, before they actually became free-swimming fry were being drawn towards the heater by the convection current set up and were being found on it and in its immediate vicinity as a pile of tiny corpses; this he tried to combat by covering the heater with nylon, or standing it upright, or burying it under a mound of gravel, but still fry were being lost, and in the instance of the buried heater the temperature "layering" of the water was most pronounced - there being as much as 12° variation between surface and bottom, which was definitely more than the babies could stand. He was now fixing up an overall bottom heater with external heat application, and thought that this should eliminate this trouble.

Mr.D.-B. has of course reared some extremely fine Beacons, but his talk was intended to give members an idea of snags which he had encountered. He recommended Green water as an initial food for the fry, then infusoria of a suitable size, and stated that Brine Shrimps were an ideal food after the 2nd week. He had also observed that slow filtration after the first two weeks seemed to have a beneficial effect on growth, and he concluded his talk by showing us his home made infusoria feeder and an extremely ingenious though very simple method of holding an external thermostat of the "Constat" type flat against the glass when it is required to work with only about 3-4" depth of water - a narrow strip of sheet aluminium bent to give a spring effect.

Many thanks D. B, for a most entertaining talk. And thanks too to Mrs, D, B. and Mr s. Blomfield who served our "inner selves", and congratulations to the winners of the Table Show for Siamese Fighters:-

1st.	Mr. Barnard
2nd.	Mrs. Harris
3rd.	Mrs. Gibbs
4th,	Mrs, Sweetenham.

..

=====

Forthcoming Events.

Wed. May 7th:- Table Show (Mollies & Danios) – please fill in the enclosed entry form and hand it in to Mr. Carter (Show Sec.) with entry fee on the actual evening:- and talk by Mr.W. Hoare on Mollies and Danios.

Wed. May 31st:- Auction Sale.

NOTE; members who do not use their Table Show entry forms please hand them back to the Editor from time to time in the interests of paper economy.

- 41 -

- **FISH__ANATOMY**

-

- by: Roy V. Edwards.

Sense organs and Intelligence

Closely associated with the organs of the nervous system are the sensory organs' Smell: Smell under water has been described as "taste at a distance". The Olfactory organs consist of two sac like bodies lying in the Nasal pits; they are ridged and the grooves are pierced by two nostrils on each side; water passes in through the front nostril, bathes the olfactory organ and passes out through the rear nostril. The sense of smell, therefore, is brought about by the chemical action of a solution of substances in the water on the olfactory organs.

Taste: The presence of taste in fishes seems to be the subject of some debate, but in fact there is one then it works in similar fashion to the sense of smell, i.e. both smell and taste are chemical senses.

Sight: Fishes have a fairly good sense of sight.

Firstly, having one eye on each side of the head, it is doubtful whether they can see one object with both eyes at the same time - they actually see different pictures with each eye. Secondly, adjustment for varying distances is done, not as in higher animals by altering the shape of the lens, but by moving it nearer to or further from its retina by a special arrangement of muscles. Also, of course, the eye has no lids except for a primitive fold of skin above and below the eye.

Sound: The ear is enclosed in a bony capsule, the AUDITORY CAPSULE, on either side of the skull and consisting of two lobes; the lower lobe consists of the three Semicircular Canals, while the upper one, in the form of a sac is interconnected and contains limey secretions (OTOLITHS) which aid the ear in its primary function of balance. Joined as it is to the Air-bladder by the Weberian Ossicles which incidentally bear a marked resemblance to the Hammer, Anvil and Stirrup bones of the human ear - the ear possibly enables the fish to hear actual sounds, and certainly gives it an appreciation of a very wide range of vibrations.

Touch: Fishes are not very sensitive to actual touch, but the LATERAL LINE sense organs in the skin are most sensitive to changes of pressure in the water - the slightest disturbance in the water causes an incredible response.

/Cont.....

How many of us have tried to "creep up from behind" with a net and found that it just can't be done? The reason is the awareness of the fish to changes in the pressure of the water behind it. It is thought that the lateral line sense organs were primitively connected to the auditory apparatus and used as an adjunct to hearing, but this point has yet to be proved.

Intelligence: Fishes are creatures of very low intelligence, being completely incapable of coordinating the sensations received from various sense organs and storing them away in the form of a memory. They can however learn by experience, inasmuch as if they are fed at the same spot each day at the same time they will thenceforward congregate there most punctually, but they have no reasoning power.

To be continued.....

Australia ahoy!_

Mr. and Mrs. L. R. Latreille, who sailed for Australia on the "OTRANTO" from Tilbury on Easter Saturday, wish to say farewell to their many friends in the Club. They say they will have many happy memories of the meetings and outings in which they were regular participants, and they send their best wishes to all their particular friends, and to the Society in general with a hope that it may ever flourish. We in turn wish them a safe and pleasant voyage, and the best of health and success in their new venture.

Do You Believe in Ghosts?

by: The Editor.,

There seem to be two different ideas on the controversial subject of ghosts; some say they are "things" one actually sees or thinks one sees but which are not really there at all, and others say that they are actual people or spirits which are really present but which, although their presence is actually known or felt, are never seen.

It struck me, while browsing through the list of members one evening recently, that we seem to have quite a few "ghosts" among us, if the latter of the two definitions is accepted. There are certainly some members who never come to any of our meetings, and, apart from the fact that they have paid their subs and are sent a Journal each month, might be mere figments of imagination. They can't realise what they are missing in the friendly Social spirit which exists in the Club, and we in turn would like to see them and welcome them to our fishy fraternity,

/Cont

So here is a special invitation to all you ghosts":-

Your "presence" is requested at the usual "haunts" -Liberal Hall, Clarence St. , on Wednesday May 7th, and at subsequent meetings. We "ex-spectre" see you there, and don't be afraid to "spook" until you are "spoken" to.

R.S.V.P.

by: **The Editor.**

When I asked one or two members recently what they liked reading, I was referring of course to things Aquaristic, but the difference in opinions as to what constitutes good reading set me thinking. For instance, one well-known character said without a trace of shame, "La Vie Parisienne" - adding something about appreciating the bare facts; another preferred Dickins; while a third could only recall having read one book in his life, and said he thought it had been entitled "No more Kids for Mrs. Blandish" or something.

Well, what do you like? ~ and this time I mean strictly as far as our Monthly Journal is concerned. It is not possible to please all the people all the time, so surely there must be types of articles which you would like to read which perhaps have not yet graced our pages. Quite frankly, when I took on this job last year I expected within a few months to be bombarded with cries of, "Why don't we have more "What about more articles on such "Shoot the Editor!", but not a bit been so quiet.

I would dearly like to be able to start a correspondence column, so why not let me have your likes and dislikes? Your criticism of the Journal is especially invited; I shan't say "Everyone is so rude, I'm going to give up the job and leave the Club", - not a hope,

Also we could with advantage run a "Your Questions answered" page. We have some good talent for answering problems among our own members, and sound replies can always be obtained from expert sources; so please do write in and let me have your queries. I might add, Please write in »- Period!

ENTRIES FOR BREEDERS CLASS ~ ANNUAL SHOW 1953.

Mrs. R. H,Harris - 3 Spot Gouramies spawned 26/3/52.
Siamese Fighters spawned 19/3/52,

OBSERVATIONS ON THE WHITE CLOUD MOUNTAIN MINNOW

by P.Blomfield

Most members will be well acquainted with this hardy and most attractive little fish, which has its natural habitat in South Eastern China, but it may not perhaps be so widely known that there are in fact two different species, and from observations made by Mr. George Cooke and the writer during the last year or so it would appear that, apart from having quite marked variations in outward appearance, there may be a difference in their brooding method,

There is little if any difference between the two species as far as size and shape of body and fins are concerned, and both have the silvery blue streak down the centre of the body, but in colouration of body, tail and dorsal and anal fins there are noticeable variations. The two species in question are *Aphiocypris pooni* and *Tanichthys albonubes*; the body colour of the former seems darker than that of the latter, and the back of the fish shows a darker bottle-green hues in the former, the red patch covering the caudal peduncle and spreading into the caudal fin (tail fin) is larger and of a deeper red, and finally, and this is the most easily noticeable, in the case of *Tanichthys albonubes* the dorsal and anal fins carry a bluish-white fleck at their extreme ends ~ this is completely absent in *Aphiocypris pooni*.

Mr. Cooke in his observations of the breeding of a pair of *Aphiocypris pooni* has found that slightly increasing quantities of eggs have been produced at regular daily intervals for about a period of three to four weeks, at the end of which time young fishes have been found in the tank (in which the parents were allowed to remain all the time) ranging in size from half an inch to newly hatched fry still clinging to the glass in the pre-free-swimming stage. This would seem to indicate that it might be usual for this species to spawn in small numbers over a considerable period of time.

In my own experience using pairs of *Tanichthys albonubes*, I have found that they spawn each time- in a manner similar to the Danios, vigorous chasing taking place, and the female being completely "emptied" in a matter of an hour and a half to two hours; and on three separate occasions last year, using two different pairs of this species, totals of from 80-100 fry have resulted in this manner.

CONT

This might indicate that it is usual for this species to spawn completely in a short time, with intervals of only long enough for the female to reproduce another full complement of eggs before a further spawning takes place.

The ultimate quantity of fry resulting from the two different methods of spawning appeared to be similar, and it is now intended to carry out experiments on spawning a male of one species with a female of the other to observe whether there is any preference of method. Also it will be interesting to discover whether they will hybridize successfully, if so whether one species will predominate or whether only one species will be produced.

We should be most interested to hear, from any members who have bred White Clouds, which type they have used and which method of spawning resulted.

Note *Tanichthys albonubes* is, according to identification given to Mr. Innes by Mr. Lin of Hong Kong, the true White Cloud Mountain Minnow. *Aphiocypris pooniis* found in a river area, inland from Hong Kong; and there is, I am told by the Natural History Museum, a third species which is so far unidentified.

From information given us by Mrs. P. Sullivan, enquiries are being made from Aquarists in New Zealand, where apparently White Clouds are also bred frequently, as to their experiences, and it will be most interesting to see whether or not a parallel to the foregoing observations can be found.

Spawning White Clouds

by .Mrs. P. Sullivan

These beautifully coloured fishes, which have been called the "poor man's Neon Tetra", are excellent subjects for breeding by beginners, as they are easy to rear and need no special diet. I have been breeding them for three years and use what I think to be an easy and effective method. A large tank should be used - at least 24 x 12 - and although the fishes should be started off in fresh water, the tank should have the sides and front nicely coated with algae, and I always have the back painted black to show up the brightly coloured youngsters, and the tank planted with *Vallisneria* and Indian Fern.

Two plump females and three good sized males are introduced into the tank with the water temperature between 70-80°, the temperature is allowed to stabilise itself at about 68° and the fishes are fed on fine dried food.....

CONT.....

.... they must be allowed strict privacy, and in a few days tiny fry will be noticed clinging to the glass: the parents are allowed to remain with the fry, showing no inclination to devour them, and in about 5 — 6 months the tank is found to be full of fine White Clouds. Nothing could be simpler, ~ no fuss, no expensive food, just a constant sprinkling of fry-grain for the babies.

Should snails become a nuisance in the tank, a cabbage leaf should be floated on the surface for a day .at a time, and the snails which will be strongly attracted to it can easily be removed complete with leaf.

Breeder's Glass - Annual. Show 1932.

With our Annual Show (August 2nd~5th) now less than four months away, members are reminded that all prospective entries, for the Breeder's Class (Barnes-Oake Cup) must be registered, at a fee of 6d. per entry, with the Club Secretary Mr. Giles, and an announcement of the entry made in this Journal.

One entry shall consist of 6 fishes of any species, coldwater or tropical, bred by the member since the 8th August 1951 and the actual date of spawning or birth must be given.

This class was a great attraction last year,' and received most favourable comment from the Judges - so come on you Breeders, let's be having your entries! Remember, age or youth is no handicap, fishes being judged on their size etc. with their particular age in mind.

Member's Ads.

36 x 10 x 10 tank - plate glass bottom : Bargain 30/-
Bargain Pair digger Barbs Adult - ready to spawn : 15/-
1 young male Nigger Barb 5/~.

Mrs. P. Sullivan,
12, Burleigh Mansions,
Station Road,
West cliff.

Incidentally, Mrs. Sullivan would also like to express her thanks to members who have enquired after her husband's health. Mr. S. is apparently well again, and we shall look forward to seeing them both again at future meetings.

Editor.

Whit Monday Show

' On Whit Monday, June 2nd. The South East Essex Junior Aquarist Society is folding its .first Annual Show at the Girl Guides Hall, Electric Avenue, Westcliff. The Show will be open from 11 a.m. until 9 p.m. and it is hoped that as many of our members as possible will support this, their first venture, by paying a visit.

=====

-
-
-
- 47 ~
-

Imported v. English.

By "Jack" Brooks

This article may perhaps interest only those members who are breeders of fishes and those who hope in the future to do the same, and first I should like to say that although the following is purely my own point of view, it has also been expressed by other dealers throughout the country from time to time.

Whenever the topic of conversation is Imported and English bred fishes, it invariably ends with the question of White Spot v. Cost. When possible I like to buy fishes from local breeders, as not only are they usually free from disease, but some measure of encouragement is offered to the Aquarist; but they are invariably dearer than imported fishes, and of course there is not the variety available.

Why are English bred fishes dearer than Imported? The main reasons given are that they are in fact English, and free from White Spot? but I say that any fish sold by us is free from W.Spot and that NO EXTRA CHARGE is made for this. All fishes, whether from home or abroad, should be quarantined for at least 14 days; W.Spot is spread mainly through carelessness, and the fact that fishes are English bred need not necessarily mean that they are free from it. Also it is often found that Imported fishes are younger and of better colour than their English counterparts of a similar age, which fact may be due to more ideal water conditions and an abundance of live foods available for the fry.

If English fishes are dearer because the amateur wishes to cover his expenses then surely he cannot be getting the success from his spawnings that he should. When one considers that the Continental breeder has all the normal running overheads of local people plus freight charges, duty etc, and then has to sell to an importer who then supplies the dealer, and that the fishes are still finally cheaper than English bred ones, one can hardly wonder at the dealer preferring them. The dealer has his living to think of, and he must at all times consider competition in prices: with the local amateur it is usually no more than a Hobby !

We are, of course, always willing to give you our support, providing we can afford to, and in some cases where specimens produced by our local breeders are superior to Continental fishes, most dealers are willing to make price concessions: but I feel that it should work both ways.

Editor's Note;

It seems that the foregoing opinion might be open to a certain amount of controversy, and we should be happy to print any ideas which members might have on the subject.

"Patients are a Virtue".

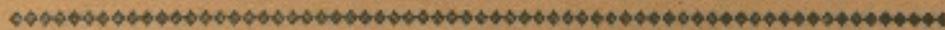
By: M.C. Mash.

He kept a fish - his dearest wish was proving its variety;
He met a chum, who said, "Do come and join our fish Society".
Elected, he then paid his fee, and went to many a meeting-
He heard with awe the experts jaw on Plants, on Light, on Heating.

Then came the day when things were grey, his fish this lifedeparted;
'Twas his belief - he spoke with grief - "They had died broken-hearted".
Like those before, he bought some more, and sought advice from others.
They thought he must have too much light, and should invest in covers.
Alas ! poor clot, he lost the lot, for what he'd done was wrong;

The experts said his fish, now dead, required the light more strong.
Some said the fault was too much salt, or else, "You need aeration";
He wept, and said, "I need instead some other recreation.
"More heat", "Less light"; - confused, yet quite determined to succeed, ho
Became quite rash and spent more cash, - his family thought him greedy.

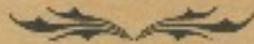
The days went past, his loss was vast; he tried suggested ruses
"More light", "Less heat", "Chopped worms", "Raw meat",- he monddod scores of fuses.
His water fleas passed on disease - white spot, gill worms and velvet;
Fresh Tubifex he bought in pecks, but found he couldn't. shelve it.
Then fortune swung, he bred some young Gouramies - 'twas exciting;
Full seven score, then millions more. Success had crowned his fighting!
So don't despair or tear your hair if luck is mortifying;
You'll find, in time, success sublime, - by dint of patient trying.



As you receive this Club Journal you are probably one of many Enthusiastic Aquarists — SO ARE WE, and believe in giving our fish the very best attention before sale so that we can feel proud to show them to you.

We supply many proved varieties of foods suitable for Tropical or Cold Water Fish, together with Plants & Accessories. An interest is taken in your problems as well as your Custom and we will Help and Advise in both.

We do not claim to be a Large Concern, but we Endeavour to Equal all for Service & Fairness.



MEET YOUR FRIENDS FOR A LOOK ROUND & CHAT

AT

THAMES AQUATICS

(B. LOVEGROVE)

48, YORK ROAD, SOUTHEND-ON-SEA, ESSEX

WHERE YOU WILL BE WELCOME AND MAY FIND JUST WHAT YOU WANT

IN

Tropical or
Cold Water Fish

Garden Ponds
Made & Stocked

Plants & Accessories

Aquariums of all sizes supplied
Immediate Aquarium Repair Service in Emergency

Servicing of Aquariums in your
own Home at Moderate Charges



SERVICE

CIVILITY

SATISFACTION

CROSS & YOUNG

Aquatic, Pet & Aviary Supplies



We invite you to inspect our selection of **TROPICAL FISH**. (The largest stock in the district), consisting of 30 Aquariums containing 50 different species including our specially home bred Angel Fishes, one of which took 1st Prize in the 1951 Southend Aquarist Society's Show.

*Goldfish, Shubunkins & Coldwater Catfish.
Budgerigars & Singing Canaries
Guinea Pigs, White Mice Etc.
Cages, Sand, Bird Seeds &
all Pet Foods.*



COMPLETELY FURNISHED AQUARIA . . . PLANTS, EQUIPMENT & ACCESSORIES
REGULAR SUPPLIES OF TUBIFEX & DAPHNIA

1-5, Nelson Drive, Leigh Road

(BETWEEN CHALKWELL PARK & CORONA CINEMA)

Telephone: LEIGH-ON-SEA 77721

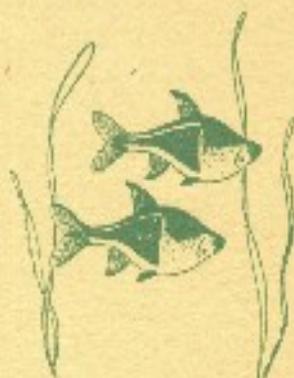
THE SOUTHEND, LEIGH & DISTRICT
AQUARIST SOCIETY

Vol. **5**

No. **5**

.... **MAY** 1954

MONTHLY



JOURNAL

Editor: P. Blomfield, 90, Beach Avenue, Leigh-on-Sea.

Hon. Secretary: H. A. Giles, 72, Sandringham Road, Southend-on-Sea.

AVAILABLE TO MEMBERS ONLY

SOUTHEND LEIGH AND DISTRICT AQUARISTS' SOCIETY

MONTHLY JOURNAL

Vol.5. No. 5.

May 1952

The Society meets at 7.45 p.m. on the First and Third WEDNESDAY in each month, at:-

THE LIBERAL HALL,
Clarence Road, Southend-on-Sea.

EDITORIAL

Dear fellow members,

Aquaristic chroniclers, doctors and psychiatrists have done their best during recent years to convince an ever gullible public that the keeping of fishes in indoor aquaria is a pastime conducive to peace of mind, evenness of temper and freedom from worry. Can they have had actual experience of the crystal water which turns remorselessly to pea soup, the cherished plants which succumb to the ravages of blue-green algae, the prize-winning pair which steadfastly refuse to spawn, the record brood of fry whose numbers dwindle unaccountably to zero, the heater or thermostat which chooses 2 a. m. on a January morning to confound its maker's guarantee? Many a fish-house bears its quota of footprints up the wall, shattered glass and handfuls of human hair, as mute evidence of the carefree bliss of fish-keeping. And now that the holiday season is at hand, we have the added concern of what to do about the fishes while we are away.

