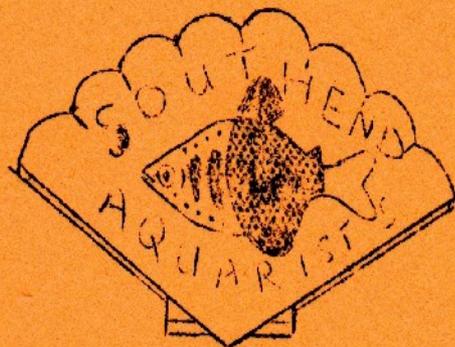


Spring 1963

SOUTHEND, LEIGH & DISTRICT

AQUARIST SOCIETY



QUARTERLY MAGAZINE

THE SOUTHEND, LEIGH AND DISTRICT AQUARIST SOCIETY

QUARTERLY MAGAZINE

SPRING 1963

The Society meets at 8.00 pm on the  
first and third Tuesday in each month

at

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

.....  
**Editor:** J.H.Preston, 79 Leigh Road, Leigh-On-Sea,  
Essex. Telephone Southend 78557

**Secretary:** D.A. Booth, 18, Hamstel Road, Southend-On-Sea  
.....

EDITORIAL

Dear Readers,

After another lapse this Journal has again been revived in this the 25<sup>th</sup> year of the club's history. It is hoped that this time we may be able to continue unbroken publication for many years at least.

This issue has been called the "Spring Issue"; it's appearance has unfortunately been rather delayed, mainly by the fact that typing and duplicating are still novelties to me. I must apologise for any difficulties you may experience in reading various words or letters, as my technique is as yet far from perfect. We hope the next edition will appear about the middle of July.

Articles in this issue have been provided entirely by members of your committee, with the exception of the articles on the Blue Acara and the Mozambique Mouthbrooder. For those contributions, thanks are due to our youngest members, Harvey Holmes and Clive Bennett.

It is hoped that this effort will encourage other members to contribute to future issues, for although fortunately we still have some "copy" in hand for the summer number, more will be needed if good work is to be produced in the future.

Finally I would like to point out that if you have any suggestions for additional topics which you think should be covered at the Club meetings, the committee will be only too pleased to hear from you.

The Editor

.....  
**CLUB NEWS**

Welcome tonight (7<sup>th</sup> May) to members of the Grays Thurrock Club who are competing against us in an Inter-Club table show. Classes are for Characins, Barbs, and Livebearers, and we hope an enjoyable evening will be had by all.

**London Zoo outing** (26<sup>th</sup> May) Practically all seats are now booked. The coach will depart from Southchurch at 10. a.m. Picking up at various points in the borough and at Hadleigh, Thundersley, etc. Members will be notified of more exact times and places at the meetings tonight and on 21<sup>st</sup> May.

(please turn to next page)

## WORLD OF THE AQUARIST TODAY

by L.E. Willis

In Ceylon on Friday evening, the fish in the dealers tanks on Saturday. Chlorophyll growing in the nursery pools in Florida, cut, collected a few hours later at London airport. Indeed, today it is a small world.

And the aquarist himself? I have an air mail letter here from the aquarist club of Kenya telling me of their members trips- 400 miles by road to the East African coastline to collect Marine fish (Sergeant Majors, Damsels and Dragon Fish). And here is another recent one from Mr LUIS ANGEL DIEZ, a fellow aquarist in Buenos Aires who is a member of the Argentine Association of Aquarists. We look forward to having his news and seeing some of his photographs.

Or Romford club friends have received the club Bulletin of the North Eastern Indiana Aquarium Society, which was formed in 1957 and has about 50 members. They meet on the first Sunday of each month at 2.00 pm and have movies, lectures, bowl shows, and auctions. Single memberships is 2 dollars (about 13/6) or 3 dollars per family. It is good to hear that in most cases the whole family joins in the club activities.

With the popularity of photography, the increasing use of tape recorders, and jet air transport, there exist wonderful opportunities for easy exchange of news, talks and knowledge between aquarists on opposite sides of the globe.

Yes, for the aquarist of today it is truly a small world. An interesting, intriguing world.

.....  
**Club News (continued)**

A further outing this time to Kingfisheries, is proposed for the 21<sup>st</sup> July.

**Romford Visited** On the 18<sup>th</sup> April some 16 members from our Society visited the Romford club, who were showing a film and slides from the Sunderland Aquarist club, taken at a recent British Aquarist Festival (Belle Vue, Manchester) The fact that the Romford club had temporarily lost the use of their usual hall, and we were all jammed into emergency accomodation, did not deter from the interest of the evening.

**Romford Visiting Discus slide show** On the 21<sup>st</sup> of May we will in term act as hosts to our Romford friends who will join us for the Discus evening. Len Willis will be in charge, and an interesting and informative program is promised. There will be, in addition to slides, photographs, etc. a tape recording by aquarists who have bred discus.

### Table Show Results 1963

Here are the results to date:-

**Barbs** 19/2/63

1	Mr Willis	tiger
2	Mr Mason	chequer
3	Mr Dunn	rosy (female)
4	Mr Mason	rosy

**Livebearers** 2/4/63

**Platies**

1	Mr Sellars	Marigold
2	Mr Willis	Lemon wag
3	Mrs Iles	Marigold
4	Mr Sellars	Marigold (F)

**Mollies**

1	Mr Dunn	Black lyretail
2	Mr Iles	Perma black(F)
3	Mr Preston	Perma black (F)
4	Mr Preston	Perma black (M)

(continued on page 7)

## HOW NOT TO BREED TIGER BARBS

by A.J. Mason

Before all you budding breeders read this sad little epistle I suggest you have a large bucket or bowl beside you to cry in.