In the case of the Community tank; rather than leave the feeding in the hands of someone completely inexperienced, it would be better to leave them without altogether for two weeks - they can take it quite comfortably, but it would be an advantage to reduce the temperature slightly, say to 70°, thus making them less inclined to want to feed. Better still, why not arrange for a fellow Club member to let himself in two or three times just to see that everything is alright, - this sort of friendly gesture should be a part of our Club spirit one with another, and our holidays will be made the more carefree for knowing that our fishes are in safe hands.

Yours most sincerely,

P. Blomfield. (**Editor**).

CLUB NEWS

by: The Editor

On Wednesday evening, April 16th, we were privileged to hear a lecture by Captain Peter Mash, son of our own Mr.M.C.Mash on Reptiles, and this was made particularly entertaining by the photographs which were shown with the aid of an Epidiascope, and which, from the rapt concentration of the audience, were received with intense interest.

Capt.Mash opened by outlining three main orders of reptiles, which he said were characterised by being all vertebrates, cold blooded, scaled and lung breathing:-

CHELONIA: Tortoises, Turtles and Terrapins.

LORICATA: Crocodiles and Alligators.

SQAMATA: suborder **LACERTILIA** – Lizards.
suborder **OPHIDIA** - Snakes.

He stressed that there were similarities in the Lizards and the Snakes which placed them in the same order, and then went on to outline the seven classes of Snakes in the sub-order **OPHIDIA:**

TYPHLOPIDAE: the burrowing Snakes.

BOI DAE : the constrictors, boas, pythons;
the largest, of all Snakes, non-venomous, the greatest length measured being 33½ feet for a Malayan Reticulated-Python and also a South American Anaconda or Water Boa. They swallow very large prey, and may weigh as much as 350-300 lbs.

COLUBRIDAE: harmless and rather small, eat live prey, and include the Rat Snakes, Grass Snakes, Whip Snakes, and Tree Snakes.

EL API DAE: all very venomous though not usually larger than 4-5 feet:- Cobras, Mambas, Coral Snakes, Kraits and King Cobras, the last named, growing up to 18 feet, being an eater of other snakes.

HYDROPHIDAE; these inhabit the Indian and S. W. Pacific Oceans, are livebearing and very poisonous,

VIPERIDAE: another venomous class, having very long fangs which are hinged - lying back flat along the roof of the mouth when not in use and springing out on striking; included are the Puff Adder, Vipers and the European Adder,

/Cont.....

CROTALIDAE; the Pit Vipers - all extremely venomous -Rattlesnakes, Copperheads, Water Moccassins, Bushmaster ' and the notorious Fer-de-lance. These all' inhabit the American Continent. Capt. Mash went on to say that Snakes have no external ears but were very sensitive to vibration!; they smell through their tongues (rather like taste at a distance), were short-sighted, and would rarely attack humans except through fear at being disturbed or attacked themselves. When they did strike at their prey, the actual strike was too quick for the human eye to follow, and in the case of the very venomous species death would probably occur from 24 to 42 hours afterwards if not treated quickly with the appropriate serum; cases of death within only a few minutes were usually due more to shock, and if one's constitution and health were particularly good the bite possibly might not prove fatal even if untreated.

The venom of the **COLUBRIDAE** caused paralysis of the nerves, while that of the **VIPERIDAE** caused severe internal and external haemorrhage. Snakes themselves were almost completely immune -from venom owing to their extremely slow blood circulation, and could exist for long periods without food, members of the order **BOLIDAE** having been known to fast for months, while a large Python in the Paris Zoo went for 2½ years before having to be fed forcibly.

Having given-us the low-down on the "ballyhoo" of Snake charming, Capt. Mash showed his many photographs, the highlights of which were a close-up of a Cobra in particularly menacing attitude, the intrepid author handling a deadly Russels Viper, and a magnificent "shot" of a Python actually constricting a large Indian Monitor. There were also on view some fine specimens of Grass snakes and Adders, one of which was resplendent in his new skin«

This was undoubtedly one of the most interesting lectures we have had for a very long time and as well as thanking Capt. Mash for its excellent delivery, we are most grateful to Mr. Mash for the use of his live exhibits and for the general organisation. Thanks too to Mrs. Baker, and Mrs. Carter for the usual smooth organisation of the refreshment.

The meeting on Wednesday May 7th was a Table Show for Mollies and Danios, and while the judging was in progress Mr. W Hoare gave an informal talk on his experiences in breeding Dwarf Gouramies, Zebra Danios and

/Cont....

Black Widows. He told us that he always preferred to spawn Dwarf Gouramies in green water which was well matured in a large tank thickly planted with *Vallisneria*, and to keep the fry on infusoria for at least 3 weeks before switching to Micro worms, and he warned against the moving of plants in a tank which had been set up for a long time as harmful gases could be released from the compost with injurious effects to fry.

With Zebras he used fresh new water, being careful to avoid hot systems involving the use of copper pipes or storage tanks, and spawned 2 males with one female over wide mesh netting to act as an egg trap and in the case of Widows he recommended the use of young fishes - about 9 months - old water, a thickly planted tank, and a high temperature. Finally Mr. Hoare stressed the necessity for bringing all fishes to first class condition before attempting to spawn them, and he thought that no finer food could be found than earthworm for this purpose.

The results of the Table Show, were:-

Danios:

1. Mr s.Harris.
2. Mrs Gibbs
3. Mrs Harris

Mollies

1. Mr s, Gi bbs
2. Mr s. Sweetenham
3. Mr. Connor.

Mr. Blomfield spoke for a few minutes on his recent experience of procuring, identifying and breeding some Dwarf Cichlids from South America- '*Nannacara taenia*', and what had been a very pleasant informal evening finally ended at 10 o'clock.

Our thanks to Mr.Hoare; to Mr.Saunders for his judgement; and to Mrs. Giles and Mrs. Harris, for the usual good fare; and our congratulations to the worthy winners.

VISIT TO THE ZOO.

On Sunday April 27th the sun shone and a party of 37 souls set out from Southend in what must surely be one of the most luxurious coaches in the business, and, after a brief halt for coffee on route, arrived at the London Zoo. Mr.Mash collected his winnings for having the lucky number "on the wheel", and we made straight for the Aquarium where followed a most entertaining peep behind the scenes. We marvelled at the intricacies of the heating, filtration and pumping systems, had our finger tips soundly chewed by some huge carp,

/Cont.....

flirted these same fingers dangerously near a giant lung fish, saw a fine brood of *Hemichromis fasciatus* Cichlids, with the parents in magnificent colour making vicious lunges at us through the glass, cast covetous eyes at a large tank full of newly imported Harlequins, and envied the lavish use of Daphnia which is apparently cultured in one of the big Aviary ponds. ^

Next came lunch, and various parties went their several ways. Some of us were taken backstage in the Reptile House where we soon became festooned with Pythons and young Alligators, and were much intrigued to hear the actual rattle of a Rattlesnake ~ prompted by a timely prod from the Keeper. Others witnessed the ever thrilling spectacle of Lions disposing of a year fo meat ration in a couple of growls and a swallow, or Sea-lions leaping and diving for fish, but perhaps the most interesting spectacles of all were George Cooke queuing for tea and that rare species *Librarius mashi* wolfing salmon sandwiches from a paper bag,

The journey home was interrupted for a meal at Seven Ways, Ilford - and excellent it was too - and we finally reached home around 8.45, perhaps a little tired, but all in agreement that it had been a wonderful day, and very grateful to George Cooke for yet another most successfully organised and executed outing.

FORTHCOMING EVENTS.

Wed, June 4th: Table Show - Fantails and Veiltails.

(An entry form is enclosed in this Journal and should be filled in and handed to the Show Sec. together with fee of 6d. per entry on the actual night)-also a Non-competitive show of Reptiles.

Wed, June 18th: Competition night - 30 Questions, Quiz - etc,

N. B. If you do not use this Form, please return it to the Editor at the next meeting; ~ paper is not- only expensive but hard to come by!

- 54 ~

-

FISH ANATOMY.

By Roy V. Edwards.

Skin and Sex Reversal.

t

The skin of the fish is composed of two main layers:-

- (a) Inner layer - **DERMIS.**
- (b) Outer layer - **EPIDERMIS.**

The Dermis consists of connective tissue in which are found nerve fibres and blood vessels, and arising from it is a layer of scales - the EXOSKELETON. These scales overlap to form a definite pattern which follows the lines of the **MYOTOMES** or blocks of muscle beneath them; there is a definite number of scales, which is fairly constant for each species of fish. In growing, the scales form a ring of bone during each year, and it is thus possible to find the age of a fish by counting the number of concentric rings on any scale. Scales are transparent and merely show the colour of the pigment cells (**CHROMATOPHORES**) in the Dermis below them. The metallic shiny appearance is due to reflecting tissue, lack of which results in the matt fishes or those which appear transparent.

The **EPIDERMIS** is the layer of tissue which secretes the slimy mucus covering the body, which protects the fish from parasites and disease.

Since fishes are the lowest of the vertebrates, they are not far removed from the **HERMAPHRODITE** invertebrates - actually they contain both sex organs, male and female. One set of organs degenerates leaving only one sex. If, however, some form of organic upheaval occurs which upsets the dominant organs and they are destroyed or so damaged as to cease to produce sex hormones, then if the degenerated set are still in working order they may grow and take the place of the damaged ones. It is seldom that a male reverts to female, but not uncommon for a female to revert to a potent male, and the phenomenon is far more common in Livebearers, although Fighters and Paradise fishes have been known to "suffer". Sex reversal has been stimulated artificially by feeding with Hormone foods at an early age before the fish have matured, resulting in the degeneration of one set of sex organs. However, great damage can be done by haphazard feeding with Hormone foods unless one really understands what one is doing, and it will be found

/Cont.....

interesting to read Dr.van Dorp van Vliet's report on his experiments in Water Life - December 1949.

I will finish this series as I began by saying that although the information therein is true in the main, I have, in order to obviate long complicated explanations, offered "half truths" in some instances, in the interests of simplicity.

However, I hope that you will have found the series interesting and instructive, and that it will enable you to consider your fishes in a new light.

OUTING, TO SOUTHSEA AQUARIUM.

by: G. Cooke.

Our next Club outing has been arranged for Sunday 23rd June, to the Southsea Aquarium recently opened by the Authorities there.

It will be a longish trip by coach through some lovely country - through Surrey and over the South Downs - a journey of about 4 hours each way.

The cost will be 15/- per head completely inclusive, and would those wishing to come along please book their seats and make their payment to me either at a Club meeting or at 109, Boscombe Rd, Southchurch

Don't forget, by the way, that odd amounts may be paid in advance at intervals on account for any particular outing. I stress this for it is often a more convenient method of covering the cost; and I, as a mere Husband and Father, know this only too well.

ENTRIES FOR BREEDERS CLASS - ANNUAL SHOW

Mrs K.Outing;	Black Mollies - born 28.4.52,
	Siamese Fighters ~ spawned 28.4.52.
	Beacons - 29.4.52.
	Yellow Wagtail Platies ~ born 28.4.52.
	Black Widows - spawned 1. 5. 52,
Mr. E., Smith;	Dwarf Gouramies- spawned 6.4.52.
Mr. W. Donges:	Tiger Barbs - spawned 23.4.52.
Mr. F.Walker:	Siamese Fighters - spawned 24.4.52.
Mr.P, Blomfield:	<i>Nannostomus anomalus</i> - spawned 10, 4. 52.
	<i>Nannacara taenia</i> - 25. 4.52.

IMPORTED & HOME BRED.

by G. Willis

As stated by Jack Brooks, dealers are in the fish business for their livelihood not as a philanthropic institution for the amateur aquarist.

Before proceeding to expand on two points in his article I would like to comment on the statement that all fish sold are free from white spot. If however he means VISIBLE signs of the disease, I agree with him; but it is now generally regarded as a fact that all fish have white spot just as all humans are infected with tuberculosis, but the actual manifestation of the disease only occurs under favourable - or to the aquarist, unfavourable - conditions.

Now for the points on which I would like to enlarge: Colour and size and cost, I agree that imported fish are on the whole of better colour than their home bred counterparts but I rather doubt the contention that this is due wholly to the amount of live food the fry received.

We readily agree that the Continental breeders are more scientific in their approach to the subject than we amateurs. They have to be - it is their living. We depend upon luck. Luck in being present to remove fish when spawning is complete and before the eggs are eaten; luck in availability of live food; luck in having ample tankage to raise the resultant brood; and even greater luck in the choice of partners who will faithfully feed the fry at frequent intervals when we are not available to do this ourselves. In fact it is only by luck that we have any luck! If we could devote full time attention to our fishes I have no doubt better fish would result from our efforts. The amateur is always limited in the number of fish he can raise by accommodation difficulties; the continental breeder on the other hand starts with a large establishment because it is going to be his livelihood. Given ample time, space and a sufficiency of live foods I maintain that we amateurs could put up as good a show in our spare time as the continental breeder. The trouble is that the majority of us are guilty of overcrowding and underfeeding with live foods,

Nearly all new prepared fish foods originate from the continent, indicative of the time and expense devoted to research carried out by the continental industry and this I think has a lot to do with the improved colouration of the continental imports. Two examples readily spring to my mind. Compare a shoal of imported flames with their washed out English counterparts, . Spawn a pair of the continental ones and still we often obtain fish of poorer colouration than the~originals at a comparable size,

/Cont.,,

I agree with Jack Brooks, that imported fish are on the average younger than the home bred counterparts offered of the same size, and support his contention that this is due to feeding on largely live food. The continental aquarist breeds his daphnia; we, unless lucky enough to know a source of supply (nearly always seasonal), depend upon the dealer for this food and tubifex. Most dealers inform us that they make little or no profit from these sales, they are merely a service for their customers. I would like to get evidence of this! If dealers want cheaper and better home bred fish let them reduce their charges for these services or increase the quantity while maintaining existng charges and so give amateurs a a chance to cut their costs of production.

In my own case with the rearing of 25 blood red fighters after infusoria (cheap - 1 potato), and "micro" (relatively cheap, only the cost of a Pyrex dish, porridge and milk), they cost me 5/~ per week for daphnia alone, and this was by no means the limit of their stomachs. On this, interspersed with brine shrimp at 2/6 per phial (compared with 5/~ per lb, retail on the Continent !) and chopped up Tubifex, receiving a minimum of twelve feeds per day, their rate of development was such that I consider they compare very favourably with those bred on the continent.

The result of this brood was 6 males and 19 females. It has taken over a year to produce this colour, combined with good finnage; yet, while dealers pay 7/6 for imported male fighters, some of which are anything but monotone (the most desirably character next to finnage), they almost faint when I ask this price for the home bred specimens. And of course the females are mostly a glut on the market,

So perhaps the local aquarists expenses may in some instances justify a good price.

ANNUAL SHOW COMMITTEE.

Plans for our Annual Show are under way, and the Show Committee, consisting of Messrs. Jack Brooks, W. Carter, G. Cooke, R. DuBoisson, and H. Giles is now in session. A great deal of organisation and hard wor.k is put into this Show each year by the Committee, and success cannot be guaranteed without the cooperation of all members. There will be the usual tickets to be sold, handbills to be distributed, staging to be erected, electrical wiring to be installed, gravel to be washed etc. etc, and it is hoped that there will be no dearth of volunteers for these jobs when the time comes, Mr, Half head has shown the way in this respect by very gallantly undertaking to glaze 60 small show tanks - no mean task for one man to tackle - thereby setting a splendid example to us all.

LECTURE by G. BARTMANN.

On Thursday May 15th twenty Club members went to Barking to hear a lecture given by Mr. George Bartmann, a celebrated German, ichthyologist and breeder of tropicals, who opened the talk by stressing that the benefit of "old water" was a myth and that fishes would remain far healthier in tanks where clean conditions prevailed, where filtration was used, and where regular syphoning away of quantities of old water from the bottom and replacing with fresh water was carried out. He said that old water, allowed to remain undisturbed in a tank for a long time, must become very heavily laden with microbic and bacterial life, thus creating ideal conditions for the "Container" diseases - those caused by external parasites which used fishes as their hosts for their own food and reproduction. We were then shown slides on an Epidiascope of various parasites of this type:- **COSTIA, CHI LODON, CYCHLOCHAETA, ICHTHYOPHIRIUS** (White Spot), **ICHTHYOPHONUS, CLOCHIDIUM**, and the types of Fish Lice.

The second half of the lecture was given to Mr. Bartmann's recommended method of breeding NEONS, with which he himself had been successful. He used an all glass tank 12 x 10 x 10, thoroughly cleaned with boiled water and filled to a depth of 4½" with distilled water. Then hot water was poured over dried OAK or ALDER bark and the solution allowed to cool ~ this solution being acid was then filtered through glass wool and used as an addition to the tank water to bring the pH down to 6.5, and the tank was then covered and allowed to stand for 2 weeks, at the end of which time, the water must be crystal clear. A bunch of Fontinalis (Willow Moss) was washed in an ALUM salt solution ~ 1 teaspoonful of Alum to 1.75 pints of distilled water, thoroughly rinsed, also in distilled water, and placed in the tank. The parent Neons, which must be over 9 months old and in good condition, were then caught in a glass dip tube and allowed to jump out of this into the tank so that no "unclean" water went in with them. During spawning the tank was kept fairly dark, and, as soon as the parents had been removed after spawning, it was covered to give complete darkness for at least 24 hrs. The light was very gradually allowed in after this time, but no feeding was carried out for 4 days, and then the first food was tiny newly-hatched brine shrimps. Infusoria feeding was not recommended owing to the chance of polluting the water and the temperature, was maintained at a steady 73.4 °F throughout. Mr. Bartmann also suggested the same method for success with the RASBORA genera (Harlequins, Scissorstails etc), and ended by saying that success could only be guaranteed by patience and scrupulous attention to detail.

Editor's Note:- And the best of luck !!!

WHO'D BE COLD-BLOODED?

by: P. Blomfield.

It is of course general knowledge that White Cloud Mountain Minnows will stand a great variation in temperature and can tolerate extremes at either end of the scale which would be "curtains" to most types of tropical fishes, but not until recently have I realised just how incredibly tough they are in this respect.

Three weeks ago I set up a large photographic developing dish, 22 x 20 x 7, in the open on an outside verandah with a view to the future spawning and rearing of White Clouds. This was duly filled and planted, and wired up to a Thermostat controlling a 38 x 15 tank in the adjoining room; not having much idea how to heat it to the best advantage, I first tried a 75 watt heater - the temperature was far too low; then I tried a 125 watt heater, and this seemed to give about 65° - 77°F over a period of 48 hours, so Mr. & Mrs. W.C.M.M. were introduced to "the great outdoors". Two days later we had our summer for this year, the sun shone, fruit blossom made a miraculous appearance, clouds were cast right and left, the migration of the genus *Trippler londonensis* to our shores commenced, and my White Clouds found themselves subjected to a temperature of 96°! This I considered a bit much, so they went heaterless during the day while the warm spell lasted, and- I then wired in a 100 watt heater with a resolution to keep a careful eye on the degrees. All went well for a couple of days ~ they still hadn't spawned - then came a return to more typical English weather, the rain fell, the wind blew, clouds were hastily retrieved, and one evening while snugly dozing before a very necessary fire I suddenly had a twinge of conscience, and donning mackintosh and gloves ventured out into the sub-arctic night complete with torch and thermometer to see how things were.

At first glance things couldn't have looked blacker - the temperature was 51°! Further glances, however, revealed the two fishes not only alive but twitching their fins and flitting up towards the surface as though expecting food, and they made the usual frantic efforts to avoid capture, but I finally netted them and floated them in a jar in their original tank before returning them there to await the return of more settled weather,

I am now most curious to know just how low a temperature they would stand, but, apart from the risk of losing two such gallant specimens, I wouldn't consider subjecting them to such an ordeal again.

COST ..OF A CUPPA.

IT has been found necessary to raise the cost of our "cuppa" at Wednesday evening meetings - this will now be 3d per cup. The cakes, which of course are made by our lady members of the Inner Man's Comfort Society will continue to be at the ridiculously low price of 1d each.

WHO'S ZOO?

We went to the Zoo ~ we had taken our lunches:
Some favouring nuts, some bananas in bunches.
The chief engineer - we'll call him George Cooke -
Stood up on the bridge and studied his book.
He then called the roll and, being polite.
He starts with the ladies - of course he's dead right:
Mesdames D, B,, Gibbs, Brocks- first names I'm emitting.
We KNOW they're all Christians, their action a befitting.
The Turners, The Thompsons, the Ycungs and the Crosses
Get great satisfaction from varicus sources.
Mr Smart, taking notes for "Slades" publicity.
Liked the spirit invoked by the chummy felicity,
Mrs.Giles, Mrs. Blomfield, both quiet and demure,
Repeatedly note if their purse is secure;
For one never knows with a "fish-wallah' s" outing,,
The Old Borstal Boys might be doing some scouting,
Mrs, Cooke did her stuff and her laughter was hearty:
'Twas avowed she was the life and -soul of the party,
Mrs.Noakes was, like others, enjoying the ridet
Her husband loves fish, but prefers them well friedl
We arrived at the "Park" and were met by the guide,
Who suggested the Bears or an Elephant ride.
But we were indignant - and so he was told,
We'd gone to see fishes- exotic and cold,
The fish were amazed at the sight we presented
The Turtle turned turtle and looked discontented,
The Sea-horses shied as if they'd been doped;
We one and all felt we were not what they'd hoped.
When we'd been round the Zoo, to us it was plain
The worry would be how to get out again.
The onus was on us - to lose or to win -
We'd all walk out backwards as though going in.
The transport was faultless, and transports of joy
Made pulses beat fast like a cheap clockwork toy.
We returned to the old town with whirling of brain,
For none of us thought we'd e'er see home again.
There was Horace and Reg making cracks with the driver.
And Peter, the Ed., with some Python's saliva,
Mrs.Ridgeweli suggested there'd be a petition
Amongst all who went, for a second edition.
When you've read thro' these lines, if your name io omitted,!
Forgive the poor poet - he's only half-witted!
Hi a rhymes are appalling - his words are "phenomenous":
He deserves all that's coming.

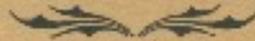
Yours truly, ANONYMOUS



As you receive this Club Journal you are probably one of many Enthusiastic Aquarists — SO ARE WE, and believe in giving our fish the very best attention before sale so that we can feel proud to show them to you.

We supply many proved varieties of foods suitable for Tropical or Cold Water Fish, together with Plants & Accessories. An interest is taken in your problems as well as your Custom and we will Help and Advise in both.

We do not claim to be a Large Concern, but we Endeavour to Equal all for Service & Fairness.



MEET YOUR FRIENDS FOR A LOOK ROUND & CHAT

AT

THAMES AQUATICS

(B. LOVEGROVE)

48, YORK ROAD, SOUTHEND-ON-SEA, ESSEX

WHERE YOU WILL BE WELCOME AND MAY FIND JUST WHAT YOU WANT

IN

Tropical or
Cold Water Fish

Garden Ponds
Made & Stocked

Plants & Accessories

Aquariums of all sizes supplied
Immediate Aquarium Repair Service in Emergency

Servicing of Aquariums in your
own Home at Moderate Charges



SERVICE • CIVILITY • SATISFACTION

CROSS & YOUNG

Aquatic, Pet & Aviary Supplies



We invite you to inspect our selection of **TROPICAL FISH**. (The largest stock in the district), consisting of 30 Aquariums containing 50 different species including our specially home bred Angel Fishes, one of which took 1st Prize in the 1951 Southend Aquarist Society's Show.

*Goldfish, Shubunkins & Coldwater Catfish.
Budgerigars & Singing Canaries
Guinea Pigs, White Mice Etc.
Cages, Sand, Bird Seeds &
all Pet Foods.*



COMPLETELY FURNISHED AQUARIA . . . PLANTS, EQUIPMENT & ACCESSORIES
REGULAR SUPPLIES OF TUBIFEX & DAPHNIA

1-5, Nelson Drive, Leigh Road

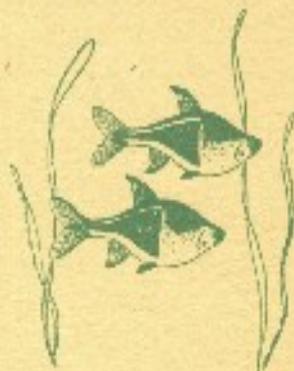
(BETWEEN CHALKWELL PARK & CORONA CINEMA)

Telephone: LEIGH-ON-SEA 77721

THE SOUTHEND, LEIGH & DISTRICT
AQUARIST SOCIETY

Vol. **5** No. **6** JUNE 1954

MONTHLY



JOURNAL

Editor: P. Blomfield, 90, Beach Avenue, Leigh-on-Sea.

Hon. Secretary: H. A. Giles, 72, Sandringham Road, Southend-on-Sea.

AVAILABLE TO MEMBERS ONLY

Metropole Aquatics

Proprietors: C. G. BROOKS — C. J. SAUNDERS

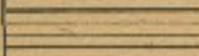
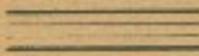


**534a, LONDON ROAD
WESTCLIFF-ON-SEA**

Telephone: SOUTHEND 45991



Stockists of Tropical and Coldwater Fish All Pet Foods and Aquarists' Accessories
--



SOUTHEND LEIGH & DISTRICT AQUARIST SOCIETY

MONTHLY JOURNAL

Vol. 5, N o.6

.June 1952,

The Society meets at 7.45 pm. on the First and Third WEDNESDAY in each month, at:-

THE LIBERAL HALL,
Clarence Road, Southend-on-Sea.

EDITORIAL.

Dear fellow members,

The other day I chanced to meet a type I used to know in the now dim and distant days when we lived like nomadic arabs in the Western Desert, and to my inevitable question "What are you doing now?" he replied, "Writing, old boy!" I couldn't resist asking him, "Best sellers, or rude things on walls?", and with a wry smile at my feeble joke, he told me that he was trying to scrape a living as a writer of short stories for magazines. He had some scathing things to say about Magazine editors who, he felt sure, took a fiendish delight in rejecting and returning his copy "The trouble is they have so much stuff to choose from they don't know what to do with it" - was about his only printable remark.

Although he had my full sympathy, I couldn't help marvelling at the perversity of fate that, while some Editors should be inundated with articles and stories, I, in my humble capacity, seldom know where the next month's Journal is coming from.

This Journal of ours is not meant to be an Encyclopaedia of fishy knowledge, but merely a chronicle of what goes on in the Club. You members always have plenty to talk about when you get together, - why not make a few notes on your various experiences and send them along to me for inclusion in our Magazine. The more the merrier, - I am just longing for the chance to "reject and return" like a real dyed-in-the-wool" Editor.

Yours most sincerely,

P. Blomfield, (Editor).

CLUB NEWS.

by:- The Editor.

On Wednesday June 4th there was a Table Show for Fantails and Shubunkins, and a very attractive display of Reptiles by Mr, Mash and Mrs Sweetenham.

Mr Jack Brooks Judged the Coldwater fishes, and the standard appeared to be very high; results were:

Fantails

1st- Mr, M.C. Mash
2nd. - Mr. M.C. Mash
3rd. - Mr. J. Cowan

Shubunkins

1st - Mr W. Hoare
2nd - Mr W. Hoare
3rd- Mr W. Hoare

The reptiles were of course non-competitive, and we saw some very nice Grass Snakes, Slow Worms, Terrapins, Great Crested Newts, Common Toads, and British Vivaporous Lizards.

The first half of the evening was given over to a quiz, with a team, comprising Mr Sykes, Mr D-B, Mrs. Cooke and Mr Smith, against a team made up of Mr, Cotgrove, Mrs. Gibbs, Mr. Hunter and Mr. G, Willis. The questions, set by Mr. Saundors, were very varied, but apart from some heavy vweather over the Cold-water questions, both teams scored well. The second team finally emerged the winners by the narrow margin of 21 points to 19.

The second half comprised a general a "Questions answered " session, in which members put queries, the answers to which were invited from the Hall, White-Spot, Leeches, Planarians, Micro worms, the effect of Quinine and Mercurochrome, and the introduction of fishes into fresh tap water were discussed, and the exchanges in ideas resulted in a great deal of interest, amusement and increased knowledge.

Our congratulations to the Table Show winners, and our thanks to Mrs, D-B, and Mrs. Blomfield, who dispensed the refreshments.

=====

Forthcoming Events.

Wednesday - July 2nd.. - Annual Show talk (see separate article)

Wednesday - July 16th. - Visiting Lecturer.

– 53 -

–

–

– **THE ANNUAL SHOW**

As you all know, we are holding our 5th Annual Show at Clarence Hall, Clarence Street, Southend on August 2nd, 3rd, 4th and 5th (Bank Holiday week-end), and if ever there is a time during the year when the Club spirit proves or disproves itself- this is it!

It is becoming a legend that our Shows improve with the years, and this one is going to be no exception if our Show Committee are any judges.

It should be a piece of cake! we have some 130 members, and allowing for the fact that some will be away and some just unable to make it, there should be plenty of hands to make light of the work; - but only if EVERYONE helps. On the Wednesday, Thursday and Friday evenings immediately prior to the opening of the Show there will be a thousand and one jobs to be done, and it is during this time that the success of the whole thing can be made or marred.

To illustrate the sort of effort that can be made by a Club member - Mr. Halfhead has just completed the glazing of no less than 60 small show tanks; and the Show Committee wish to place on record their thanks to him for this fine effort.

N.B. The meeting on Wednesday will be given to a Show talk, and at this, members will be asked to take on certain vitally important, though not necessarily arduous tasks of preparation. It is to be hoped, therefore, that there- will be a really good attendance on that evening.

Finally, - by now you will have received your Show Entry forms. Please enter as many fishes as you can, and do please make a special effort to enter a Furnished Aquarium, - you may either use your own tank (all 24 x 12 x 12) or one will be loaned to you for the purpose.

Members wishing to borrow a tank for this Class should state so clearly on their Entry form. Members who wish to carry out the feeding of their own fishes at the Show should stick a small white disc of paper in the top left hand corner of each tank - **BUT ONLY AFTER THE JUDGING HAS TAKEN PLACE.**

EXPERIENCES WITH *Nannacara taenia*

by P. Blomfield

About the middle of April I wandered into a dealer's in the West-end of London "for a look round, and having asked for a phial of brine shrimp eggs- which owing to the present shortage, I guessed they wouldn't have -just to justify my presence in the shop, I noticed in a large tank, along with sundry other small fishes, some specimens of a type I had not seen before, They were obviously of the Cichlid family, but my enquiry as to their actual name was unsuccessful, and as the proprietor was away at the time, I had no immediate means of finding from whence they had come. The good, folk in the shop were apparently anxious to get rid of them as they said they were bullying and biting the other fishes and were obviously not good community types, and after a little crafty haggling I finally emerged with all ten of them at what seemed a ridiculously low price.

In spite of my pleasure at acquiring the little chaps - they were no more than 1¼" long - I couldn't help wondering if they might turn out to be merely youngsters of one of the types of Cichlid which grow very large, have a sour disposition towards all other fishes, a rooted dislike of plants, and have to be kept in single or paired isolation, Searches through Innes and other well known books, and enquiries at the Natural History Museum failed to provide positive identification, and then, after they had been in their quarantine tank (24 x 6 x 6) for just a week, things began to happen. !

First I noticed that about half of them appeared to have slightly different markings, - apart from the light sandy background colour and dark brown horizontal line common to them all, some showed a very dark, almost black, checker board marking on the top half of the body, and these seemed slightly smaller and fuller in the body than the others. Then on Thursday April 25th I found one fish paying close attention to the back of the round compass- type thermometer in one corner of the tank, while all the others were herded together in the far opposite corner. Inspection of the back of the thermometer with a small hand mirror revealed the cause of the interest - EGGS

The space of about 1¼" diameter was covered by some 80 quite large brown eggs. Came moments of feverish activity to remove the other inmates to another home, and the remaining parent settled down to the serious task of fanning and sucking the eggs in true Cichlid fashion,

/Cont.....

Now I found myself with a potential brood of so far unidentified fishes, which, after being transferred by their parent to various other parts of the tank with mystifying frequency, finally hatched five days later into what looked like a quivering mass of brown jelly with a host of tiny eyes and tails.

At this point I learned of a book by a German, AHL, owned by another of the London dealers, which apparently showed excellent illustrations of these very fishes, and upon checking I found that they were in fact one of the species of Dwarf Cichlid – *Nannacara taenia*. The shape, the markings, the colours, the slight differences between the sexes, - everything checked.

Back in the -nursery four days later the babies began to swim, jerkily at first with little hops off the bottom, but with increasing confidence, and the Mother (I had now proved this to be the female) would suck 6 or 7 at a time into her mouth, appear to "rinse" them around , and then blow them out among their fellows. By the next day all were swimming well in a shoal near the bottom of the tank, with mother constantly rounding up the stragglers by the now familiar suck, rinse, blow method. Deciding that the youngsters were now self-supporting, I transferred their parent to the other tank among the rest of her kind, and here the maternal instinct was far from quenched;- she promptly adopted a shoal of Daphnia, keeping her brothers and sisters at bay with short savage rushes, and frantically trying to prevent the panic stricken Daphnia from straying from her immediate vicinity.

The babies, which were surprisingly large, took immediately to Brine Shrimps and Micro worms, and after two weeks, having been transferred to a larger tank, were $\frac{3}{8}$ " long and beginning to show signs of the chequer markings. The large ones have settled down to a peaceful community life, and appear to have no vices whatever. They are now all about 2": long, with the females slightly smaller than the males, and the latter have a most delicately fine traced edging of pale pink and blue along the top edge of their Dorsal fin, and shining metallic blue on the throat and gill covers.

I am looking forward, on my return from holiday, to breeding them again and to studying once more the fascinating antics of the female in her care of her offspring.

WAIT FOR IT !

By;- I, Cotgrove.

It was in the early Autumn of last year that I first started fish~keeping. My brother-in-law gave me my initial stock, saying, rather maliciously, that I might as well have a hobby to keep me poor, the same as he had.

Soon afterwards I joined the club, and gaining a smattering of knowledge-, began to feel quite the experienced fish-keeper, especially when a brood of Guppies was born, although, having been left to do the washing-up that evening, I was in trouble when my wife returned home to find the dishes unwashed and, a female Guppy (which died unaccountably in childbirth) laid in state on the dining room table, and the teaspoons and fruit preserving jars being used to catch baby Guppies

Among my plant purchases was a small sprig of Indian Fern ("Fancy, 1/6 for that tiny bit-, said my wife, You can get a nice Geranium in a pot for that!") Now I have heard it said that even some experts have difficulty in growing Indian Fern, but mine grew and multiplied until, having set them out in three rows (like a cabbage patch) they so filled the tank that only on rare occasions were we able to catch a glimpse of the fishes. At this stage I paid a visit to our worthy Editor, and, fired with enthusiasm for the tank beautiful, decided to throw out all my pretty rocks — dare I mention that my wife.had been toying with the idea of an ornamental sunken ship! - and transplant my forest into artistic clumps, I had no spare tank into which to put the fishes, but with undampened ardour and a few hefty tugs I had soon pulled up every plant in the tank. After two minutes.the water was so muddy that I could not see what I was doing; and thick anil muddy it remained for over a week. Needless to say, my prize Ferns died a natural death.

In April, having had a new tank as a birthday gift, I decided to try my hand at breeding, I had a pair of White Clouds in perfect condition, so into the breeding tank they went. We pulled up our chairs to watch the spawning, but.the female hid under a rock and the male cruised aimlessly around - both without the vestige of bright colour. So after we had watched and waited for two days, back they went to the Community tank, where they regained their brilliance within an hour.

Cont.....

Next into the breeding tank went a pair of Chequer Barbs (*oligolepis*) this time it was the male who hid under the rock, and although I tipped in half a bucket of water to try to stimulate their emotions, they showed not the slightest inclination to spawn.

There seemed obviously something wrong with the water or the tank, so I returned home on the third day determined to sterilise everything and start from scratch, However, as I entered, a shout from my wife greeted me, "There's a little something in the tank!" There was a little "thing" darting about ~ dare we hope it was a fish? And there on the glass, little transparent commas! Out came the parents; in went a jar of green water; and the rest of the evening was spent in peering for signs of life until our eyes ached.

After a further couple of days we knew we had achieved our ambition, and from green water we passed to infusoria, then dried egg, then Brine shrimp etc. We now have a delightful brood of about fifty little ..fishes, and furthermore, we have the thrill that no expert can achieve, - they are still an unknown quantity! Will they be Barbs, or might; they be White Clouds?

Editors Notes

Since writing this article, Mr. Cotgrove has been able to identify his fry as Chequer Barbs. We congratulate him, and thank him for an excellent article of just the type which this Journal needs.

=====

Forthcoming Attractions (In lighter vein).

By:- M.C.M,

August 2nd - 5th "The Greatest Show on Earth ?

Produced by Cecil B. de Carter, and featuring:-

Gary DuBoisson, Franchot Giles, Bing Cooke, Sponcer Blomfuld, Olivia de Gibbs, and Dame Sybil Outing.

Positively four days only - excluding the dirty work before and after.

" A Street Car named Burst Tyre" —

First appearance of Sir Laurence O'Saunders and Zachary Brooks.

the idea was considered soiae time ago of a feature in the Journal similar to "The Aquarist at Home-
in Water Life;" the scheme being to visit Club members who were willing to co-operate and Report
on their "set-up" and ideas on their own particular activity. Mr. Mash has started the ball rolling -
albeit on a humourous note, and it is hoped, after our Annual Show, to start seriously on a regular
feature. Editor

=====

Well Known Aquarists at Home.

Miss Rose Aceus.

By M,C. Mash.

Having with difficulty located White Spot Lane, an inhabitant directed me to "The Bubble Nest",
an old world cottage erected in the early 17th century when mud and stray were plentiful. After an
unsuccessful search for a knocker, I pushed open the front door, and landed straight into what was
evidently the living room. A rickety table occupied the centre of the room, and upon it reposed what
I conjectured .as the remains of a meal;: there was a packet of Bomax, a jar of marmalade, a
cracked cup, and two ice-cream tubs of Tubifex. After my eyes had become more accustomed to the
filtered light that pierced the room, I noticed dozens of glass jars which from the stench contained
ripe infusoria in various stages of decomposition.

I was debating within myself the number of fry that had perished. miserably on this diet, when a
communicating door opened with a screech of rusty hinges and I came face to face with the great
Rose Aceus, famous for her spawnings of the 21 spined sticklefront (*Hystericus conjunmctivitis*)
and also for sitting ac a model many years before for the well known sculptor Michael Angel-o. She
was still a striking woman, and I edged a bit further away. Looking right through me and back again
she said:-

"I have the pleasure ?"

:

"Oh yes", I said.I am Masho Polo of the "Foul Water Gazette" at your service. My boss would like a
few words for his readers on your secret method of breeding the 21 spined Sticklefront1".

."Your boss can have a few words, a very few - they are nuts to him, and "get out" toyou. Now beat
it"

/Cont.....

I remonstrated. "But Madam, think of the widows and orphans who will be hanging on your every word. The fate of the Empire (and the Hippodrome) may depend on what you say. Do say it!"

She gave a sort of snarl, and I just managed to dodge the well-aimed jar of rabbit-pill infusoria. Although being unable to get her to divulge any secrets, I was able to form a mental picture of this grand old Dame of aquabatics. Her carriage was well sprung and her dorsal held up well like a ballet-dancer; she had probably had dropsy at some time, but there were no signs of tail-rot !

Going out by the back way, I passed what was obviously the fish-house. It reeked; but I could hear faintly the clatter of spines and the smacking of lips of thousands of baby Sticklefronts, and I was glad I had made the joucxiey for the sake of the readers of the 'Foul Water Gazette'.

Next time I have a date with Mr. Jon Dory of Amster and a few other dams.