About three years ago I decided to sally forth and try my luck at breeding a few tropical fish. I had managed to keep a small community aquarium for about a year without fouling it, and I thought I now knew enough to try one of the so called "easy ones". Ha,Ha! So I chose Tiger barbs. After gathering around me all the books I could find about breeding these barbs, I started to read. But the more I read the more confused I became for every article on Tigers told a different story. So I chucked the lot back on the book shelf, and decided on trial and error as the best method.

I had read in one of the books that using nylon wool mops was cheaper than using plants; also you could wash the mops out and use them again at a later date. So when you decided to try your luck with other fish you did not have to go rushing out to buy fresh plants.

Armed with all this "know how", I half filled a 16" x8" x8" tank with fresh tap water, put in a couple of nylon mops and set the thermostat to give a temperature of 80 degrees (Fahr). The tank was left to stand for about four days, and during this time I went out to search for an adult male Tiger. I had what I thought was a good female apparently full of eggs.

On the fourth day all seemed ready for the great experiment, I placed the pair in the tank last thing at night, preyed and went to bed. As I had been told that they that they should spawn at first light in the morning I set the alarm clock for an early rise. So at six o'clock next morning I awoke to a great clanging and rushed downstairs. I peered into the tank and saw? - nothing. Just two tiger barbs panting nose down in opposite corners of the tank. So I made a cup of tea, switched on the tank top light, and went back to bed. At a more respectable hour in the morning I once more arose, this time more leisurely. Gloomily I looked again into the tank; the fish were in exactly the same place, still pale and still panting.

I swiped one of my wife's knitting needles and gave the mops a couple of half hearted pokes. To my delight and amazement dozens of tiny of tiny, clear eggs could be seen on the wool and some on the bottom. My head immediately swelled to twice it's normal size. Hurriedly I removed the parents and cover the tank over with a dark cloth.

Two days latter I removed the cloth and peered into the tank. They were the longest forty eight hours I have ever known. But there on the sides I saw what appeared to be splinters of glass with little black dots at one end. Another three days and I had a nice little shoal of youngsters swimming about the tank.

No stand by with your bucket. I fed them on drops of "Liquifry" three times a day but alas they were all dead within two days. My head shrank back to it's normal size and I half filled my bucket.

Here endeth the first lesson.

Sally number two started about three months ago. I was armed with a little more experience and an even "bigger head", for I had now bred and reared several other types, including Checker barbs, fighters, and some of the toothcarps. I thought I would try again these so called "easy barbs". As I had got as far as the fry stage previously I used the same mixture as before, though with of course a new pair of fish. After a couple of days I again arrived with glass like fry sticking all over the wool and glass, so I now had about three days to plan my campaign on feeding the brutes. I decided to use infusoria tablets and Liquifry, as things seemed to be going very well for the .....

(continued on next page)

first week I reckoned I had won the first round. But, (sigh) I made my second bloomer; I tried to rush them along too fast, and after putting them on fine dry food too soon I lost the lot within two days. The moral appears to be “never count your fry before they are at least six weeks old”.

I have since spawned Tiger barbs yet again and tried to rear them on brine shrimp and micro worms after two weeks on infusoria. But out of the sixty fry that hatched I have only actually managed to rear only one poor little barb. By this time I had completely filled up my bucket and I think I had better empty it before it slops over the floor. But, please don't you be put off by my dismal failures.

I expect I shall try again. I am a glutton for punishment, though perhaps I'll have more success in raising neons or cardinals.

.....

## **THE BREEDING OF AEQUIDENS LATIFRONS (??-!!!)**

By H. Holmes.

*Aequidens latifrons* are cichlids and have the characteristic hard and soft rays on the dorsal fin. They have many black bars on a white body, and also have many blue-turquoise spots and markings; the dorsal fin is edged with gold. The sexes are identified by the pointed dorsal fin in the males. Blue Acaras grow to a maximum length of about five inches.

My story begins on the 18<sup>th</sup> of March, when I bought a young pair of Blue Acaras. I believed, as I was told that they were too young to breed. My fish were about 2½ inches long. I put them in a 14 inch long tank with a 25 watt heater and a top light, keeping the temperature at approximately 78 deg. Because the tank was rather small for the fish I had an aerator stone going. A few plants that I put in were left alone. I started to feed the Acaras on “Kit-e-kat” food which I was told they would like, also it would bring them into breeding condition. I also fed them tubifex regularly but they didn't like this as much as the cat food. Now and again I fed them young guppies, which they ate readily. Usually I fed them two to three times a day.

On the 27<sup>th</sup> March I noticed that one rock was particularly clean. This was about 7 o'clock in the evening and on further observation I saw that both fish had breeding tubes> Suddenly the female swam, hovering, slowly over the surface of the rock and laid six eggs. The rock was yellow in colour and as the eggs were orange they were not easily seen. I now saw about thirty eggs on the rock. When she had finished laying some the male swam over, but instead of fertilising them he just ate them. The female laid eggs all evening and he ate the lot.. I had read that Blue Acaras were good parents but this was certainly not so with my fish. I took the view that they were too young to look after the eggs.