ANNUAL SHOW FURNISHED AQUARIA.

Without doubt, the most important and certainly the most attractive feature, from the public point of view, of our Annual Show is the array of Furnished Tanks.

Last year there were more than 30 furnished aquaria on show, but some 14- of these were provided by our then Junior section , who are now holding their own shows separately and will not be exhibiting.

You are appealed to therefore to enter a tank — either your own or one which can be loaned to you for the purpose. **YOU SHOULD STATE ON YOUR SHOW ENTRY FORM WHICH YOU WILL REQUIRE TO USE.**

Plenty of time will be available beforehand for the setting up of tanks. **PLEASE HAVE A GO !**

It has been decided to try to revive a scheme, originally started some 2 years ago, of encouraging members to get together with one another in their own homes. The idea is that members should publish in the Journal a time when they will be "at home" and willing to receive visits from any other members who might care to drop in for a fishy chat.

There should be no question of an invitation anyone who is willing to enter the scheme should be prepared to welcome any fellow member or members who care to call at the time they have specified.

The whole success of the venture will depend on all of us shelving our natural shyness and, provided we can find the time, calling on our colleagues.

Apart from the pleasure of getting to know one another better, there can be no better way of improving one's knowledge, and the Committee have started the ball rolling by inviting any member to call in for a chat at the following places, and times:-

Mr. W. Carter, 126, Central Avenue, Southend SUNDAY mornings after 10.30

Mr. G. Cooke, 109, Boscombe Rd., Southchurch Tuesday evenings after 8

Mr. R. DuBoisson, - 4-3, Somerset Ave., Westcliff Monday evenings after 8

Mr. J. Brooks, . (Coldwater) 1, Southchurch Boulevard Friday evenings after 8

Mr. P. Blomfield, - 90, Beach Avenue, Chalkwell Thursday evenings after 7.30

The Editor will be pleased to receive times from members who wish to participate, - either by post or at meetings, and these will be published at various times in the Journal.

The scheme cannot function at all without CALLERS -so do please get out and visit one another.

YOU DON'T HAVE TO BE ASKED, AND YOU CAN BE SURE OF A WELCOME..

YOUR QUESTIONS ANSWERED.

"Is it safe to introduce fishes into a tank immediately after it has been filled with fresh water drawn straight from the mains tap?"

This may or may not do actual harm to the fishes, depending on the pressure; of the water in the mains system. Fresh water from the tap often contains a large amount of air under some pressure, and this can cause much discomfort to newly introduced fishes. It is better to let the tank stand for two or three days to allow the water to settle down and the plants to start to grow. The large quantity of air in fresh tap water is most noticeable from the masses of bubbles which invariably cover the tank sides and the plants after filling.

"How can one tell the sex of Wagtail Platies?"

The difference in the sexes of these fishes and in fact all the commoner live-bearing species is most easily noticeable - once they are at an age when sex is actually distinguishable — by the shape of the Anal fin. This fin, which is the large single fin underneath the fish nearest to the tail, is wide and fan-shaped in the female, whereas in the male it is very narrow, like a spike - called the Gonopodium.

"What is the best method of culturing Micro worms?"

Opinion seems to vary on this subject, but a tried and true method is to mix ordinary breakfast porridge oats with cold water to a thickish creamy consistency in a shallow glass or enamel dish - preferably with slightly sloping sides - to a depth of about $\frac{1}{4}$ " ; place a small quantity of Micro in the centre and stand the dish in a warm place with a piece of glass over the top to conserve moisture. When the worms are flourishing they will crawl up the sides of the dish in their hundreds and may be easily collected by means of a paint brush. The culture should be remade every two or three weeks, - 'seeding' the new one with a little of the surface mixture of the old. If the culture shows signs of drying, the surface should be moistened with a few drops of water.

"What is the cause of the gravel at the bottom of the tank turning black, and how can it be prevented?"

Blackening of the sand or, gravel is caused by the action of bacteria as a direct result of the decay of left-over food, particularly dried food. This unsightly and dangerous condition can easily be avoided by intelligent feeding from the start. Give only very small quantities of food at a time so that it is all consumed either on the surface or before any reaches the bottom. Never feed so much that some is left floating on the surface after the fishes appear to be satisfied. Any that ultimately sinks and is not eaten will quickly decay and provide just the medium for bacteria to thrive. It is advisable to sieve any dried food through a fine net before using, to remove the dust-fine particles which are not large enough to interest the fishes and which finally sink to the bottom and find their way down into the gravel. All blackened gravel should be siphoned out and replaced with fresh, or alternatively boiled thoroughly and allowed to stand spread out on a tray in the open air for two or three days before reintroducing into the tank.

=====

Mrs. Gibbs -	Dwarf Gouramies -	Spawned 7/5/52
Mr. DuBoisson -	Beacons -	Spawned 23/4/52 ;
Mr Duboisson ~	Beacons -	Spawned 15/5/52

=====

Mr. C.J. Saunders, a life member of our Society, who has been President since the beginning of this year and of course in previous years, has for personal reasons - mainly lack of time and the feeling that he cannot devote as much time to the Club as he should - tendered his resignation to the Committee. The Committee have agreed to accept this resignation.

Members are asked, therefore, to make written nominations to the Hon. Secretary, Mr. Giles, for the position of President. The new President will be elected at the meeting on **Wednesday JULY 2nd.**



As you receive this Club Journal you are probably one of many Enthusiastic Aquarists — SO ARE WE, and believe in giving our fish the very best attention before sale so that we can feel proud to show them to you.

We supply many proved varieties of foods suitable for Tropical or Cold Water Fish, together with Plants & Accessories. An interest is taken in your problems as well as your Custom and we will Help and Advise in both.

We do not claim to be a Large Concern, but we Endeavour to Equal all for Service & Fairness.



MEET YOUR FRIENDS FOR A LOOK ROUND & CHAT

AT

THAMES AQUATICS

(B. LOVEGROVE)

48, YORK ROAD, SOUTHEND-ON-SEA, ESSEX

WHERE YOU WILL BE WELCOME AND MAY FIND JUST WHAT YOU WANT

IN

Tropical or
Cold Water Fish

Garden Ponds
Made & Stocked

Plants & Accessories

Aquariums of all sizes supplied
Immediate Aquarium Repair Service in Emergency

Servicing of Aquariums in your
own Home at Moderate Charges



SERVICE • CIVILITY • SATISFACTION

CROSS & YOUNG

Aquatic, Pet & Aviary Supplies



We invite you to inspect our selection of **TROPICAL FISH**. (The largest stock in the district), consisting of 30 Aquariums containing 50 different species including our specially home bred Angel Fishes, one of which took 1st Prize in the 1951 Southend Aquarist Society's Show.

*Goldfish, Shubunkins & Coldwater Catfish.
Budgerigars & Singing Canaries
Guinea Pigs, White Mice Etc.
Cages, Sand, Bird Seeds &
all Pet Foods.*



COMPLETELY FURNISHED AQUARIA . . . PLANTS, EQUIPMENT & ACCESSORIES
REGULAR SUPPLIES OF TUBIFEX & DAPHNIA

1-5, Nelson Drive, Leigh Road

(BETWEEN CHALKWELL PARK & CORONA CINEMA)

Telephone: LEIGH-ON-SEA 7721

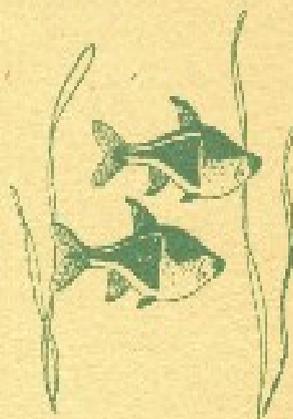
THE SOUTHEND, LEIGH & DISTRICT
AQUARIST SOCIETY

Vol. **5**

No. **7**

—JULY 1952

MONTHLY



JOURNAL

Editor: P. Blomfield, 90, Beach Avenue, Leigh-on-Sea.

Hon. Secretary: H. A. Giles, 72, Sandringham Road, Southend-on-Sea.

AVAILABLE TO MEMBERS ONLY

Metropole

Aquatics

Proprietors: C. G. BROOKS — C. J. SAUNDERS



534a, LONDON ROAD
WESTCLIFF-ON-SEA

Telephone: SOUTHEND 45991



Stockists of
Tropical and Coldwater Fish
All Pet Foods
and Aquarists' Accessories

SOUTHEND LEIGH & DISTRICT AQUARIST SOCIETY

MONTHLY_ JOURNAL

Vol. 5. No, 7,

July._1952

The Society meetn at 7.45 p,m, on the First and Third WEDNESDAY in each monthh, at:~

THE LIBERAL HALL,
Clarence Road, Southend-on-Sea.

Dear fellow members,

Well, we have almost come to the main event of the year as far as the Club is concerned ~ our Annual Show and, as most members are aware, we rely on that almost entirely for our revenue. It behoves us all therefore, in our own interests, to make a special effort to ensure that it is a financial success.

"What", you may say, "can we members do towards this end?" You can perform two most useful functions: advertising verbally the dates and place and nature of the Show, and selling tickets from the books which have been sent to you. During the next two weeks tell everyone you know, and get them to tell everyone they know, about it ~ and sell 'em a ticket! People will always sport a bob for oome obscure Christmas draw later in the year with practically no chance of getting anything for it, point out to them that here for their bob they will be certain of getting something - a type of entertainment which is different and unusual, and which may open up a new field of interest for them.

Finally, do please come along to Clarence Hall on the Wednesday Thursday and Friday evenings prior to the show, or during the day if you can ponably manage to, and lend a hand with erection of the staging, the electrical wiring etc, If everyone does his and her bit,we can and shall put on the best Show yet!

Yours most sincerely,

P. Blomfield. (Editor)_

CLUB NEWS

We had another of our friendly informal evenings on Wednesday June 13th, and amongst a goodly gathering of members, questions, answers and discussion flowed thick and fast.

Leeches and Planaria were the subjects of some comment, and a specimen of one of the former was produced by Mrs. Gibbs, looking none too happy in the spotless cleanliness of the small Brylcreem jar ~ the leech of course, not Mrs. Gibbs. Detailed pictures of both, taken from Water Life, September 1937, were also studied, and in reply to a query as to how Planaria could be eliminated from the tank, it was suggested that all plants, fishes and gravel should be removed, the tank thoroughly sterilised with strong Detrol or Ammonia, the gravel boiled, and the plants thoroughly inspected and washed. It is possible of course, that some eggs might be left behind on the plants when re-setting up the tank, and it was recommended that the tank should be filled with fresh, clean water and allowed to stand for a week or more, by which time any Planaria present would have starved.

On the subject of White Cloud Mountain Minnows, members were again invited to make observations on the spawning procedure of the two types – *Tanichthys albonubes* (with white flecks on Dorsal and Anal fins) and *Aphyocypris pooni* (without white flecks). Mr. Cooke, Mr. Hoare and Mr. Sykes spoke on this subject, and, as a result of their past observations, it could not be established that either type was consistent in either spawning completely out in the manner of the Danios or over a long period – a few eggs at a time; nor could it be said with any certainty that either species did or did not show an inclination to eat their own eggs or young - although reports have been received from members who have left the parents in with the eggs and fry and raised successfully large broods.

Further discussion on the rearing of young Mollies followed, in which the advantages of plentiful space, green water and green algae as a diet were stressed; and a report on the possible danger of feeding exclusively on Bemax was heard from Mr. Lovagrove.

Mr. Cooke reported that the proposed outing to Southsea had had regretfully to be cancelled owing to.....

/Cont, . .

lack of the number necessary to make a coach~load, but it it was hoped to arrange an alternative outing in the near future. outing in the neax

The meeting ended at 10. 50, and we thank Mrs Baker and Mrs. Carter for the usual excellent refreshments in the interval.

HOME AQUARIA COMPETITION- RESULTS.

It must be reported with some regret that there was only a total of 9 entries in this years Home Aquaria Competition, and the average percentages of marks awarded to the first four places by the Judges were as follows:--

1.	P, Blomfield	81%
2.	G. Cooke,	71%
3.	R. DuBoisson.	70.66%
4.	Mrs. Gibbs.	59%

In the opinion of Mr. Saunders it was noticeable that none of the tanks showed a really poor standard but the winning tanks were not as good as he expected. Choice of fishes was, he thought, in many cases poor, with unsuitable mixing, some overcrowding, some understocked, while in certain cases damaged fishes were on show and these should in fact have been more heavily penalised, - Plants were good on the whole, although the planting of some tanks had obviously been somewhat hasty: Rockwork showed little inspiration, while several competitors had mixed their compost both as to size and material, in addition to arranging it badly.

Mr. Jack Brooks thought that in comparison with previous years when much larger numbers of entries were judged, the standard of those tanks "at the bottom of the list" was an improvement, although there is still much room for further improvement.

While thanking the Judges, Mr. Saunders, Mr, Brooks, and Mr. G. Pryor, it is to be hoped that the response to the appeal for entries for the Furnished Aquaria Class at the Annual Show will be a vast improvement on that for the Home Competition.

BREEDING THE SIAMES FIGHTER (*Betta splendens*)

by G. Willis

We are all familiar with these magnificent fishes belonging to the Anabantidae, all the members of which possess an auxiliary respiratory system enabling them to "breathe" free oxygen from the air; the majority of whom deposit their eggs in a floating nest of bubbles. Because of their pugnacious - or alleged pugnacious-tendency, they are often absent in our collection, particularly if we happen to be community tank hobbyists. It should be noted however that it is only when more than one male is present in a tank that their fighting spirit is aroused; in other words they are good and peaceful occupants in a community tank provided only one male is kept therein.

For breeding purposes only the best should be used, best not only as regards finnage of the male, but for both as regards colour. Finnage apart, the most desirable character in fighters is body and finnage of one colour. This naturally does not apply to the Cambodian species, where the body should be a clear creamy colour without trace of red which should be entirely confined to the finnage.

Breeding can be successfully accomplished in a 24 x 12 x 12 tank and fighters are a far cheaper proposition for spawning than the adhesive egg-layer, as they do not require a heavily planted tank. One floating plant such as a water lettuce or a small Indian fern is all that is required. Even this one plant isn't essential but I have found that the male when he proceeds to build his nest prefers to have something to which to anchor it. Any floating plant with a leaf coverage of a four inch circle suffices. Four to five inches of water, a compost covered bottom and everyone is happy. The fishes, previously conditioned entirely on live food, should be introduced at the same temperature in which they have been living (say 75° F) and the temperature then raised to 80° ~ 82°F).

The male will immediately start showing off before the female who will almost certainly refuse his advances and most likely proceed to chase him away. But "don't be fright ~ it's alright" she's only telling him to get on with his first task of building the bubble nest,

/C on t

Additional light over and above natural day light is not necessary in the breeding tank, in fact if the tank is in full sunlight it could with advantage be considerably reduced. While the male is busy building the nest, the female may approach to view his handiwork but does not participate in the job. The male will in all probability start to desport himself in front of the female only to be repulsed and sent back to get on with the good work. By the time the female is satisfied with the job, he may have covered an area up to five inches across with bubbles in patches half an inch thick. This is accomplished by taking in copious quantities of air which are then confined within a mucilaginous "shell" and blown out from the mouth. Surplus air is exhausted through the gills but it is only bubbles blown out from the mouth that stick one to the other and remain as bubbles for any length of time.

Spawning may take place any time after the female is satisfied with her mate's handiwork, but I have found in certain circumstances the female will play hard to get. While the stimulation of fresh water coupled with a rise in temperature is enough to set the male about his duties the female is more discerning and may not allow the male to complete the job until such time as the water has become infused with the minute life upon which the fry will first feed.

On one occasion, by judiciously siphoning off the fresh water daily and topping up with more fresh water, I caused the male to build six different nests without the female allowing herself to be spawned, yet on introducing a fair quantity of old water full of infusorial life, she surrendered within an hour.

The act of spawning is indeed a wonderful sight. The male will begin by chasing the female all over the tank and, on cornering her, will stay motionless with all his brilliantly colourful fins extended quivering. Having enticed her under the nest the female will assume a slightly head up position just beside and slightly behind the pectoral fins of the male, with her body at right angles to the male. He with fins extended and quivering will sidle up to her and envelop her within his body until she has been turned upside down and the male is suspended in the water with his tail and head side by side. His fins are now completely relaxed. They remain in this position

/Cont.....

for a second or two after which the male will release the female and in doing turn her over onto a normal keel. She regains just under the nest stationary, as though temporarily knocked out. The male sinks below the female ready to catch the eggs in his mouth as they are extruded by the female above.

Fertilisation of the ova must, in my opinion, take place within the body of the female as the eggs are not released from her body are not released until some second or two after the embrace has been completed..

As the small white eggs descend through the water they are caught and carried to the nest and blown into the bubbles by the male. By this time the female has recovered and the whole process will be repeated

. The embraces may be frequently interrupted while the male makes adjustments to the nest and for frequent forages to the compost to ensure that no eggs have been missed. In this latter duty I have found that the female assists and that any eggs so scavenged by her are not, as is often alleged, eaten, but in my experience are deposited by her in the nest. Despite the apparent enormous size of the completed nest I have yet to find the eggs deposited in an area larger than could be covered by a penny.

Spawning, depending upon the size and fullness of the female, may last over an hour. Eggs at the start may be extruded as many as a dozen per embrace, but the male will eventually desist after the last few embraces have failed to produce any more eggs.

From now on the presence of the female is no longer essential, and to enable the male to devote his whole attention to safeguarding the nest it is as well to remove her to a rest tank. She will certainly look in need of a rest; her once complete fins are now reduced to shreds.

By the end of the third day the eggs will have hatched and the fry can be seen suspended tail down under the nest. Now the males' duties are really onerous. Whereas for two days he has only been keeping the nest in trim and fanning a current over the eggs he now assumes the duties of nursemaid, As the fry fall from under the nest he collects them in his mouth and replaces them under the nest. At this stage, and before the fry are free-swimming, I insert in the tank

/Cont.....

two or three pieces of old potato (about the size of a chip) or a small ball of crushed lettuce leaves to supplement the infusoria upon which the fry will feed when they have absorbed the yolk sac, - usually by the end of the second day.

When free swimming, at which stage the male can be removed, gently aeration is started to ensure that the infusoria is distributed throughout the tank. It also ensures that the fry expend energy swimming, as is customary, against the slight current; and while this causes maybe unnecessary expenditure of energy, it also ensures feeding to replace the energy so expended. Similarly supplementary lighting is now provided which remains on day and night to ensure maximum activity which induces, subject to adequate food supplies, maximum growth.

When the fry are large enough, about a week after feeding on infusoria, micro-worm and brine-shrimps supplement the diet of infusoria. My method of hatching brine-shrimp is to float a 1 lb jam jar half full of sea water in the tank and at the tank temperature the eggs hatch in 12 hours. Egg cases and freshly hatched shrimp are then strained in a cloth and washed off into the tank. At the end of a week on these foods they should be able to take sifted daphnia, finely chopped tubifex and white worm. From now on vigorous culling of the inferior fry should take place and the rejects should be thrown away or fed to larger fishes.

My method of introducing the whiteworm or tubifex, chopped with a razor blade on a piece of hard wood, is to fill a small tube with water from the tank, scrape into the tube the chopped mass and agitate until the particles have separated then distribute this suspended food over the tank.

Late in their third, or early in their fourth week, of life, the fry start to develop the auxiliary breathing system. It is stated that at this period during their life they are susceptible to changes of air temperature which are liable to decimate broods. Maybe I'm lucky, because I have found that lifting the canopy as many as fourteen times a day has had no adverse effect on the broods.

/Cont. ...

Feeding of small quantities of live food should continue as often as practicable, Naturally the food should be chopped to suit the size of the fishes mouths. What isn't eaten will only produce infusoria and add to the food reserve so over feed rather than under feed. (The sand can always be sterilised and bleached for subsequent use.)

At the end of eight weeks those fishes which are males will have started fighting amongst themselves. Because of their ability to utilise free air, swim space is only of secondary importance for growth, and the males can be successfully grown on in 2 lb jam jars suspended in the tanks.

Better results are of course obtained if they can be distributed singly in other tanks. Feeding on live foods should be continued at its previous intensity and at three months the fish should not only be adult but can be spawned. Growth to full maturity will continue until round about the six month. They are old at eighteen months, and past their reproductive best at 9 months.



MEMBER'S EXPERIENCE WITH WHITE CLOUDS

by E. Baker

.Further to the general discussion on the behaviour of White Cloud Mountain Minnows at the meeting on June 18th, which I was unfortunately unable to attend, I should like to record that mine have the whitish stripe, underlaid with red, running the length of the body, and the fins are red (*Aphiocypris pooni*), and they breed profusely in a 24 x 12 tank. I have seven adults in the tank -and oddly enough quite a lot of snails - they are fed well on live foods, and show no inclination to eat the fry. The youngsters are left in this tank until they are about a week or so old, and then moved to other quarters.

I should welcome a visit from any members, who might like to see them or come along for a general chat; my address is :-

333, Westbourne Grove, Westcliff.

CHILD GUIDANCE CLINIC TANK.

The Society has recently donated to and set up for the Child Guidance Clinic in Warrior Square, Southend, a Furnished Tropical Aquarium, and the following letter has been received by our Secretary from Mr, H. Bevan Jones, D. P, M. the Consultant Psychiatrist.

"Dear Mr, Giles,

I am writing to thank you most sincerely for the great generosity shown by you and your fellow aquarists in presenting the splendid fish aquarium which now brightens these premises.

Please convey to your colleagues the gratitude of all at this Clinic for what you have done. I am sure it will give a lot of children much pleasure, at the same time being a great help to us,"

=====

LIBRARY.

The following two new volumes have recently been added to our Library:-

Aquarist, Vol. XVI April 1951 - March 1958.

S. L. A. D, A. S. Monthly Journal. Vols. 3 & 4 Combined,

ANNUAL SHOW, UNCOMPETITIVE ENTRIES.

As you will know, the competitive classes in our Annual Show are for pairs of fishes- excepting Cichlids and Fighters. However, it maybe that some members may have a single fish only, of an unusual kind, which would be of great interest to the visitors, and which cannot be shown owing to its lack of a mate: and it is proposed to form an exhibit of such types, suitably labelled with their names, purely for the interest value.

Would members therefore please let me know (a card, or phone to the Editor ~ Leigh 78783) if they will enter such a fish, so that the necessary tanks may be arranged.

Deadline date for entries will be July 26th, and all entries will of course be **FREE.**

ENTRIES FOR BREEDER'S CLASS ~ ANNUAL SHOW 1953.

Mr. J, Layzell - Angels ~ Spawned 23/5/52.

HAVE FUN WITH THE STARS

by "Leary Gorblimey"

- AQUARIUS** (Jan.21-Feb. 1 5), This month you may breathe freely, bat you`ll probably be taxed for it later. There will most likely be something cooking in the home - watch your thermostats!
- PISCES** (Feb. 20-March 21). Beware of the snake in the grass on Independence day, and don't forget -curiosity killed the catfish!
- ARIES** (Mar.22-April 20). You are in danger of getting a letter this month, and it may be from the Eastern Electricity Board. Don't make unnecessary journeys - let the work come to you.
- TAURUS** (April 21~May 22). A movement is afoot - don't tread on anyone's corns. There will be the usual births, marriages and deaths-(Hatchings, Matchings and Despatchings).
- GEMINI** (May 23-June 21), These born under Gemini will have to do a bit of string-pulling (if they wish to get undressed). A strange face may be seen in your sittingroom - perhaps on a screen. You will go on a journey in a public vehicle.
- CANCER** (June 23-July 22). Some of you may spend a week-end somewhere. A slice of luck (good or bad) may be expected. Steer clear of hay-fever and, if you talk in your sleep, talk in whispers.
- LEO** (July 3 3-Aug. 22). Beware of walking barefooted with your tongue out - foot and mouth disease will be on the increase. There is every likelihood of a short vacation on a Saturday in this month.Those going on holiday may have some weather.
- VIRGO** (Aug. 2 3-Sept. 22). Do not drink from a damp glass during the early part of the month, A national disaster may be averted by breathing less oxygen. You may meet an old friend (probably your wife or husband). A good month for a bath,

/Cont.....

LIBRA (Sept.23-Oct.22), Speculation is bad Just don't count your fishes before they are spawned. Worms will continue to turn, Your structure may need decarbonizing - try Horlicks-.

SCORPIO (Oct. 23-Nov. 21). Vegetarians should beware of celery on Tuesdays. Those contemplating picnics this month would be well advised to use stronger elastic. Shopping should be done before closing time.

SAGITTARIUS (Nov. 22-Dec. 22). Don't take walks abroad especially at high tide. Haricot beans will be beneficial to dark-skinned people, and bananas should be eaten without the peel. Electric razors will be dangerous to those with wired. teeth. A few hours sleep this month may prove to be necessary.

CAPRICORN (Dec. 23-Jan, 20). Those feeling romantic should see a doctor. Keep an eye on your stockings and keep the other on the boy keeping both eyes on them. Special precautions are necessary for those bathing in daphnia ponds without costumes. Curb your drug addiction, and don't pay dentist's bills this or any other month.

(Special fool-length horror scopes will be sent, on receipt of an unbounceable cheque, to all believers needing individual guidance).

=====
Editor's Note

The foregoing literary masterpiece is of course a further brain-child of our dear friend Mr, M, C.Mash, -as if you haven't already guessed!

=====
Hi. neighbour! (cont.,)

Further to our list of members who would like to welcome fellow members to their-homes for a fishy get-together is added the following: -

Mr, C, J. Saundars, - 300, Southbourne Grove, Westcliff,
SUNDAY mornings after 10.30,

YOUR QUESTIONS ANSWERED, (cont, . .)

"Is it essential to have Snails in an Aquarium?"

Snails in general are rather a mixed blessing, and they can hardly be said to be essential in the pure sense. Their value lies in their scavenging for left-over food and their appetite for Algae, but they will in no way prevent the dangerous effects of over-feeding nor will they stop the formation of the Brown and Blue-Green types of Algae which can be such a nuisance, though they may to some extent help to keep the latter in check. Snails make quite a lot of mess with their own waste products, and they seem to have a nasty habit of dying behind the heater - and dead snails will soon help to foul the water. Some types show a tendency to nibble the best shoots of one's treasured plants, and the sight of a large number of them in a tank can definitely spoil an otherwise pleasing effect. The burrowing Malayan snail, with its earthworm-like action in the gravel helping to circulate the mulm to the plant roots, is certainly a useful addition; but the use of other Snails should be confined to a few large specimens of the alledgedly non-plant-eating types. Baby snails, newly hatched, do of course provide a source of live food for several types of our Tropical fishes.

"The Angelus"

By; M.C, Mash.

Oh Angel fair, demure in style,
With graceful elegance and guile,
Making an Aquarist's life worth while.
You Angler !

You lend enchantment to the scene;
Mischievous eyes, pert nose between;
Your bearing travesties a queen.
You Wangler!

You glide as if you were on ice,
With flowing pectorals precise,
And snap a Daphnia in a trice.
You Mangler!

With pouting lips you kiss your mate,
Then share with him a tete-a-tete,
Regardless of that other date,
Entangler !

SERVICE

CIVILITY

SATISFACTION

CROSS & YOUNG

Aquatic, Pet & Aviary Supplies



We invite you to inspect our selection of **TROPICAL FISH**. (The largest stock in the district), consisting of 30 Aquariums containing 50 different species including our specially home bred Angel Fishes, one of which took 1st Prize in the 1951 Southend Aquarist Society's Show.



*Goldfish, Shubunkins & Coldwater Catfish.
Budgerigars & Singing Canaries
Guinea Pigs, White Mice Etc.
Cages, Sand, Bird Seeds &
all Pet Foods.*



COMPLETELY FURNISHED AQUARIA - - - PLANTS, EQUIPMENT & ACCESSORIES
REGULAR SUPPLIES OF TUBIFEX & DAPHNIA

1-5, Nelson Drive, Leigh Road

(BETWEEN CHALKWELL PARK & CORONA CINEMA)

Telephone: LEIGH-ON-SEA 7721

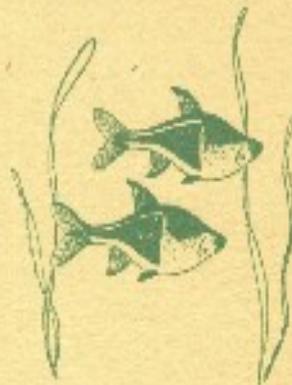
THE SOUTHEND, LEIGH & DISTRICT
AQUARIST SOCIETY

Vol. 5

No. 8

AUGUST 1952

MONTHLY



JOURNAL

Editor: P. Blomfield, 90, Beach Avenue, Leigh-on-Sea.

Hon. Secretary: H. A. Giles, 72, Sandringham Road, Southend-on-Sea.

AVAILABLE TO MEMBERS ONLY

Metropole Aquatics

Proprietors: C. G. BROOKS — C. J. SAUNDERS

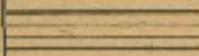
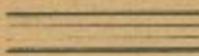


**534a, LONDON ROAD
WESTCLIFF-ON-SEA**

Telephone: SOUTHEND 45991



Stockists of Tropical and Coldwater Fish All Pet Foods and Aquarists' Accessories
--



W. H. CARTER

BUILDER & DECORATOR

Interior & Exterior Decorations



POND & FISH-HOUSE
CONSTRUCTION A SPECIALITY



126, CENTRAL AVENUE, SOUTHEND-ON-SEA, ESSEX.
Phone: SOUTHEND 68993

The Express Printers

Office:

30, BRIGHTWELL AVENUE,
WESTCLIFF-ON-SEA,
ESSEX.

Telephone: SOUTHEND 43331

Works:

43a, ALEXANDRA STREET,
SOUTHEND-ON-SEA,
ESSEX.

Telephone: SOUTHEND 46389



"ALWAYS ON TIME"

for

Private Stationery — Visiting Cards
Christmas Cards
Dance & Whist Drive Tickets
Posters Etc.

Visit . . .

Phone: SOUTHEND 45554

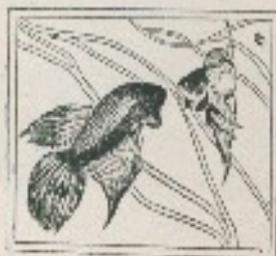
THE TROPICAL SHOP

352, WESTBOROUGH ROAD
& 54-56, FAIRMEAD AVENUE,
(Corner of Fairmead Avenue)
WESTCLIFF-ON-SEA

THE LARGEST TROPICAL & COLDWATER FISH ESTABLISHMENT IN THE BOROUGH

*A Selection of over 75 Different Varieties of Exotic Fish
always in Stock, also Goldfish, Shubunkins, Golden Orfe Etc.*

BREEDING PAIRS AT
VERY MODERATE PRICE



FISH BRED ON THE
PREMISES

*Tropical & Coldwater Plants, Pond Plants,
Water Lilys Etc.*

Accessories of Every Description

NOTE OUR PRICES

24 x 12 x 12	ANGLE IRON GLAZED AQUARIUM	37,6
24 x 12 x 36	ANGLE IRON 2-TIER STAND	37,6
18 x 10 x 10	GLAZED AQUARIUM	20,-
COMPLETE UNIT OF	HEATER, THERMOSTAT & THERMOMETER	24,6

CONSULT US - NO CHARGE - NO OBLIGATION

SOUTHEND LEIGH AND DISTRICT AQUARIST SOCIETY

MONTHLY JOURNAL

Volume. 5. No. 8.

August 1952.

The Society meets at 7.45 p.m. on the First and Third WEDNESDAY in each month, at:-

THE LIBERAL HALL
Clarence Road, Southend-on-Sea.

EDITORIAL

Dear fellow members,

After worrying weeks of organisation and frantic days of final preparation, followed by the comparative calm of the actual proceedings, another Annual Show has come and gone - and the general impression seems to have been that it was once again better than ever. No doubt there will be some recriminations about things which were not done or which could have been done better, but few things in this world are perfect, and the Club's thanks are due in no small measure to all those members who gave so unstintingly of their time, labour and in some cases money to make the Show the success it undoubtedly was.

The only justifiable complaints, in the writer's humble opinion, are firstly that all the entries came from only 89 of our 130 odd members and secondly that comparatively few gave their actual support to the preparation and erection. There were of course those who were unfit or on holiday, but when one considers that some members did not even pay the Show a visit in support of their own Club, well, I ask you!

However, the Show was a winner in every way, and we are grateful to those members (and some non-members) who did do their bit, for their kind help, however great or small.

To all new members who have joined us, either at the time of or as a result of the Show, we say, "Welcome" we hope you will enjoy our company - as we shall yours - and help us to make next year's Show an even greater success.

Yours most sincerely,

P.Blomfield, (Editor).

- 86 -
-
- **CLUB NEWS.**

Once again our Annual Show has proved, contrary to the earlier expectations of some, a successful venture, and the wonderful attendance on the Bank Holiday Monday more than made up for the Slow, rain affected start on Saturday.

Gavin Willis is to be most heartily congratulated on achieving the highest points for the coveted Abbott Cup after having been runner-up for so long, and a very fine show was also put up by Mr. Halfhead who was a close second. Gordon Pryor, a new exhibitor (though not by any means a new member) in the Coldwater Classes, won the Jones Cup with a fine Shubunkin, and Bill Donges again produced his magnificent Angel to win Best Tropical, although G. Willis's Panchax Lineatus and P. Blomfield's *Nannacara -taenia* were only just "pipped at the post". Our distinguished judges - Mrs. Meadows for the Tropical, and Mr. Meadows for Cold water entries, commented most favourably on the general lay-out and impression of the Show, and the former's tribute to our Breeder's Class - "probably the best I have seen at any Show, and extremely difficult to judge" - is most gratifying, and should make those who contributed justifiably proud, - Mrs. Kit Outing is to be particularly congratulated on taking the Barnes-Oake Cup with her sextet of Black Widows,

Mr. Meadows was rather disappointed in the standard of Coldwater entries, and thought that lack of colour - particularly in the Shubunkins - spoiled many fishes with other wise good attributes in body and finage, Mrs Meadows commented favourably on the big improvement in the standard of our Guppies, but was not impressed with the P.laties, Swerd tails or Mollies; she thought the Labyrinths generally were of a high standard, and the Barbs and Characins well up to average, and the opinion of both judges on the Furnished Aquaria was that there was a big improvement on last year.

The best Livebearer entry was Mr. Carter's pair of Veiltail Gnppies.; the best Labyrinth - Mr Knopp's Red Fighter; the best Barbs - Mr Willis's Spanners the best Characins - Mr. Walker's *Nannostomus anomala* and the best Cichlid - Mr Donges's Angel.

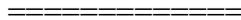
/Cont.....

Other individual fishes which came in for particularly favourable comment were Mr Soffietti's Three Spot Gouramis, Mr Halfhead's swordtails, Mr Duboisson's Dwarf Gouramis, and Mr Donges' widows which won the D.B. Cup

The Show Committee of Messrs, Carter, Brooks, Giles, Cooke, DuBoisson and Mash deserve our gratitude for the way they have worked and schemed to make the Show possible, and the unselfish way in which they have cheerfully given so much of their time is a fine example to the Club. It was grand to see the way in which those members who did make an effort to help turned up with unfailing regularity- space will not permit a list of their names, but they can be assured that the Show Committee are grateful for their fine efforts. Our ornamental pond- the result of much work by Messrs. Kelly, Wells, Sykes and Martin - was a great attraction, and we sincerely thank Capt Peter Mash, who gave his Father such valuable assistance in the Reptile Section both with his own exhibits and his time (this from a non-member too!). We also much appreciate the very kind and able help received from Mr. Charles Green, whom we hope shortly to welcome as a member; his efficient supervision and arrangement of the electrical fittings ensured that the Show was entirely free from any snags regarding lighting and aeration. We are also extremely grateful to Mr, Reg Outing for his time (and petrol !) - he always managed to be on the spot when transport was most needed, and to Mr. Geoff Cooke - another non-member, who worked like a Trojan,

Finally a very sincere thankyou to our ladies ~ Mesdames Gibbs, Giles, DuBoisson, Carter, Harris, Baker, Cotgrove, Donges, Noakes, Blomfield - who carried out the tiring job of "organising" the refreshments so cheerfully and successfully, and a special word in praioe of the wonderful effort of Mrs. Cooke who sat almost without a break at the Guppy tank, fairly talking her head off to cajole guesses and ha'pence out of all and sundry.

Congratulations to the successful; hard luck but thanks for entering to the unsuccessful; and "well done" to all those who helped in any way at all.



The Society wishes to record its thanks to those members of the South East Essex Junior Aquarist Society who gave such valuable assistance during and before the Show,

FURNISHED AQUARIA

In the view of the Judges Mr & Mrs Meadows, there was a marked general improvement on last year's efforts. Some members still showed a tendency to overstock with fishes and underplant their tanks but there was evidence that more attention was being paid to rock work and to design.

A most interesting effort was Mr. Willis's Marine tank with Anemones, Shrimps, Mussels, young Smelts, Gobies and a Shore Crab. The general impression of the array of Furnished Aquaria was, in the Judges' opinion, first class, and we are most grateful to the Chelmsford Aquarist Society for the loan of their white fish and plant cut-outs, which set off so well the black framing of the tanks.

The individual results were as follows:-

No.	Name	FISHES size quality (25)	PLANTS quality (25)	DESIGN layout originality (25)	TECHNIQUE Planting Clarity (25)	TOTAL (100)
212	Mrs. Harris	14	18	15	22	69
213	R. DuBoisson	19	19	18	22	78
214	P.Soffietti	11	22	21	21	75
215	H.Giles	16	13	11	21	61
216	M.Mash	11	13	13	20	57
217	H, Giles	16	16	12	21	65
218	P, Blomfield	23	20	20	22	85
219	H, Giles	17	14	14	22	67
220	J, Cowan	19	15	18	22	74
221	Mrs, Outing	15	15	15	21	66
222	J, Cowan	12	15	14	20	61
223	Mrs, Outing	16	15	14	19	64
224	Mrs, Sweetenham	19	12	10	19	60
225	G, Cooke	16	19	21	23	79
226	Mrs, Sweetenham	17	16	15	20	68
227	Mrs. Gibbs	15	14	16	19	64
228	P, Blomfield	24	22	23	23	92
229	G. Willis	21	20	18	24	83
230	R. DuBoisson	22	19	17	20	78
231	G. Cooke	18	16	15	20	69
232	G. Willis	17	17	17	20	71
233	E Baker	16	12	16	17	61
234	P,Soffietti	17	13	14	20	64
235	Mrs, Gibbs	16	16	15	20	67
236	W. Carter	14	17	16	21	68
237	E. Baker	13	14	15	20	62
238	Mrs. Webster	13	13	13	18	59
239	G. Willis	10	9	11	18	48

CLUB NEWS

At the meeting on Wednesday July 16th we were privileged to hear a talk by Mrs. W.Meadows on the Sexing of some of the types of Tropical fishes in which she is particularly experienced and some general hints on breeding them.

Mrs. Meadows made the following observations on Zebra and Giant Danios and White Clouds:

Zebras: Males are more streamlined in the body, while females show, slight hump between head and dorsal fin, and, while in the former the dark blue longitudinal lines continue under the belly, in the females they tend to spread out and fade giving a white appearance.

Giant Danios: Males show more unbroken blue lines and usually more erect fins, while females are slightly deeper in the body, particularly when carrying spawn.

For both these types a breeding temperature of 78° was recommended, and the removal of the parents after spawning was essential.

White Clouds: Attempts to "cross" the two types were strongly deprecated, and in Mrs.Meadow's experience the type with the red-tipped fins spawned small quantities of eggs each day over a period of from 7 to 41 days, Males are more streamlined, have deeper red in the fins, have also larger and more erect fins. Breeding was carried out at 73°.