On the 27<sup>th</sup> March I cleaned out the tank, putting in new gravel and blue-grey rocks. I wondered whether they would spawn again after this disturbance, but they did. This time they uprooted the plant and knocked a small rock down on the gravel and cleaned it. Both fish had breeding tubes. They had coloured up remarkable and covered the rock with eggs. As soon as I appeared they started eating the eggs again and within an hour had devoured the lot! This time I thought it might have been through a disturbance that they had eaten the eggs.

It was not until twelve days later that they spawned again on the 15<sup>th</sup> April. They deposited between 500 and 800 eggs in the far corner of the aquarium on a large rock. This time I was careful to see that I made no noise or disturbance near the tank. The tank was situated in the dining room so there was always a certain amount of disturbance and noise around. As they seemed to be looking after the eggs all right I left the fish in with them. On the 16<sup>th</sup>.....

they were still looking after the eggs and I was very pleased to see them taking turns to fan and guard the eggs. One fish hovered above the eggs fanning them and then when the other one swam over it took over and kept in the same place as the first fish. This went on for three days but on the third day they were not guarding the eggs and I noticed that they had been eating them but this time I definitely think it was caused by a disturbance.

Whether they will breed again and whether the eggs will hatch, only time will tell.

.....

### BREEDING APISTOGRAMMA RAMIREZI

by D.G. Perrott

I believe this fish is the most beautiful of all the cichlids, and it has many points in it's favour. It is small, about 2½ inches at the most, it is a peaceful fish and does not tear out the plants. The colour of this fish is rather hard to describe, since it varies from blue to mauve, the belly is at times pink and eyes red. A black stripe runs from the nape of the neck through the eye down to the gill plate. The sides carry dark vertical bands, which are more pronounced at the head, becoming fainter near the tail. The flanks have scales of shining blue. The dorsal caudal and anal fin are orange with blue dots. The first two rays of the dorsal fin are jet black, the tips are separated and look like the teeth of a comb. *A. ramirezi* seems to be better off in soft, slightly acid water.

I have had a little success in breeding this species but it is by no means east. The fish will spawn readily enough, but hatching the eggs is a different story. To date I have had five spawnings; the first, which I left in with the parents was eaten, and the second and third were removed to bare tanks where the eggs went white and failed to hatch. The fourth spawning was my successful one. The eggs were laid in a depression in the gravel, and not on the slate as in previous spawnings. I siphoned the eggs out into a 12" x 9" tank, applied strong aeration, and hoped for the best. Thirty-six hours later the first fry were seen lying on the bottom of the tank. On the seventh day they were free swimming. It is advisable to give them a stir with a glass rod just before they are due to become free swimming because, like baby angel, they are inclined to stick together in a mass and die. As soon as they became free swimming I gave them their first feed of newly hatched brine shrimp. The date this spawning took place was the 17<sup>th</sup> January 1963, and twenty youngsters were raised. They are now in mid-April one inch long and are exact replicas of their parents. The young ones are greedy eaters, taking anything from dry food to tubifex, grindal, and white worm. I hope in a couple of months time to be spawning these young ones with more success.

I have come to the conclusion that the most important point when breeding this fish is temperature. About 80 to 85 degrees Fahrenheit seems to be about right and this I believe is where I made my mistake with my 2<sup>nd</sup>, 3<sup>rd</sup>, and 5<sup>th</sup> spawnings.

If you wish to breed this colourful cichlid then buy them young, as they are a very short lived fish, two years being about their life span.

.....

### THE TILAPIA MOSSAMBICA

by C.Bennett

This is a normal cichlid on the whole. It has the typical long dorsal and a big carnivorous appetite. Their normal colouring is olive-grey, with four black bands linked with horizontal bands. On the dorsal and at the base of the tail are a few white dots. The male Tilapia has a more pointed dorsal fin, and is the slightly larger of the two sexes. The fishes finnage is not excessive and apart.....

from the large mouth there is nothing striking about them. That is, until they come into breeding condition or have just bred, when there is a fantastic change. The male goes jet black with a thick orange stripe around the tail; the gill plate stays white. The female retains her normal colours but loses her black bands. Also around her mouth and on her nose black dots appear.

I had four Tilapia, of which one female died of a tumour. At first I fed them on garden worms. These I just threw into the tank after the fish had evacuated their intestines. They grabbed them at both ends and pulled them apart to eat. For the first few months my fish were extremely nervous but later I put more rock work in the tank and fed tubifex. With this treatment they were soon out in the front of the tank.

After a while I thought I would like to breed my fish so I raised the temperature to 80 degrees Fahr. They all started to dig. This went on for some time and eventually I got fed up with this performance. I thought it would do no harm to introduce a large black shark. In a week both males were guarding two large holes and trying to lure the female in. They coloured up as described and fed ravenously. One evening I came home to find they had just spawned, the males still with their brilliant breeding dress. The female refused all food for a week while the males kept their colours, and dug. Then she ate the eggs!

This happened twice more and in each case the female ate the eggs after about a week.

The next time they spawned I removed the female after two days to a separate tank. But she ate the eggs again immediately after being placed in her new home. All this time the males kept their colour and each had a separate hole about an inch deep (and 8" by 4" in area).

Then the tank became covered in algae and no further observations were made for about a fortnight. I cleaned out the tank to find the female with eggs again and only the largest male. His companion was visible as a skeleton on the gravel at the rear of the tank.