Characins were next discussed, and it was pointed out that not all of them possessed the small adipose fin, but that males of Flames, Beacons, Black-line Tetras and *Pristella riddlei* could be identified by the "Characin hook" on the anal fin catching in a fine mesh net.

Black-line Tetras: Males have slightly pointed Dorsals, while females are rounder in the belly and have a brassy tinge in the body colour.

Pristella riddlei (X-rays): Males have a 1/8" wide white margin on the front edge of the Anal fin.

Flames: Males show richer red colouration, less depth of body, and less curvature of the Anal fin,

Serpae: Females invariably have brighter colouring, particularly during breeding, and have a small yellowish strip at the beginning of the Dorsal - this is white in the males.

These Characins could also be sexed. by placing a strong light behind and observing the shape of the Air-bladder, which in the female is rounder, and in the male more slanting,

/Cont.....

Copeina guttata: One of the Characins with no Adipose fin and no "hook", the males being darker and the females more silvery, and the latter having a large black spot in the Dorsal. Down the side of the body in the males there are 2 or 3 lines of tiny crimson spots, while females only occasionally show a few scattered spots.

Mrs. Meadows then went on to say that she breeds most of her Characins in 24 x 12 tanks, at a temperature of 76° F, using ½ tap and ½ boiled water, and adding a little cooking salt and a very small knob of common soda. She keeps the sexes separate, and before spawning keeps them on either side of a clear glass partition in the spawning tank as an "exciter"; and while they are there she feeds only a little of a good type of dried feed, as live food feeding might result in the introduction of some unwanted pests.

After the usual break for refreshments, under the kind auspices of Mrs. D. B. and Mrs. Blomfield, our worthy lecturer answered many and varied questions before taking her leave just after 10 o'clock. We thank her most cordially for a friendly, instructive and at times most amusing evening.

=====

Any Frogs, Tadpoles Newts etc. ?

While talking the London Zoo into loaning us the Reptiles which helped to add attraction to our Herpetological section at the Show, Mr. Knopp, whose persuasive tongue did the trick, was asked if he could obtain any Frogs, Tadpoles or Newts for them.

Should any member, therefore, come across any of these at any time, would he or she kindly take or send them to him for onward transmission:-

S. Knopp,
249, Hamlet Court Rd, Westcliff.

=====

AN APOLOGY TO Mr. W.Donges.

It is much regretted, Bill, that for the second year running your name should have appeared in the programme with that "u" instead of an "n". We can't blame the printer - it won't happen again.

=====

THE DAY OF REST,

by: M. C Mash.

Christopher Robin, aquarist, was awakened on a certain Sunday morning by a violent dig in the ribs from his better -half (?) He gazed at the clock, gazed at his wife, and gurgled "Sunday-plen`y.o` time." "No you don't, you lazy so-and-so; get cracking and clean out some of those tanks - they smell !"

To keep the peace, Christopher reluctantly arose, dazedly dressed in a ca-canny manner and ambled downstairs to his tropical tanks. "She was right," he thought; "they do smell! What a life !"

He started by bailing out some of the greenish-grey water from the top 30- inch tank of a 2- tier stand, and in doing so spilt a liberal quantity on the floor, which increased the atmospheric condition by about 175 per cent. Having removed nearly two- thirds of the not so aqua-pura in this way, together with a couple of dozen dead and just living fish, he thought it would be quicker to tip the rest. And so it would have been had he not ricked his back in the process. His language was now vieing with the atmosphere in foulness - and was not a bit Sunday- like. Patches of verdigris and rust adorned his unshaven features, his blood- shot eyes registered pain and he was beginning to sag at the knees

He sat on the edge of a box and pondered awhile, but the over-pitched voice of his misunderstanding wife floated in from above, awakening him from his trance. "What are you doing down there? The place smells like a slaughter house !"

He gathered himself together with an effort, arose from the box and skated on the slimy floor. His boot hit the side of the tank, there was a shattering of plate glass and out poured the remainder of the water, carrying with it a fairish quantity of compost and duckweed. He groaned dejectedly. His back was settling down to a delicious ache and every movement sent stabs of pain up his spine. His big toe was burning and throbbing like a jet-engine and the aroma was choking him. "What else was there in life?" he thought,

Came a ring at the front door bell. Threading his way through the chaos of slush, grit, and broken glass to the door he picked up a note which had been pushed through the letter box. It read:~

/Cont

"Dear Chris, we were one furnished tank short for the show next week, so, knowing you wouldn't mind, I've entered you for two instead of one,

P. S. We drew lots for washing a couple of yards of compost, and you and Jack Spratt were the winners, You lucky people !

Yours,

etc.

Hush! Hush ! Don't go upstairs. Christopher Robin is saying his prayers!

=====

HEARD AT THE SHOW.

Two small boys were wandering rather aimlessly round, when one suddenly stopped and was heard to exclaim, "Coo, look, Widows! I must go and tell Dad."

=====

Another rather younger youngster having studied the Best Tropical for some moments turned to a doting parent and said, "Call them Angels? They aint get no `arps like ourn in the picture at `ome!"

=====

From the Reptile section came the howler of the century. An up-and-coming young "scientist" was asked by his fair companion what was the difference between an Alligator and a Crocodile. Quick as a flash came the reply, "Well, Crocodiles are the ones they use for shoes and handbags."

=====

A middle aged lady having roamed round the hall time and again carrying a large square basket and paying no attention at all to the fishes, eventually asked one of our lady members, "Where are the puppies which are advertised?" The lady member regretted that there were none, but didn't have the heart to point out to the dear old thing that she must have mis-read "guppies".

=====

THANKS TO OUR PRIZE-GIVERS. .

The Society wishes to express its thanks and sincere gratitude to His Worship the Mayor, Councillor J.E.Longman, J.P. , and to Mrs, J, Warry for officiating at our Priae-giviiiig, on Saturday August 2nd

3-SPOT OBSERVATIONS.

by; Mr & Mrs.L. Keeling

Early in April a nest of bubbles, manufactured by our pair of Gouramies, appeared in the Community tank; we were very busy, had no alternative accommodation at the time, and as we had seen it all before and nothing had come of it we just ignored it. Two days later, however, on the Friday, the other occupants of the tank were very much "confined to barracks" in one corner and a mental note was made to prepare another tank for the Gouramies.

On Sunday morning 7 fishes had to be removed -dead!, among them an Angel, Rosy Barb, Black Widow and a Feather fin, and the others were again herded into the corner guarded by a murderous looking male Gourami, while in the opposite corner was the bubble nest with fry in various stages of development. Obviously action was called for, so with great haste another tank was got ready, and the nest and fry were transferred by means of a spoon, followed by the parents. Later in the day the female was returned to the Community tank as she was obviously having a rough time, but the day ended on a triumphant note, - the Community tank was once more a happy playground, and our first-time-ever baby egg-layers were apparently none the worse.

The male was removed after four days because of our fear (apparently groundless) that he might eat his offspring, of which more than 100 were swimming around. With great diligence we followed the book of words, and all went well for some three weeks, then through our own stupidity we lost the lot, ~ but we won't go into that. So we decided to try again.

This time we decided that we should take charge of operations, so everything was prepared in advance, and almost before one could say "Gourami" we had nest and eggs complete, and the bewildered female back in the Community tank ! Our reward was another happy family of 100 or so of which about 60 are still with us. The male on this occasion remained with his brood for eight days before being removed.

The time was now approaching when our Home Aquarium had to be made ready for judging, so some extra plants were acquired and our new tanks, which had been so long in the making, were set up for the first time, and we sat back thinking how clever we were. But that didn't last long ! We got White Spot ! No sooner had we set to work

/Cont.....

with Quinine Hydrochloride than the Gouramies were at it again!!!

Having fresh in our minds the memory of our depleted tank and what these demented Fathers oan do, we oought the male and put him in solitary confinement, and an examination of the Community tank revealed a number of eggs among some more bubbles. I was sorry at the time that my wife should have noticed these, for she insisted that they be saved. We placed them in a pyrex dish and with suitable precautions floated them into the breeding tank, but not one hatched. White Spot?, Quinine?, or Fatherless?

=====

EXCEL-SI-OR !

by: M.C.Mash.

The shades of night were falling fast
As thro` the ranks of tanks there passed
A youth whose fish were there on show -
The first time he had had a go.
Excel-si-or !

His pals had said he stood a chance.
He paid for entries in advance
Two scarf-tailed guppies and a sword
Was all that he could well afford.
Exoel-si-or!

Came the great day - the judges pause
Before his fish, what was the cause?
Great grief, the youth had 'won a prize !
The label's there before his eyes.
Excel-si-or !

Then in the evening, white with fear,
He gets a cup and sheds a tear.
Out in the night - , a pub stands near,
He thinks he might have just one beer.
Excel-si-or !

Then came the dawn, the bobby said,
" The drink had clearly turned his head,
He couldn't stand - he tried to danoe,
And so we called an am-bu-lance."
Excel-si-or ! Excel-si-or!

CUPS AND MEDALS.

Will all winners of Cups, Medals and small Cup replicas please bring them along to the meeting on Wednesday September 3rd, and give them to our Hon. Secretary - Mr. Giles so that they may be suitably engraved.

Please attach to each Cup or Medal a note stating initials, name, class and year-

Example; A. Qurist, Rosy Barbs. 1953
or J. White-Spotte A, O. V. Characins 1952

It will save Mr. Giles a lot of time and trouble if the engraver can have all these in one batch - so please do bring them, - or send them to him beforehand.

TANK WINNERS.

The winner of the furnished tank for the Lucky Ticket No. Was:-

Mr. M. Pride - 16, Lovelace Avenue, Southchurch, and the winner of the guessing competition (the Guppy tank) was:-

Mr. A. W. Bevan ~ Rettenden Common.

The actual number of fishes was 134, and Mr. Bevan won after a tie with another gentleman ~ the toss-up being made by our Hon. Sec. in the presence of both parties.

The Society wishes to record its thanks to Mr. Ken Dowsett, aged 15, who gave voluntary and extremely able help in the setting up and dismantling of the Show as well as much time in helping to run the Reptile Section.

=====

FORTHCOMING EVENTS.

Wednesday. Sept. 3rd, Table Show - Shubunkins and Common Goldfish.

Wednesday. Sept. 17th. Visiting Lecturer,

Mr. R. DuBoisson has, for personal reasons, tendered his resignation from the Committee, which resignation has been accepted.

Mr. D. B., who for the second year played no small part in helping to organise the Show, also put in a vast amount of manual work in its erection and dismantling, and while appreciating the equally hard and valuable work done by those Club members ("the same ones every time") who did come along and give a hand, he deplores the fact that so many were apparently only too willing to "leave the job to somebody else".

(Editors Note): It may take some believing, but some "members" actually returned their books of tickets unsold without even buying one for themselves in support of their Club!

=====

DOES A WHITEWORM MISS ITS BROTHER?

I wandered o'er the meadow sweet
With puckered brow and halting feet.
The question is I oft repeat ~
"Does a white worm miss its brother?"

The night before with tweezers clutched
A whiteworm from its lair I wrenched.
Oh! pondering thought that was not quenched:
"Does a white worm miss its brother?"

The family life I had destroyed;
Its parents must have been annoyed.
Poor Enchytraea the barb enjoyed -

So in this murky world of strife,
Consider this - you or your wife -
When contemplating taking life:
"Does a whiteworm miss its brother?"

M.C.M.

=====

PLEA FOR COPY

Now that we have got the Annual Show out of our systems, you will once more be settling down to a little gentle breeding, **WELL, PLEASE LET ME KNOW ABOUT IT.**



As you receive this Club Journal you are probably one of many Enthusiastic Aquarists —
 SO ARE WE, and believe in giving our fish the very best attention before sale so that we
 can feel proud to show them to you.

We supply many proved varieties of foods suitable for Tropical or Cold Water Fish,
 together with Plants & Accessories. An interest is taken in your problems as well as your
 Custom and we will Help and Advise in both.

We do not claim to be a Large Concern, but we Endeavour to Equal all for Service
 & Fairness.



MEET YOUR FRIENDS FOR A LOOK ROUND & CHAT

AT

THAMES AQUATICS

(B. LOVEGROVE)

48, YORK ROAD, SOUTHEND-ON-SEA, ESSEX

WHERE YOU WILL BE WELCOME AND MAY FIND JUST WHAT YOU WANT

IN

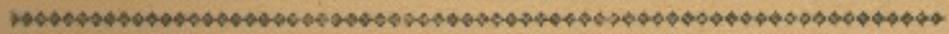
Tropical or
 Cold Water Fish

Garden Ponds
 Made & Stocked

Plants & Accessories

Aquariums of all sizes supplied
 Immediate Aquarium Repair Service in Emergency

Servicing of Aquariums in your
 own Home at Moderate Charges



SERVICE

CIVILITY

SATISFACTION

CROSS & YOUNG

Aquatic, Pet & Aviary Supplies



We invite you to inspect our selection of **TROPICAL FISH**. (The largest stock in the district), consisting of 30 Aquariums containing 50 different species including our specially home bred Angel Fishes, one of which took 1st Prize in the 1951 Southend Aquarist Society's Show.

*Goldfish, Shubunkins & Coldwater Catfish.
Budgerigars & Singing Canaries
Guinea Pigs, White Mice Etc.
Cages, Sand, Bird Seeds &
all Pet Foods.*



COMPLETELY FURNISHED AQUARIA . . . PLANTS, EQUIPMENT & ACCESSORIES
REGULAR SUPPLIES OF TUBIFEX & DAPHNIA

1-5, Nelson Drive, Leigh Road

(BETWEEN CHALKWELL PARK & CORONA CINEMA)

Telephone: LEIGH-ON-SEA 77721

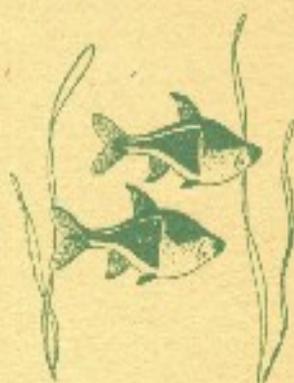
THE SOUTHEND, LEIGH & DISTRICT
AQUARIST SOCIETY

Vol. **5**

No. **10**

October 1952

MONTHLY



JOURNAL

Editor: P. Blomfield, 90, Beach Avenue, Leigh-on-Sea.

Hon. Secretary: H. A. Giles, 72, Sandringham Road, Southend-on-Sea.

AVAILABLE TO MEMBERS ONLY

Metropole

Aquatics

Proprietors: C. G. BROOKS — C. J. SAUNDERS

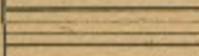
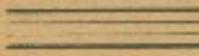


**534a, LONDON ROAD
WESTCLIFF-ON-SEA**

Telephone: SOUTHEND 45991



Stockists of Tropical and Coldwater Fish All Pet Foods and Aquarists' Accessories
--



W. H. CARTER

BUILDER & DECORATOR

Interior & Exterior Decorations



POND & FISH-HOUSE
CONSTRUCTION A SPECIALITY



126, CENTRAL AVENUE, SOUTHEND-ON-SEA, ESSEX.
Phone: SOUTHEND 68993

The Express Printers

Office:

30, BRIGHTWELL AVENUE,
WESTCLIFF-ON-SEA,
ESSEX.

Telephone: SOUTHEND 43331

Works:

43a, ALEXANDRA STREET,
SOUTHEND-ON-SEA,
ESSEX.

Telephone: SOUTHEND 45389



"ALWAYS ON TIME"

for

Private Stationery — Visiting Cards
Christmas Cards
Dance & Whist Drive Tickets
Posters Etc.

Visit . . .

Phone: SOUTHEND 45554

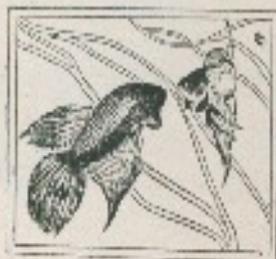
THE TROPICAL SHOP

352, WESTBOROUGH ROAD
& 54-56, FAIRMEAD AVENUE,
(Corner of Fairmead Avenue)
WESTCLIFF-ON-SEA

THE LARGEST TROPICAL & COLDWATER FISH ESTABLISHMENT IN THE BOROUGH

*A Selection of over 75 Different Varieties of Exotic Fish
always in Stock, also Goldfish, Shubunkins, Golden Orfe Etc.*

BREEDING PAIRS AT
VERY MODERATE PRICE



FISH BRED ON THE
PREMISES

*Tropical & Coldwater Plants, Pond Plants,
Water Lilys Etc.*

Accessories of Every Description

NOTE OUR PRICES

24 x 12 x 12	ANGLE IRON GLAZED AQUARIUM	37/6
24 x 12 x 36	ANGLE IRON 2-TIER STAND	37/6
18 x 10 x 10	GLAZED AQUARIUM	20/-
COMPLETE UNIT OF	HEATER, THERMOSTAT & THERMOMETER	24/6

CONSULT US - NO CHARGE - NO OBLIGATION

SOUTHEND LEIGH & DISTRICT AQUARIST SOCIETY.

MONTHLY JOURNAL

Vol.5. No. 10.

October, 1953

The Society meets at 7.45 p.m. on the First and Third WEDNESDAY in each month, at:-

THE LIBERAL HALL
Clarence Road, Southend-on-Sea.

Dear fellow members,

Two events of prime importance loom on the Club horizon - the Annual Dinner and the Annual General Meeting. Of the first one can only say that members who miss it are either extremely unlucky or have only themselves to blame; last year's was a riotous success, and it is now well known that everything we do has a habit of progressive improvement, - So keep the date in mind, November 22nd, and make it a date! Of the second, the A. G.M., this is your chance to say what the Club should or should not do, and also to have a say in the election of who you consider should fill the various administrative posts, - so make that a date too ~ 3rd December.

Incidentally, this post of Editor is one which will be vacant. I have had it for almost two years, and frankly I'm running out of ideas, - and its' time for a change of style. Furthermore, having now moved into a ground floor flat complete with garden, I want to indulge a passion for growing plants even more beautiful than Cryptocoryne (and the edible types too), and my wife wants to exchange the typewriter for the sewing machine. So if the prospect of doing it doesn't appeal to you yourself, you can have fun asking your friends if they will accept a nomination for the job. I've thoroughly enjoyed doing it, and I can only hope that my humble efforts have brought up to now, and will continue to bring until the end of the year, some measure of enjoyment to those who read their Journal.

Yours most sincerely,

P. Blomfield. (Editor)

CLUB NEWS

On Sunday September 14th a 33 - seater coach load of enthusiastic members set out for a visit to London Airport and Kew Gardens, The weather though a trifle cool, was up to the standard we have now come to expect on our trips, and the ride was interspersed with the usual fishy chatter, swopping of sweets, papers, cigarettes, seats etc, At Heathrow a B. O. A, C, guide took us on a tour of the Airport pointing out tilings of interest, and answering queries on the aircraft and procedure; we watched 'planes taking off and landing, and passengers embarking for various parts of the globe. After lunch Kew Gardens was visited, and, although, the outside display was rather disappointing owing to the time of the year, there was much of interest to be seen in the various houses. The run home was uneventful ~ there seemed to be some snoozing going on - and a stop at a very pleasant cafe in Romford resulted in the consumption of copious quantities of excellent ham and eggs or fish and ohips according to taste. Altogether an enjoyable day, and our thanks to Mr. George Gooke for his usual smooth organisation.

At the meeting on Wednesday 17th Mr.C. J,Saunders kindly gave us a talk in his now familiar manner which is at the same time both instructive and amusing. His subject was Tropical Fish breeding, and he opened by stating that he only spoke from his own experience, Mr. Saunders first stressed the importance of bringing the pair of fishes into breeding condition by feeding to repletion with the best foods, which he considered to be Earth worm, White worm and Bemax on this point he doubted whether Tubifex possessed much food value and said that while Daphnla made a pleasant change as an appetiser it had little nourishment value, being nearly all water and hard shell. He advocated that fishes should be kept at temperatures between 70° - 75° while conditioning - a slightly increased temperature would then be useful when it came to spawning.