This surviving pair then spawned again and I removed the female after she had incubated the eggs for eleven days! This time she ate the fry! I could see them in her mouth before she was moved. The pair were then put in a tank with a bottom filter containing peat to acidify and clean the water. I am hoping that the change of pH will keep them happier, next time I will remove the male and also the other occupant of the tank. These are the black shark and two baby Dempseys. Then I'll see what happens.

.....

## **A FEW COMMENTS ON PLANTS**

by M.J. Willis

Do you take an interest in your aquatic plants? By this I mean, are they in your tank because everybody puts them in to help show off the fish, or do you plan what you grow?

Many of us naturally have the fish first in mind when we look at our tanks. When we start keeping tropicals we buy certain varieties because we like the look of them or, maybe, because we have heard some interesting things about them. Plants very often are bought in the same way, no doubt for a community tank, Vallisneria (twisted or straight) or Sagittaria takes first place when planting. The others are then just put around in spare spaces. If this happens, then it could be that the tank could be made more attractive by having plants that show the fish to better advantage. Vallisneria unless it is a nice solid green wall at the back of the tank, tends to hide the less colourful fish. However, neons may show to better advantage flitting in and out of the glades.

Plants are an interesting and ever increasingly wide subject. More types of plant appear each year, though admittedly these are predominately Cryptocorynes. If we are fortunate .....

enough to have a few tanks it is possible to grow enough plants for your own needs and also a few more besides. At the moment, as we have a fish house at our disposal, I have been trying to plant the plant growth, making the best use of the tanks available. What I am aiming at is to get maximum production from each tank. This I hope to do by planting each tank with the variety which I have found grows best in that particular tank. For example, near the light, Twisted Vallisneria and in the lower (and darker) tanks, Cryptocorynes. Over a period of time it becomes evident which plants grow well in a given tank, and I have planted tanks more or less exclusively with that type of plant.

The size of the tank and the lighting conditions play a big part as far as the actual growth is concerned. Although it is possible to grow plants in tanks smaller than 18" x 10" x 10" this is the smallest practical size. It can even be dangerous to use smaller tanks. Recently, by trying to grow something in every tank, I ran into trouble with small tanks. These were planted with small cryptocorynes and had a full commitment of young platies to each tank. After a while, the combination of uneaten food and the concentration of fish produced foul conditions so rapidly it was difficult to keep a check. In such conditions the plants soon die and endanger the lives of the fish.

If you, perhaps, just keep one or two tanks, then very probably growing only one or two types of plants will not appeal at all. Variety is more interesting as this type of tank is kept as a show piece. However, if you keep your tank in the living room with a top light you may have trouble in keeping or even growing say five or six varieties. Some may die. The suggestion that I put forward is that it is possible to have an attractive set-up with only one type of plant growing. This is not variety but beauty in simplicity. Our member Jim Wylie for instance had a large tank in his front room light by strip lighting. In this tank he had the largest and most beautiful specimens of *Cryptocoryne cordata* that I have ever seen. In their natural habitat the plants could not have been much finer. Unusual perhaps, but this was an example of a plant being in tank perfectly suited for it.

In the same way you would not try to keep baby guppies with Angels some plants do not live well with one another. The two types of Vallisneria are a good example; they seldom do well together. In your own tanks you will notice after a period of time which plants prosper and which do not. Water conditions can also play a big part in whether growth will be successful or only moderate. This subject is too large to fully cover now but it useful to remember that when separating Cryptocorynes for further propagation they should be planted in old tank water. This is because the exposed parts of the roots are harmed by fresh tap water.

Finally, floating plants may be kept, either for their attractiveness or because of their value in saving livebearer fry. It is surprising how many livebears can be saved from a community tank with floating plants. But even these plants have their drawback. They can serve as a trap for decaying uneaten food, they may collect dirt if an aerator is used, and they can cut off much light from the aquarium. The plant should serve it's particular purpose only; once it goes beyond this and gets out of hand there is danger.

No apologies are made for this not being a constructive article, it is intended to be just a few comments on plants.

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## LIVEBEARER RESULTS (continued)

### GUPPIES

- |   |            |                 |
|---|------------|-----------------|
| 1 | Mr Stewart | female          |
| 2 | Mr Preston | veiltail golden |
| 3 | Mr Preston | veiltail golden |
| 4 | Mr Preston | veiltail golden |

### SWORDTAILS

- |   |            |               |
|---|------------|---------------|
| 1 | Mr Preston | red           |
| 2 | Mr Perrott | red           |
| 3 | Mr Mason   | red simpson M |
| 4 | Mr Perrott | red F         |

Congratulations to young Ian Stewart on winning the Guppy class of 10 entries with his fine female.

The complete Livebearer show totalled over 50 entries.

## **The Variatus Platy from the Rio Panuco System**

by J.H.Preston

Since its introduction to the aquarium world in the early 1930's the Variatus Platy has increased steadily in popularity, and today it ranks among our most widely kept livebearers. It is a native of Mexico and is found chiefly in the Rio Panuco and its tributaries. This is further north than its closely related neighbour, the common maculatus platy. All platies are only found in rivers that flow into the Atlantic Ocean; they are absent from the stream on the western side of the country which empty into the Pacific Ocean. The generic name of the platies was changed several years ago from *Platyopocilus* to *Xiphophorus* because in the light of modern knowledge it was considered that there was no longer justification for including swordtails and platies in separate genera. So the scientific name of the variatus is now *Xiphophorus variatus*.

From an aquarist's point of view, the variatus is in many ways an ideal fish. It is a livebearer, one of the most popular groups of aquarium fishes. It is hardy, peaceful, colourful and its maximum size of 2 to 3 inches is just right for most community collections. The Variatus is not unduly fussy about water conditions or temperature, although it should not be kept for long periods at over 80 degrees F. At the other end of the scale, it has been reported that the species can stand a temperature as low as 50 degrees. Of course it would be unwise to suddenly subject your fish to these low ranges if they had been maintained and bred for some generations at a constant steady 78 to 80 degrees, say. Feeding the adult variatus presents no problems as nearly all foods are readily taken.

A certain amount of vegetable matter should be included in the diet, however. Bemax provided it is not fed more than three times weekly is excellent. It is surprising how many items from the kitchen may be utilised as fish food, for example, raw meat scrapings, peas, and tiny pieces of scrambled eggs or boiled fish. I feed tubifex worms to my variatus once weekly and have never yet observed any ill effects; I take care however that the worms are clean and fresh.

The young platy variatus are a dull muddy brown colour, and it is unfortunate that the adult colours develop very slowly and in some specimens the colours never become spectacular. Most females remain on the dull side although some may develop a yellow dorsal and red caudal fins. Some of the tank raised strains have females with a fair amount of body colour too. Male colouration varies greatly, but in the original wild imported stock there was a tendency to two distinct types – the yellows and the blues. The yellows normally had a bright canary yellow dorsal and a red tail, the basic body colour was yellow. The blues had a distinct blue sheen on the body and both dorsal and caudal fins were yellow. Fish approximating to both these types are common today and there are endless intermediate variations. The body is overlaid with yellow, blue, green, red, or mauve markings, the more the better. Inexperienced fishkeepers are baffled by what appears to be a "gravid spot" in the male. Many males do show a dark blue-green patch in the region of the gravid spot, and practically all females exhibit a gravid spot typical of livebearer whether they are carrying young or not. In pregnant females the spot enlarges when birth is imminent. The correct way to sex these fish is by the anal fin, which in the female is rounded and fan shaped, and in the male forms the spike-like gonopodium.

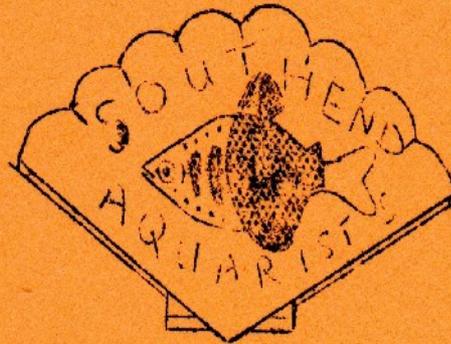
In addition to the basic colours there are several markings in black which may or may not be present in both sexes. Probably the commonest is the "twin spot" or "split crescent" marking appearing as two large spots, one at the top and one at the bottom of the caudal peduncle. Some fish possess a complete crescent- this may be sex linked as I cannot ever recall seeing it on a male fish. A third common trait is the presence of small black spots on the body, usually in the dorsal area. I would expect that these markings are inherited as dominant traits in accordance with Mendelian principles; one day I hope to have the opportunity to find out by breeding experiments.

TO BE CONTINUED

Summer 1963

SOUTHEND, LEIGH & DISTRICT

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QUARTERLY MAGAZINE

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**Secretary:** D.A. Booth, 18, Hamstel Road, Southend-On-Sea  
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EDITORIAL

Dear Readers,

The following extract is taken from the "WATER LIFE" magazine for June 1948

"In April Southend, Leigh & District Aquarist Society published the first edition of their members monthly journal. This is an enlarged version of the monthly news letter which has been issued for some time. A 90% attendance was recorded at an Auction arranged by the Society on April 7<sup>th</sup>, and on April 25<sup>th</sup> members visited Messrs Cura's Fish Hatcheries . In May the Society holds a field day on the 9<sup>th</sup> and a table show on the 12<sup>th</sup>."

Alas there is insufficient support in the Society at the present time for a monthly journal, although it should not be beyond us to produce one four times a year, but it is interesting to read of the activities of fifteen years ago, and of the beginnings of this magazine. Evidently auction sales were just as popular in those days as they are now.!

One of the major events of the year, as far as this club is concerned, is now only a short time ahead- this is of course the Town Show. Many of you will remember the excellent display we put on last year; if this success is to be repeated this time it will mean a great deal of work for a few days around mid-August. May I appeal to as many as possible to lend a hand; and to those of you who are entering furnished aquaria, start planning your tank now to put on a really attractive display.

The Editor

## WORLD OF THE AQUARIST TODAY

by L.E. Willis

I have information before me of the American Killie Fish Association which was organised about 18 months ago.

The A.K.A. Is an organisation dealing exclusively with fish species of the CYPRINODONTIDAE, commonly known as Egg-laying Toothcarps. Until this year, membership was for Americans and Canadians only. However, now membership is open to embrace aquarists all over the World.

The yearly subscription is 5 dollars (about 35/-) and this includes a monthly newsletter and a quarterly magazine which is up to professional standards.. In the newsletter members list the species that they want or have available, and in this manner they are able to trade species and build a collection of Killies, even the most rare species, at small cost. Almost every species known to science is available to members through this eggs exchange. Members have successfully air mailed eggs and even fish all over the world.