In the case of Barbs, Mr. Saunders advised not too large a tank for spawning, with say a minimum of 16"x8"; this should be thoroughly sterilised with Methylene Blue, Pot` .Permanganate, Salt solution, Dettol etc. and then allowed to stand all day filled up with fresh water while the temperature is slowly brought up to that required. No gravel is used on the bottom, and a large clump of plants,

/Cont.....

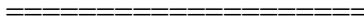
weighted with lead (Mr. Saunders uses Bladderwort) is placed in one back corner. The parents, which he does not previously separate, are placed in the tank in the evening, and during the night the temperature is allowed to fall or rise to act as a stimulant. Under this treatment they should usually spawn the following morning or at least within 48 hours; however, some reluctance to spawn had been experienced in the case of *Barbuss schuberti* which he had known to take 14 days.

Mr. Saunders then touched on breeding the Labyrinths, his favourites among which were the Leeri Gouramies, and he felt that the best position for the breeding tank was in direct sunlight, thus giving every opportunity for the formation of Green water, so beneficial for the newly hatched fry. This would obviate the loss of large numbers in the first two or three weeks - a common occurrence which, in his opinion, was due to starvation and not the more common belief that losses were due to cold air over the water surface during development of the labyrinth organ.

In the case of Fighters it was advisable to leave one parent fish with the eggs in the bubble nest as the eggs were heavier than water and would sink to the bottom with no fish there to replace them; with Gouramies the eggs were lighter and would remain in the nest of their own accord - both the parents could therefore safely be removed. Green water and infusoria feeding should be maintained for the first 10 days of the fry's lives, then micro and "shredded" earthworm and brine shrimps. The Leeri Gouramies seemed rather more difficult than the others to spawn and they also seemed to react badly to change of water in being moved from place to place; they preferred a slightly higher temperature (80°-85°),

Finally Mr. Saunders had a word to say on the bad habit of keeping one's thermostatic control within the plus or minus 1° which was the boast of some thermostat makers. He strongly recommended that fishes should be given a constant variation of from 5 to 10 degrees, thus simulating the natural day and night temperature change.

We thank him most heartily for a most instructive and entertaining talk, and we are grateful too to Mrs. Harris and Mrs. Giles for "doing us proud" in the tea break.



CLUB NEWS-CONTINUED.

Some 40 members attended the meeting on Wednesday October 1st, and while Mr. Jack Brooks judged the entries in the Table Show ~ Labyrinths - Messrs. Giles, Carter and Mash organised a "30 Questions" quiz, which got away to a good start and was an unparalleled success.

There were 3 teams of 10 members each, and from information received (unfortunately the Editor was unable to be present owing to pressing Automotive business at Earls Court) team No. 1 appeared to have amassed the least number of points or questions and were therefore the winners. Best efforts were Mrs. Cooke's Malayan Snail in 3 questions, Mr.Harris's Blanket Weed in 3, Mr.Scragg's Adipose fin in 5) while at the other end of the scale, team No. 3 only just managed to get the Annual Dinner in 30 and Water Life in a similar number.

One shaft of wit from our Secretary; on being asked of Water Life, "Is it a food?", he remarked, "No, but it can be digested".

All agreed that it was a highly amusing evening, and there can be no denying that the reason for the enjoyment was that members themselves joined in and "had a go".

The results of the Table Show were as follows:-

- | | |
|--------------------|-----------------|
| 1. Mr,R. DuBoisson | Dwarf Gourami |
| 2. Mr, W.Hoare | Blue Fighter |
| 3. Mr, M.Barnard | Fighter |
| 4. Mr.M. Barnard | 3 Spot Gourami, |

Congratulations to the winners, thanks to the organisers, and thanksa too to Mrs. D, B. and Mrs. Blomfield for the 9 o'clock bun fight.

=====

DO YOU WANT TO `PHONE THE SECRETARY ?

Our Hon. Secretary is now on the telephone - his number is Southend 64070

EXPERIENCE WITH *Corydoras paleatus*

by Mrs. E. Gibbs,

Having been interested in Cat fishes for a number of years I thought I would like to try to breed some. So in June I purchased a pair of young English bred *Corydoras paleatus*. Within a month the roundness of the female indicated that she would soon be ready for spawning. I put her in a tank and waited until she appeared full of eggs; then I put the male in the tank. For two days they appeared only mildly interested in each other but on the third day I noticed the male swimming very closely over the back of the female. This, I understood, was the first signs of spawning. It was then that I became so interested in the behaviour of my Paleatus that I laid down my mop and duster, forgot the milk pudding in the oven, and settled down in my grandstand seat to await the curtain rise on this interesting and exciting melodrama,

SCENE 1

After the male swims over the female the female noses up to the male and draws something from his side. This, I imagine is the sperm which is later to be deposited with the eggs on the chosen site. Soon the female is seen holding one or two eggs between her ventral fins while at the same time she swims around to find a suitable place for laying the eggs. Following this interlude comes,

SCENE 11

In which the female begins an operation which is either the cleaning of a leaf or glass selected or else it is the depositing of the sperms on the site, (which of these she does I am not sure). Then, in an upside position, she presses the eggs onto the selected site. In this way the spawning goes on for two or three hours, but already my mop, duster and oven all needed attention and from then on I had to content myself with a few fleeting glimpses during the remainder of their performance,

Unfortunately I did not rear any babies from this spawning. Many eggs went furry and I can only gather that they were infertile. A fortnight later I tried again, repeating the operation as before. I counted sixty eggs after this spawning and then went to bed feeling very satisfied.

/Cont.....,

But alas, the result was as disappointing as before, though I did rear one very fine fish from this attempt..

Five weeks later I made a third attempt. This time as I had heard that the parent fish would not eat the eggs I left them in the tank instead of removing them as I had done before. Again I counted a large number of eggs, but to my horror these were all eaten by the parents during the night. Next day the female laid another twenty or so eggs but these too were eaten with the exception of three which I placed in a floating jar. However, two of these went, furry and again I only obtained one baby which I haven't seen since I put it into an empty tank, but I am hoping that this is merely because it is, as yet, too small to find !

Nevertheless I feel that these experiences have taught me much and soon I hope to make yet another attempt, and, needless to say, I hope that I shall meet with more success. So "HERE'S TO THE NEXT TIME".

=====

FORTHCOMING ATTRACTIONS.

Wednesday, November 5th - Table Show, Characins and Cichlids (other than Angels) ~ ENTRY FORM ENCLOSED. Talk on Plants and Home made dried foods -Mr. H. Giles.

Wednesday, November 19th ~ Another session of "20 Questions", with probably a visit by some members of Chelmsford Club to join in.

Saturday, November 22nd ~ Annual Dinner, Dance and "Cabaret" ~ London Hotel, Southend.

BREEDING ANGEL FISH,

by: By .R. DuBoissen.

In writing this article I am relating as closely as possible my experiences in the spawning and rearing of Angels, I do not want to give the impression that this is the only way to approach the problem, but I feel sure that if other members have a pair of Angels they wish to breed, the following notes may at least be helpful.

Last March I purchased three Angels all about the size of a two shilling piece - probably eight to ten weeks old, and after a period of isolation I put them in my large Community tank. One decided it did not like the surroundings or the food, and without any trouble at all just gave up the ghost. Two little Angels- No this is not a story like the little nigger boys ~ two Angels grew quite rapidly, and in August they graced my Furnished Aquarium in our Annual Show.

On returning from the Annual Show, I put the fishes in another tank, and took this opportunity to re-set my badly wrecked Community tank, at the same time topping up with some 20 gallons of fresh water, The next day I put my fishes with the two Angels into the tank and was quite surprised to see the Angels taking a lively interest in each other. The usual procedure of locking jaws and cleaning leaves followed and the next day they settled down to clean a large Amazon Sword leaf. At about 8 p.m. that evening the female laid her eggs on the leaf and the male gave them the necessary attention.

At this stage I decided I would try to hatch the eggs and raise the young without the aid of the parents.

A glass accumulator jar measuring about 8" x 3" x 10" high was thoroughly cleaned and water from the tank the eggs were in syphoned into it to a depth of about 6". Into this I put three drops of a 2% solution of Methylene Blue, Then I removed the leaf with the eggs, placed a piece of lead on the base of the leaf and a very small piece of lead at the top and dropped it into the glass jar.

I put the jar in a 24 x 12 x 12 tank with about 6 inches of water at 80° F, and then placed an aerator tube

/Cont.....

directly under the leaf. The piece of lead at the top of the leaf caused it to bend forward to enable the very fine aeration to pass over all the eggs, It was now about 1.30 a.m. and so to bed.

The next morning I found two or three of the eggs had gone white ~ I took the leaf out of the water and removed the eggs with a pair of tweezers. The following day I had to remove another couple of eggs. On the third day little spikes could be seen protruding from the eggs and vibrating furiously. By the fourth day all the eggs had hatched, the fry being on the bottom of the jar in little clusters, head to head. It will be found that the fry have a very fine thread extending from the top of the head which sticks on to anything it touches. They kept up their continual wriggling for the next two days and then I noticed they had started to jump about and the clusters were now split up.

On the following day there were several of them actually swimming - and at this stage I tipped them into the 6" of water in the 24 x 12 x 12 tank which had housed the jar. The next day I fed some micro worm, but the fry did not eat any and this was obviously too soon to feed them.

The following day I fed brine shrimps and was very pleased to see them eat them with gusto. -I fed them brine shrimp for the next week and then added some sifted daphnia. The following week I moved them to a larger tank and counted 134.

Here I would like to point out one or two facts contrary to common belief

- (1) It is generally believed that Angels must be about 18 months - 2 years old before they will breed successfully. Mine were approximately 8 months old.
- (2) I have heard it said that the first four or five spawnings will not hatch, This was the first spawning by this pair of Angels.
- (3) One reads that the fry must be first fed on infusoria. These fish only ate brine shrimp and if there was infusoria in the tank I do not think they ate it. My aim was to keep the tank as free as possible from infusoria,

/Cont.....

NOTE. The eggs can be taken out of the water and apparently come to no harm - I had them out for several minutes. I have since reared another spawning from this pair - and a third spawning is being reared by another member at the time of writing.

If you should try this system please do let the Editor know how you get along, Secondly if you have any queries or if I have not made the various points clear enough, I will be very happy to give further explanation on the subject.

Good Luck!

WHO WON THE FISHES

At the Auction Sale on Wenesday October 15th Mrs. Kit Outing very kindly brought along two jars of fishes- one of young barbs - one of black Mollies – to be raffled. The winning tickets tickets were Nos.22 and 94,

Winners No. 94 were brand new members Mr G Stevens (Congratulations to them.). However ticket No 22 has not been claimed. Would the lucky owner of this ticket please contact our Hon: Sec` Mr Giles and collect his or her winnings.

=====

FOR SALE

4 Tanks	22 x 15 x 12 32 oz glass	25/- each
2 Tanks	17 x 15 x 15 ¼ plate glass	45/- each
2 Breeding tanks	24 X 7 X 8	12/-6d
1 Breeding tank	36 x 6 x 6	17/-6d
2 Tanks approx`	14 x 8 x 9	10/-
1 Tank approx`	18 x 10 x 10	20/-

apply:-

Mr J. Saunders
300, Southbourne Grove
Westcliff-on-Sea.

FOR SALE CONT.....

1 Tank 36" x 21½" (width) x 18" ,plate glass sides and zinc bottom	£3.0.0.
3 Tanks 24" x 12" x 12"	35/~ each
1 " 18" x 12" x 12"	£1.0.0.
One Stand for 24" x 12" x 12"	15/~

apply:- Tuesday and Friday evenings after 7.p.m.

Mr. J. W. Cowan,
88, Salisbury Road,
Leigh-on-Sea.

=====

BREEDER'S CLASS.

It should be remembered that all prospective entries for the Breeder s Class at the next Annual Show- August 1953- must be registered in the Journal (Fee 6d per entry).

Next year there will be separate classes for Egglayers and Livebearers with a Cup for the winner of each. Registrations should be written on a slip of paper and handed to Mr, Giles (Hon.Sec.) together with the appropriate fee, ~ DATE OF BIRTH or SPAWNING MUST BE SHOWN.

Mr.R. DuBoisson	<i>Apistogramma rodwigi</i> -	spawned	17/9/52.
	Angels -	spawned	7/9/53.

=====

ANNUAL DINNER.

Since writing the Editorial to this issue, there is some doubt as to whether we shall be able to hold our Annual Dinner at the London Hotel on November 22nd. If this proves to be not possible we shall either arrange for it to be held at " The London" on an alternative date or at the "Middleton Hotel" on the 22nd November.

Whatever arrangements are finally made will be brought to the notice of every individual Member in a Circular letter at the very earliest possible opportunity.

PORTRAYED FOR THE "KEWRIOUS".

By M.C..M.

We went to the Airport to see all the planes;
Our route was thro` London, via various lanes,
The coaoh was luxurious, the occupants jolly,
Some eating choc-ices, some sucking a "lolly".

The usual stalwarts were there in some force,
With lashings of sandwiches ~ egg, ham and horse!
George Cooke did hie stuff, he bled us all white:
The chalking of wheels i s hi s one great delight.

The guide took us round and explained the devices
For soaking tax-payers he knew all the prices
Of hangers and buildings that had been erected
And pulled down again 'ere they'd been inspected.

We saw all the "liners" with jets or propellers -
That eat up the juice which is stored in the cellars,
With scarcely a thought for the owners of cars
Whose petrol bills mount to the height of the stars.

After lunch we went on to the Gardens at Kew
And saw what a good jobbing gardner can do;
With a packet of seeds and a handful of mould,
He grows cacti or conkers, like we groweth old.

A lady we know was greatly intrigued
With a "suet-pud" plant just going to seed.
We "kewed" at a greenhouse especially to see
The Kew Garden wonder - the "spiral-stair" tree.

We started for home and were all satisfied,
The trip was worth-while, a most comfortable ride.
We stopped once or twice - compulsion or choice -
And went to bed happy. Give thanks and rejoice.

=====

WELL-KNOWN AQUARISTS AT HOME.

by: M.C.M.

5. NAN NOSTOMUS

After the usual greetings my first words to Miss Nan Nostomus were "Why Nan? Why not Anne, Annie or Nancy"? Her long eyelashes swept the horizon as she replied "My people were expecting the goat to kid at that very time, but I came first, and in any case it was a Billy. ".

/Cont.

She conducted me into a work-room where several lovely girls were busily engaged in sewing artificial fans onto the caudals of unsuspecting goldfish. They seemed to be enjoying their task and I could not help but remark on their aptitude for the work. Nan told me they had been especially trained in Japan not only in fanning, but in finning, floundering and foundlering. Knowing she was a cold-water fan and not wishing to get myself into hot water I remained silent,

We passed into the egg-sexing room, where skilled egg-sexers of both sexes were sorting goldfish eggs and stamping, grading and entubing them ready to send to the lonely outposts of the world. I was amazed to learn that they were paid as much as 7d, for every half-million. Speaking to a girl sexer I discovered that in time these remarkable people could hear the heart-beat of an egg at a distance of 6 feet, a feat that defeats imagination.

I asked Nan how she retained her school-girl complexion and she replied "green water and choc-ice mudpacke".

Readers, of the "Foul water Gazette" will be gratified to know who does not advocate the Chinese method of eye-ball abortion, so often used to obtain ultra-oelestiali era. She also told me that she had taken most of her degrees thermostatically and had not only passed with honours in aquarism, but in mesmerism, sensualism and paralism, and I could well believe it. She has written many books on such subjects as "The effects of cloud-tarsts on the ear-drums of octopi," "The changing currents in spotted-dicks" and, a masterpiece of the imagination, "A monograph of the Rays - from Ted to Alpha."

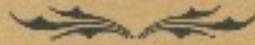
Miss Nostomus had a most alluring habit of expectorating into the tanks as we passed them and this may have accounted for the healthy appearance of her spatterdocks. Anyway, I had great difficulty in deciphering my shorthand notes on returning to the office, so am sure 'Foulwater' readers will forgive any discrepancies.



As you receive this Club Journal you are probably one of many Enthusiastic Aquarists — SO ARE WE, and believe in giving our fish the very best attention before sale so that we can feel proud to show them to you.

We supply many proved varieties of foods suitable for Tropical or Cold Water Fish, together with Plants & Accessories. An interest is taken in your problems as well as your Custom and we will Help and Advise in both.

We do not claim to be a Large Concern, but we Endeavour to Equal all for Service & Fairness.



MEET YOUR FRIENDS FOR A LOOK ROUND & CHAT

AT

THAMES AQUATICS

(B. LOVEGROVE)

48, YORK ROAD, SOUTHEND-ON-SEA, ESSEX

WHERE YOU WILL BE WELCOME AND MAY FIND JUST WHAT YOU WANT

IN

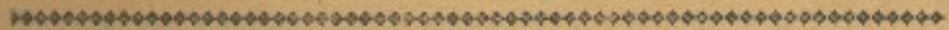
Tropical or
Cold Water Fish

Garden Ponds
Made & Stocked

Plants & Accessories

Aquariums of all sizes supplied
Immediate Aquarium Repair Service in Emergency

Servicing of Aquariums in your
own Home at Moderate Charges



SERVICE

CIVILITY

SATISFACTION

CROSS & YOUNG

Aquatic, Pet & Aviary Supplies



We invite you to inspect our selection of **TROPICAL FISH**. (The largest stock in the district), consisting of 30 Aquariums containing 50 different species including our specially home bred Angel Fishes, one of which took 1st Prize in the 1951 Southern Aquarist Society's Show.

*Goldfish, Shubunkins & Coldwater Catfish.
Budgerigars & Singing Canaries
Guinea Pigs, White Mice Etc.
Cages, Sand, Bird Seeds &
all Pet Foods.*



COMPLETELY FURNISHED AQUARIA . . . PLANTS, EQUIPMENT & ACCESSORIES
REGULAR SUPPLIES OF TUBIFEX & DAPHNIA

1-5, Nelson Drive, Leigh Road

(BETWEEN CHALKWELL PARK & CORONA CINEMA)

Telephone: LEIGH-ON-SEA 7721

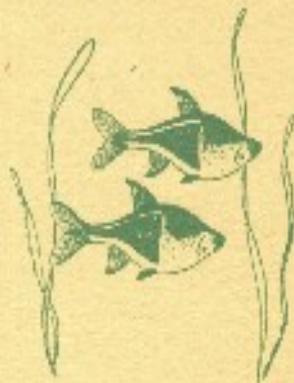
THE SOUTHEND, LEIGH & DISTRICT
AQUARIST SOCIETY

Vol. **5**

No. **11**

November 1952

MONTHLY



JOURNAL

Editor: P. Blomfield, 90, Beach Avenue, Leigh-on-Sea.

Hon. Secretary: H. A. Giles, 72, Sandringham Road, Southend-on-Sea.

AVAILABLE TO MEMBERS ONLY

Metropole

Aquatics

Proprietors: C. G. BROOKS — C. J. SAUNDERS

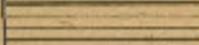
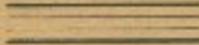


**534a, LONDON ROAD
WESTCLIFF-ON-SEA**

Telephone: SOUTHEND 45991



Stockists of Tropical and Coldwater Fish All Pet Foods and Aquarists' Accessories
--



W. H. CARTER

BUILDER & DECORATOR

Interior & Exterior Decorations



POND & FISH-HOUSE
CONSTRUCTION A SPECIALITY



126, CENTRAL AVENUE, SOUTHEND-ON-SEA, ESSEX.
Phone: SOUTHEND 68993

The Express Printers

Office:

30, BRIGHTWELL AVENUE,
WESTCLIFF-ON-SEA,
ESSEX.

Telephone: SOUTHEND 45331

Works:

43a, ALEXANDRA STREET,
SOUTHEND-ON-SEA,
ESSEX.

Telephone: SOUTHEND 45389



"ALWAYS ON TIME"

for

Private Stationery — Visiting Cards
Christmas Cards
Dance & Whist Drive Tickets
Posters Etc.