The Association also has committees for research into fish diseases and their cures, fish propagation, egg distribution (in order to keep species going rather than let them die out in certain areas), help for beginners, fish photography, and even a committee for importing new species. Last year members imported 2 species new to science from Columbia, South America: *RACHOVIA SPLENDENS* and *AUSTROFUNDULUS MYERSI*, and they are being exchanged now.

Many of these Toothcarps or TOP MINNOWS as they are sometimes known are brilliantly coloured, breed readily, and can be maintained for show on their own comfortably in a small furnished tank – say 18” x 10” x 10”

I shall be happy to give further details to anyone interested in membership.

.....  
Many of us remember Mr Fred Austen who always used to keep a wide range of good tropicals in his shop and indeed had quite an extensive experience in breeding. I had the opportunity in visiting him and his wife recently at Soldridge Nursery near Alton, Hampshire. He has an extensive nursery and apart from the usual bedding plants, has Pelargoniums, Geraniums, and Fuchias. Fred really specialises in Fuchias and has 150 different varieties including the latest American types. He advertises in the “Southend Standard” from time to time and I gather his prices are keen and attractive.

He still retains an interest in fish and built himself a first class fish house about 14 foot by 12 foot, I suppose. Two thirds of it is set out with tanks. Most disappointingly his great problem is water, which runs at a hardness of 36 Clark degrees. Plants simply refuse to grow in water as hard as this and breeding egg-layers is also almost impossible. Another extraordinary thing is that nowhere are there any ponds with daphnia, nor will it flourish if seeded in any of the water there. It is only when you here of these things that you realise how well placed we are in Southend. Fred Austen runs Lyre tail mollies and various other livebearers and has quite a few tanks going despite the difficulties . For live food he receives tubifex by rail.

## CLUB NEWS

The meeting on May 7<sup>th</sup>, which was the Inter-Club table show with Grays/Thurrock A.S., got off to a rather chaotic start as the decorators had left the hall in a decidedly topsy-turvy state. The show attracted a combined entry of 51 fishes from both clubs, and the classes were arranged for Characins, Barbs, Platies, guppies and mollies and Swordtails. Mr Willis took 1<sup>st</sup> and 2<sup>nd</sup> Mr Dunn won the Guppy/ Mollie class and a red Swordtail owned by your editor proved the best in it's section; but this was about the limit of Southend's success, and Grays were the winners by 28 points to 22. (The pointing system here was; 1<sup>st</sup> 4 points, 2<sup>nd</sup> 3 points, 3<sup>rd</sup> 2 points, 4<sup>th</sup> 1 point.)

May 21<sup>st</sup> was the Discus evening. Although no *Symphysodon discus* were able to be present, 24 Southend members turned up, and also a few of our friends from the Romford club. The second half of the evenings program was billed as "Breeding and rearing Toothcarps"; however, this had to be held over until a later date. There is news elsewhere in this issue which may interest Toothcarp enthusiasts.

I had the effrontery to take a weeks holiday in early June, so I was not present at the June 4<sup>th</sup> meeting, which was an auction sale. The attendance of 25 was never-the-less the highest so far this year (apart from May 7<sup>th</sup> when Grays were visiting). Michael Willis took over as auctioneer, as is usual on these occasions many bargains were to be had.

June the 18<sup>th</sup> was a disappointment, for not only was the attendance of 16 the lowest for 2 months but the total number of entries for the Labyrinth, Rasbora and White Cloud table show was EIGHT fish only! Let's hope there is better support for the Characin Show tonight (July 16<sup>th</sup>). Results were:-

- 1...D.Perrott.....Kissing gourami
- 2...J.Mason.....Harlequin
- 3...D.Perrott.....Blue Fighter
- 4...D.Perrott.....Leeri gourami

Well done Dave! There were no W.C.M.M.s and only one Rasbora (the harlequin).

A talk recorded on tape by Max Gibbs, of the "Goldfish Bowl", Oxford was a feature of the Tropical Marine program for July 2<sup>nd</sup>. Mr Gibbs spoke of his experiences of keeping Tropical marine fishes, and said that he found that artificial sea water was better than natural sea water, for fish kept in the latter often fell prey to disease. Bird sand was used instead of gravel on the bottom of his tanks, and aeration and filtration was found to be essential. The hydrometer must be checked to ensure that the density was correct, i.e. between 1.025 and 1.028. No metals must come into contact with the "sea" water. All corals, etc., used for decoration must be well-boiled before use for up to one hour. The temperature range for Tropical Marine tanks was the normal 74-78 degrees Fahr. And most ordinary live foods were suitable for the fish, white worm being especially recommended. Mr Gibbs reminded us that not all marine fish mixed well and he discouraged us from keeping Sea Horses until.....

some experience has been gained. The various Clown fish were the best for a start, being relatively hardy and inexpensive. The main marine disease encountered was Oodinium; for the treatment of Marine white spot heat seemed the best remedy. A book was recommended for those interested in marine aquarium keeping, entitled "The Salt Water Aquarium in the Home" by Robert P.L. Straughan. Before the close of the meeting Len Willis showed us some colour slides of the brilliant corals and fishes of the Great Barrier Reef, off the Australian coast.

**Outing May 26<sup>th</sup>** .....A total of some forty people made up of members and their families enjoyed the first outing of the year, to the London Zoo. The day was a great success, partly due to the excellent weather, for the organisers had done a good job in picking one of the few fine days we have had during the last couple of months.