Visit . . .

Phone: SOUTHEND 45554

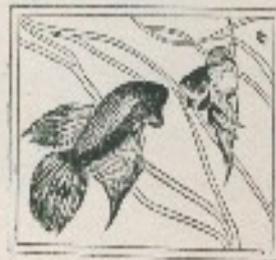
THE TROPICAL SHOP

352, WESTBOROUGH ROAD
& 54-56, FAIRMEAD AVENUE,
(Corner of Fairmead Avenue)
WESTCLIFF-ON-SEA

THE LARGEST TROPICAL & COLDWATER FISH ESTABLISHMENT IN THE BOROUGH

*A Selection of over 75 Different Varieties of Exotic Fish
always in Stock, also Goldfish, Shubunkins, Golden Orfe Etc.*

BREEDING PAIRS AT
VERY MODERATE PRICE



FISH BRED ON THE
PREMISES

*Tropical & Coldwater Plants, Pond Plants,
Water Lilys Etc.*

Accessories of Every Description

NOTE OUR PRICES

24 x 12 x 12	ANGLE IRON GLAZED AQUARIUM	37/6
24 x 12 x 36	ANGLE IRON 2-TIER STAND	37/6
18 x 10 x 10	GLAZED AQUARIUM	20/-
COMPLETE UNIT OF	HEATER, THERMOSTAT & THERMOMETER	24/6

CONSULT US - NO CHARGE - NO OBLIGATION

SOUTHEND LEIGH & DISTRICT AQUARIST SOCIETY.

MONTHLY JOURNAL

Vol. 5, No. 10.

November. 1952

The Society meets at 7.45 p. m, on the First and Third WEDNESDAY in each month, at:-

**THE LIBERAL HALL,
Clarence Road, Southend-on-Sea.**

EDITORIAL.

Dear fellow members,

During this year I have been keeping a note of the attendance of members at meetings - purely for interest you will understand, and the results are, to me, amazing. (Is there a Psychiatrist in the house?) Our average actual membership throughout the year has been 144. At the 17 meetings- NOT INCLUDING AUCTION SALES ~ there has been an average of 45 members present. At the 3 Auction Sales there has been an average of 87 members present. Of the 45 members who comprise the first figure, about 32 are members who always come to every meeting - the "hard core" of the Club- and there is no doubt that these are the one's who get the most fun out of it.

Why the popularity of Auction Sales? Is it that a large number of members are only interested in what they can get out of the Club? It is apparent that they aren't very interested in any other type of function. Then there are in my address book no less than six names whose owners I have never seen at any meeting - one can only wonder why they rejoined this year. -- I didn't see them last year either!

There must be a reason for this sort of thing-why not let us have your ideas on the subject; perhaps we of the Committee are to blame -- well, if no, we would like to know. Of course it might be that those who don't come merely like to receive a Journal, it is free of course, or perhaps --particularly after this Editorial - I am flattering myself as to its popularity??

Yours most sincerely,

P. Blomfield. (**Editor**)

CLUB NEWS

The meeting on Wednesday October 15th was an Auction Sale and was attended by a large number of members ~ many of whom, it is much regretted, seem to limit their attendance solely to this type of function. Our Auctioneer, Mr. Giles, got away to a swift start, and between 7.50 and 10.40 the incredible number of 210 lots were disposed of - a remarkably stout effort of vocal endurance, Horace. The range of articles available ranged from glass marbles in gross lots to 4 ft. tanks and from Scarf tail Guppies to Blue Gouramies the size of young whales. Plants, of which there were large numbers, again fetched better prices on the whole than fishes, and those who collected almost new Constat Thermostats for much less than £1 must have been well pleased with themselves.

On Wednesday November 5th the numbers reverted to the "faithful few" - less some who were obviously answering the call of family in treating one Guido Fawkes to his annual ceremonial cremation, but those present were both instructed and amused by our Hon. Sec. Mr. Giles who talked and gave a practical demonstration of his method of preparing his particular "brew" of dried-food. He took Dried Shrimp, Puppy Biscuit and Bemax and used an ordinary household mincer to grind the mixture down to the size required. The Shrimp he baked in the oven on a low gas for about 3 hours- during which time he advised the evacuation of the house, and he suggested the use of Spinach, collected either from one's own or the next door garden and slowly dried, as a food for those types of fishes, e.g. Mollies, which are normal Algae eaters. Liver was also recommended -dried after having been cooked ~ as an occasional luxury tit-bit. Mr. Giles stressed that dried food should not be used to the exclusion of other foods, and to the question of whether Cuttlefish (as given to cage birds) was of any value to make up for the small fishes which would undoubtedly form part of the average Tropicals diet, he thought that it should not be used on account of its very high lime content. Mr. Willis suggested that Cod Liver Oil could be kneaded into the food which should then be re-dried before using, but there was a query raised as to whether this might lead to a film on the surface of the water.

/Cont.....

Mr. Gavin Willis kept the ball rolling after the interval with a talk on plants, and opened by saying that in his opinion sunlight could not be bettered for growing them. He explained that *Vallisneria spiralis* was not the twisted type, as seemed to be the popular misconception, it was in fact the straight leaved variety which produced a long flower stem which was in spiral form (hence the name), - the twisted *Vallisneria* carried the distinctive name of *torta*. He went on to explain how *Hygrophila* could be propagated by floating a single leaf on the surface, — this leaf will in a short time throw down a small root, which, when sufficiently large, could be anchored in shallow water, eventually producing a complete plant. *Ludwigia* being by nature a bog plant, produced best results when grown out of water and was outstanding by reason of the lovely pinks and mauves seen on the undersides of the leaves.

He had found bright sunlight the only medium for growing *Myriophyllum* and particularly recommended the blood - red variety, and he had mixed feelings on the subject of *Elodea* in tropical tanks, as although it was a good oxygenator it grew too fast and was inclined to stringiness. Indian Fern he had found tricky to grow, - it seemed to hate being moved and would disintegrate if the "crown" was pushed down below the surface of the gravel - reproduction in both the ordinary and the broad-leaf varieties was from tiny plants forming from the main leaves and sending down their own roots.

Amazon Sword plants he found to do best in very large tanks so that their runners could spread out, but the Dwarf variety grew to only 5" and its runners produced offspring plants so close together that a solid mat of plants could eventually be formed. Cryptocorynes were slow growing and reluctant being moved ~ they are said to produce flowers but these, Mr. Willis said, he had never seen; and he had found that *Aponogeton undulatum* would self-fertilise and produce seeds provided that it produced its own flower stem.

While the two lectures were going on, Mr, Gavin Willis judged a Table Show of Characins with the following results.

1st.	Feather Fin -	Mrs. Gibbs.
2nd.	Black Widow ~	Mr. Mash.
3rd.	Neon tetra -	Mr. Mash.
4th.	Black Widow -	Mrs. Gibbs.

/Continued.....

Our thanks to Messrs. Giles and Willis for their respective talks, to Gavin Willis for his judgement, to Mr. Carter for getting things organised, to Mrs. Baker and Mrs. Garter for providing the "char" and "wads" in the break, and our congratulations to the winners.

Forthcoming; Attractions.

The last meeting; of the Year,- December 3rd.

The Annual General Meeting - at which you can air your grouses, make your suggestions, throw out the present Administration, throw in a new one, become President, or Hon. Sec, or Hon. Treas, or Hon. anything else, and generally have a say as to what YOU want the Club to do.

Of course there are quite a lot of members who won't bother to come, but we should dearly love to see every single member present at what is, after all, the most important meeting of the year.

ELECTION .OF OFFICERS - Annual General Meeting.

In accordance with the Rules of the Society, the present Committee will resign at the A.G.M, on Wed. Dec, 3rd. and a completely new one will have to be elected.

Members are asked therefore to let the Hon. Sec.Mr. H.Giles, have their nominations for the following positions:-

President, Vice-President, Hon. Secretary, Hon. Treasurer, Hon. Editor, Hon. Show-Organiser, Hon. Librarian, Hon. Social Secretary, and other Committee member.

It must of course be remembered that the consent of the member must be first obtained for any nomination.

In previous years the apathy of members on this subject of nominations has been pretty pathetic, It's your Club - you should at least be interested enough either to take on a job yourself or talk someone else into it. Don't leave it to the same one's every year, what about some **NEW BLOOD** What about **YOU** having a go -Yes **YOU!** !!

SOUTHCHURCH TROPHY WINNER,

It will be recalled that Club members inhabiting the Southchurch district have banded together to provide a Trophy to be awarded to whoever gains the most Table Show points during the year.

We are most happy to record that the Southchurch Trophy has been won, in this its first year, by our Hon. Librarian ~ that writer of terse verse - that inventor of topical ballads — that saviour of Journal Editors - he of the cherubic, smiling face- Mr.M. C. Mash.

Mr. Mash, to whom we offer our most hearty congratulations, narrowly defeated last year`s winner, Mrs. Ivy Gibbs, the actual points totals being as follows:-

- | | | |
|----|----------------|-----------|
| 1. | Mr.M.C.Mash | 25 points |
| 2. | Mr s. E. Gibbs | 23 points |
| 3. | Mrs. Harris | 13 points |
| 4. | Mr. W. Hoare | 12 points |

=====

WHO?

by: Mrs. I. Cotgrove

Who feeds the fish throughout the day,
When hubby dear is far away,
And electric light bills has tc pay?

Dear Wifey!

Who listens to His tales of woes
Resignedly to the Fish Club goes,
And gives him up at times of shows?

Sweet Wifey!

Who gets the blame when white worms die,
And spends her spare time watching fry,
And gives up chocolates, fish to buy,

Poor Wifey!

Who lets his wife clean out his tanks,
And never gives her any thanks;
Whose friends are all aquarium cranks?

Why, Hubby!

Who gets all praise, collects awards,
And talks all day of Barbs and Swords,
And never thinks his wife gets bored?

Dear Hubby!

=====

A FEW NOTES ON WORMS,

by Mrs P. Sullivan

Tubifex: Some people may be worried by statements that these red mud worms are dangerous food for fishes due to the fact that they harbour parasites; these are almost certainly untrue, as no worm parasite would be parasitic upon fish. The misapprehension has probably arisen from the fact that there may be fish parasitic complaints which could be present in the mud in which the worms live and which could be introduced into one's tank with the worms. This danger is small and becomes nonexistent if the worms are "washed" thoroughly under a slow-running tap for some hours to clean them prior to using them.

Fishes that have been fed only on dried foods are apt to gorge themselves when first feeding with Tubifex, with bad results, so care should be taken not to overfeed. Fishes like Mollies, which are essentially vegetarian, can best have their diet restricted to a vegetarian one, as worms of this sort are apt to upset their digestion.

Micro-worms : My method of culturing these tiny worms - so useful in the rearing of small fry - is to fill a wooden box, about 8" square and 6" deep, with garden soil of the soft leaf-mould type, soak with water and allow to stand for 24 hours. Then procure a small culture of "micro" from a fellow ~ aquarist, scoop out a hole in the centre of the moist soil and fill with a mixture of bread and milk or a little white fish, and in this place the "micro". Cover the soil with a piece of glass and the box with a wooden lid, and in two to three days plenty of worms can be picked off the glass with tweezers.

It always vary the feeds, using as a frequent alternative Quaker Oats and Yeast mixed with milk ~ this produces a seething mass which usually lasts for 3-4 weeks. This latter method is apt to develop an unpleasant smell, but this should not be much in evidence if the box is kept covered and in a cupboard.



Should any member be interested in writing to New Zealand to obtain information on the subject of White Cloud Mountain Minnow breeding there, they are invited to write to-

Mr. R.H. Taylor,
8, Burton Avenue,
WANGANUI EAST,
North Island,
N.Zealand.

This gentleman is Editor of the Wanganui Fish Club

=====

WELL-KNOWN AQUARISTS AT HOME. by: M. C. Mash.

4- - JIM NOCORYMBUS.

It was in the 'eighties that Jim Nocorymbus left his home in Connecticut with a light heart after a heavy sentence. His relatives wanted nothing to do with the man who had been convicted of crossing swords with small fry to the detriment of the profession, so after obtaining his unnaturalisation papers Jim emigrated to Ashby-de-la-Zouch.

For a while he turned his warty hands (i.e. star wort, bladderwort and liverwort) to inventing. Those well known proprietary brands of hair-grass brilliantine and stoneless gravel were the outcome of his fertile brain, and he also had a hand in lady's hip-pockets.

Since the war he has devoted most of his valuable time to decreasing the fish-population of Spawnington, near Ashby, but he readily agreed to a meeting with myself for the enlargement of the knowledge of 'Foul-water Gasette' readers,

He met me at the rustic railway-station, which was half underground, and we spent several hours in the public bar of the 'Seven Veils' before proceeding unsteadily to his breeding-ditches. The surrounding country was knee-deep in mulm which had been strained off from his plastic reservoirs and there was a consequential aroma of baked beans.

/Cont.....

One of his most successful efforts, he told me, had been in converting Zebras to Pearls by the simple expedient of sandpapering the dark horizontal bars. Also, he had carried out a scheme for grafting an extra spot on to Blue Gouramies.

His Leeries were an unforgettable sight. They leered as only a Leeri can leer, and I had to turn away to prevent myself being mesmerised.

He had trained a squadron of Angels to act as a guard of honour to distinguished visitors and I inspected them with an hypercritical eye, and it is no hyperbole to say they were super-perfect.

The craze for speed in this age had prompted Jim to experiment with Black-Line Tetras by cutting down their fins, thereby giving them a stream-lined contour. He then immersed them in paraffin to encourage jet-propulsion, hoping in time to get these fish to swim faster than smell, but he was rather concerned about what would happen when they passed the smell barrier

I was somewhat intrigued by a tank of Mountain Minnows that was tipped to an angle of 45 degrees. This, I ascertained, was to inveigle the fish into imagining they were in their natural haunts on the side of a mountain. Another tank, that contained Mollies, had convex mirrors attached to the sides. This cute idea was to delude the fish into thinking they were getting a "spread" and so encourage them to slim. Result - no dropsy!

Mr, Nocorymbus had married a black-headed widow, and they had three buxom daughters whom they had named Faith, Hope and Charity, but whom the rustics had re-named Graceless I, II and III, as there was something fishy about them.

As we drove back to the station in his 1901 "Chitty-bang-bang" I felt that he had missed something in life, but I was mistaken. It was I who missed something- to wit, one wrist-watch, a fountain pen, a cigarette lighter, a pair of suspenders and my ration book. But I would have sacrificed much more for such an experience, and feel convinced that "Foul-Water" readers would do likewise.

=====

**FEEDING MY FAMILY AND MY FISHES
A WOMAN'S POINT OF VIEW.**

by~Constance G. Brooks.
Thames Valley A. S,

I don't want to start a battle of the sexes but I believe that a woman can care for fishes better than a man. I dare to base this rash assertion on my own experience in combining housekeeping and fish keeping as in my opinion, the most important part of both tasks is feeding the brutes. As this is a "Fishy" magazine I'll not spend time on proving that the way to a man's heart is through his stomach, but will stick to fish. In their case correct feeding the experts say- is not too much food at a time and as much variety as possible. On both these points the housewife scores.

It's a pleasant break from domestic duties to feed my charges several times a day and, of course, I can raid the larder with impunity. The family never grumble at the small sacrifices they make for the simple reason that they never know.

Right from the start - when I spot the newly hatched fry ~ the kitchen provides all manner of things for infusoria experiments - the banana skin on its way to the dustbin, a slice of potato or a lettuce leaf, or even the water in the vase when I'm changing the flowers. Also I'm in a position to add a little dried egg to the youngster's diet -there's only a very little left now in a tin cunningly labelled "rice" at the back of the larder !

The next stage of feeding is generally accomplished with brine shrimp and micro-worm, I don't raid the larder for salt for the brine shrimps-they prefer Tidmans Sea Salt - but I never make special purchases for the micro. They flourish in small bowls of the same flaked oat porridge that we have for breakfast - but without the sugar ! If there's no porridge available a paste made from ordinary flour or soya flour and water suits them just as well (although I have found that soya quickly develops a very unpleasant smell).

Of course, I use several varieties of dried food including dried shrimp and Bemax and gradually the fry are encouraged to take these for most meals

/Cont.....

but I can maintain a proportion of live food with earthworms - easily found when I m pottering in the garden- and white worms. The latter's staple diet is bread well soaked in milk but in addition they receive any of the baby' g cereal (Farex etc) when she refused to finish it up, and occasionally a little Bemax or any old scrap of cheese grated into their mash.

And I have discovered that my fishes welcome other 'fresh' foods from the kitchen. They all seem to appreciate minute scraps of red meat and I often take a snippet from the "joint" before it goes into the even, The Angels relish small morsels of the dog's horse-meat and will take it from my fingers in fact, they almost sit up and beg - perhaps one day I shall hear them bark for it! Raw Liver is another favourite and although offal from the butcher is rare we quite often have rabbit and I doubt if any of the family notice the liver is missing when it comes to the table. It should be fed sparingly and even the smallest fish greedily accept the pulp if it's squashed between worm shredders. But do not let the stringy residue fall in the tank as it can choke small fish- I've seen it happen!

From the fishmongers I occasionally bring home a prawn or shrimp to suspend in the tank. Live-bearers especially will tackle it with zest - but I do not recommend this minor form of shop-lifting unless you're on very good terms with your fishmonger and do not mind some odd glances from other women in the queue.

One day, if ever I'm able to sell any of the fish I'm so carefully nurturing- I'll make them contribute to the house-keeping and give my family a treat ! I wonder what reward they would appreciate? A lobster, perhaps? now haven't I read in Innes that fish like lobster too? There I go again

=====

The Editor regrets that it has not been possible to provide more than a ten page Journal this month, owing to lack of Copy.

=====

**Note: We don't believe there ever was a
December issue as there was only one
actual meeting in December 1952**

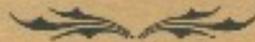
If you know different <mailto:peter.capon@yahoo.co.uk?subject=archive of Southend Leigh & District Aquarist Society Journals>



As you receive this Club Journal you are probably one of many Enthusiastic Aquarists —
 SO ARE WE, and believe in giving our fish the very best attention before sale so that we
 can feel proud to show them to you.

We supply many proved varieties of foods suitable for Tropical or Cold Water Fish,
 together with Plants & Accessories. An intrest is taken in your problems as well as your
 Custom and we will Help and Advise in both.

We do not claim to be a Large Concern, but we Endeavour to Equal all for Service
 & Fairness.



MEET YOUR FRIENDS FOR A LOOK ROUND & CHAT

AT

THAMES AQUATICS

(B. LOVEGROVE)

48, YORK ROAD, SOUTHEND-ON-SEA, ESSEX

WHERE YOU WILL BE WELCOME AND MAY FIND JUST WHAT YOU WANT

IN

Tropical or
 Cold Water Fish

Garden Ponds
 Made & Stocked

Plants & Accessories

Aquariums of all sizes supplied
 Immediate Aquarium Repair Service in Emergency

Servicing of Aquariums in your
 own Home at Moderate Charges



SERVICE

CIVILITY

SATISFACTION

CROSS & YOUNG

Aquatic, Pet & Aviary Supplies



We invite you to inspect our selection of **TROPICAL FISH**. (The largest stock in the district), consisting of 30 Aquariums containing 50 different species including our specially home bred Angel Fishes, one of which took 1st Prize in the 1951 Southend Aquarist Society's Show.

*Goldfish, Shubunkins & Coldwater Catfish.
Budgerigars & Singing Canaries
Guinea Pigs, White Mice Etc.
Cages, Sand, Bird Seeds &
all Pet Foods.*



COMPLETELY FURNISHED AQUARIA . . . PLANTS, EQUIPMENT & ACCESSORIES
REGULAR SUPPLIES OF TUBIFEX & DAPHNIA

1-5, Nelson Drive, Leigh Road

(BETWEEN CHALKWELL PARK & CORONA CINEMA)

Telephone: LEIGH-ON-SEA 77721