The departure from the "White Horse" was a mere six minutes after the scheduled 10.00 a.m., and as everyone was in good time no further delays were encountered. A halt was made at Romford, first to pick up the last two members of the party, and immediately afterwards for refreshments.

We arrived in London in good time, and settled down for a picnic lunch in Regents Park. It was here that everyone found to their cost that the grass was still surprisingly wet from the previous Thursdays rain. Shortly afterwards we were let loose in the Zoo, until 3. pm, when came the long awaited visit to the aquarium. The time permitted behind the scenes was all too brief; my own most vivid memory is of the giant carp (some near 50 pounds) in their equally mammoth tank, noisily devouring cubes of meat from the hands of their keeper. I wonder how many others noticed, as I did, the tank labelled "Mosquito Fish" that contained not the more familiar *Heterandria formosa* but a couple of specimens of *Gambusia*. (*Gambusia* is a genus of livebearers which occurs widely in the southern states of the U.S.A. - but is seldom seen in this country). A special display of Mediterranean wild life was laid on for us, and we were also shown the Archer fish being fed with flies. (The fish capture the flies by spitting drops of water at them, and remarkably accurate they are too). Perhaps the best looking tank in the whole Aquarium was that containing a shoal of Nigger Barbs, all males in full colour.

There was of course plenty to see in the Zoo besides the Aquarium, and all too soon it was time to make our way back to the coach for the journey home. A halt was again made at Romford, and Southend was reached some time after 8.00 pm. Mr Bonner won the raffle which was held on the coach on the return journey.

#### **KINGFISHERIES** Outing No 2, July 21<sup>st</sup>

Plenty of seats are still available on the coach for the trip to this well known fish and plant establishment next Sunday, July 21<sup>st</sup>. The fare is expected to be 12/-6 and departure times are likely to be the same as for the previous outing, i.e., starting at 10.00 am from the "White Horse", Southchurch.

The club has visited Kingfisheries before and the trip proved well worth it. A genuine discount of 25% on items purchased there.

## CLUB BADGES

After a long delay, a further supply of Southend Aquarist Society badges has become available. The design is similar to the old badges which some of the older members will remember, with the familiar Black Widow on a green background.

Badges may now be purchased, price 4/-6d each.

## JOURNAL PRICE INCREASE

You will no doubt have noticed that the price of this magazine has been raised to 6d. The committee were reluctant to take this step, but the cost of production today is so high that the previous charge of 3d was insufficient by far to prevent a considerable loss on the venture.

## TOWN SHOW

The Southend town show will take place this year on 16<sup>th</sup>, 17<sup>th</sup> and 18<sup>th</sup> August, in Southchurch Park East. Our Society is to put on a display along similar lines to last years, i.e., furnished aquaria and a few other exhibits. A great deal of work is needed to put on even such a modest display as this, and any help and any help YOU can give will be greatly appreciated by the Show Committee.

Furnished aquaria classes will be limited to four entries in the 24" x 12" x 12" Tropical class and 8 entries in the 18" x 10" x 10" Tropical class. It is hoped that there will be enough interest to form a 24" x 12" x 12" Coldwater class also.

## NEXT MAGAZINE

Don't forget to send your "copy" in so that the next issue can roll off the presses in good time. The provisional date for the appearance of the Autumn issue is October 15<sup>th</sup>.

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## A NEW TROPICAL AQUARIUM PLANT?

By J.H. Preston.

Some plants received in a recent import were supposed to be a type of lily; however, they had a most un-lily like appearance. The few cuttings received were in poor shape, but planted in a tank which received plenty of natural light, they made rapid growth.

The plant bears a resemblance to *Aponogeton* in that its leaves have crinkled edges, but they are borne alternatively on individual stems. Reproduction is both by runners and cuttings. Many insignificant flowers have been produced, enabling the plant to be identified by the Royal Botanical Gardens, Kew, as *Pomatogeton nodosus* Poir.

*Pomatogeton* is quite a large and common genus of aquatic plants, though I believe this to be a new species to most aquarists. It is certainly decorative, with its bright green leaves which sometimes present a lace-like appearance, and may turn to a reddish shade under certain conditions; the plant's fast rate of growth attained may possibly prevent it becoming popular however.

## SPAWNING (???) UNIDENTIFIED SHARKS

by C. Bennett

I bought a trio of these fish from a well known Southchurch dealer; these were between three and five inches long. The colouring was golden with red fins, and also black dots along the sides which turned to red around the head. The only apparent difference between the sexes was the plumpness and larger size of the female.

Recently I noticed some strange behaviour in my sharks. They became very active and their colours became intense. Then one morning I noticed a pair dashing madly around the tank. After a while they topped and gave a sort of mock battle. Next they assumed a side by side position (head to head) and quivered for a few minutes, they also did this head to tail, like *Labeo bicolor*. About a week later the fishes repeated this behaviour and also locked jaws as the cichlids do before spawning.

In both instances no eggs were seen although there was no plant in the tank, (no wonder for they demolished a giant *Sagittaria* in a day!) Comments are invited.

.....

## CICHLIDS

by C. Bennett

The family Cichlidae is one of the largest groups of freshwater fishes kept today. It is split up into genera (groups of closely related species), of which the following are the main ones:-

*Aequidens, Cichlasoma, Apistogramma, Tilapia, Nannacara, Haplochromis, Pterophyllum, Symphysodon, Astronotus, Geophagus, Etroplus, Crenicichla, Pelmatochromis, and Hemichromis.*

In size, Cichlids vary from 1½” of the *ramirezi* to the 12” of the Marbled Cichlid.. They also vary in temperament from the peaceful Discus or Pompadour fish to the more robust Jack Dempsey or the deadly Jewel fish.

The reason that most people do not keep cichlids are that they rip up plants and kill small fish. Both these statements are true up to a point. But most people keep angel fish although no baby fish or small one is safe from them when they grow big. I have Blue Acara which have never attacked plants except when spawning.

The breeding of cichlids is in most cases extremely interesting; all guard the eggs and fry and in the case of the Pompadour even feed the youngsters. Alas, when guarding eggs and fry they are killers- my pair of Acaras spawned and because of a shortage of tank space I had to keep several other fish in with them. These ended up with ripped fins and missing scales and also a Blue Acara died.

Most cichlids spawn on rocks or holes dug in the gravel, but many.....

dwarf ones however need caves or upturned flower pots., Another type is the Mouthbrooders which carry the eggs and young in their mouth until they can care for themselves. The exceptions to the general rules of Cichlid breeding are the Angel fish and the Pompadour. These spawn on leaves, bamboo, or slate.

The colouring of most Cichlids is superb- consider the Firemouth, Dempsey, Pompadour, Kribensis, and Ramirezzi. They also change colour with age and mood, and have colours of fear and aggressiveness, also courting colours.

I consider Cichlids to be the most interesting and intelligent of all the fish I have even kept.

.....

## THE VARIATUS PLATY FROM THE RIO PANUCO SYSTEM

By J.H. Preston (continued from the Spring Issue)

Firstly I must correct a false impression that I gave in the Spring article. Since I wrote that I have watched a brood of crescent marked Variatus growing up, and several have sexed out into males. So the crescent marking is obviously not sex-linked.

My suggested method of breeding Platy variatus is as follows. The fish should be not less than six months old, and one year is better. Females should be virgins. One pair only may be used, but if many youngsters are desired, use one or two males and several females. The breeding fish should of course be in first class condition; they should be left together for three weeks, with of course no fish of a similar type in the same aquarium, and after this period all the females should be gravid. It is best to place each female in a separate container to drop their young, which usually takes place 4 to six weeks after fertilisation. A well planted tank is the best method of saving the babies; provided a careful watch is kept to see when they appear, losses will be small. The female is best removed immediately after the birth, and feeding of the fry commenced. Although fine dry food will be taken, if good growth is desired however, generous amounts of brine shrimp are needed, together with some micro worms and liquid fry food. If daphnia are available so much the better. After seven to ten days, the fry should be taking Grindal worms, and growth should be rapid. A maturity is reached, an adult diet may be gradually substituted. I recommend from the earliest possible date as if this not done, not only will all the fish remain smaller, but there will be every opportunity for brothers and sisters to inbreed at a early age. This is most undesirable and is likely to produce only runts.

*Xiphophorus variatus* will produce hybrids with all other members of the genus, and the results of such matings are somewhat unpredictable. The so-called Black Variatus platy has recently been available in Southend; this looks as though it was produced by crossing the Variatus with the Black Platy. I do not know the origin of the Marigold Platy, but I strongly suspect this is a hybrid, because from my observation broods of Marigolds contain an unusually high proportion of males. Although there are undoubtedly possibilities for further new types to be developed, such work is best left to experts who have plenty of time, patience, and lots of tank space.

## BADIS BADIS

by D. Cheswright

This interesting fish belongs to a Genus of Perches originating in India and Indo-china. It grows to about 3 inches in length and presents some unusual features. Once Badis reach about 2 inches in length at about 9 months, they are extremely easy to sex, the male having larger and more pointed fins than the female being able to carry out surprising changes of colour within a few seconds. Whereas the colouring of the female consist of a dark greyish background with black edging to the scales and is subject to only varying degrees of intensity, the male normally sports a grey or brown background with scales edged in red or blue. In addition the lateral line of the male often appears as a line of closely packed red spots. The finnage of the male is usually light blue, but when in breeding condition it becomes very dark blue, in fact almost black. When in breeding condition the male's body colour changes from drabness to brilliance, the fish becoming darker and darker blue until appearing black.

Another peculiarity of this species is that it will often lie on it's side or back on the bottom of the tank or when placed in a jar. This seems to be some form of defence tactic as I have never found a fish in this position to out of condition in any way.

Badis are quite peaceful although when young they tend to nip each others fins if overcrowded. There not at all keen on dried food and much prefer tubifex to any other live food. It is because of this feeding problem that they are best kept apart from other species, when they will display the colouring to full advantage.

They are content in a temperature of 70 to 85°F (21 to 30°C) and for breeding purposes 75 to 80°F (25 to 28°C) is most suitable. Obtaining a spawning is an easy matter and an 18" or 24" tank is the best size to use. Larger sizes are not necessary but in smaller tanks the fry tend to be overcrowded and fin nipping results. Even when young each Badis takes over an area of the bottom as it's domain chasing off intruders; hence in a small tank with many fry fin nipping results.

Tap water which has stood for a week or so is suitable for breeding purposes. The tank should be set up with about six inches of water, one or two nylon mops or bunches of plant and a 2 to 3 inch clean flower pot. The mops or plants are to provide refuge for the female and it is in the pot that the eggs will be laid. The pot should be placed on its side with the mouth facing the front of the tank when it will be easy to watch the spawning take place and, subsequently, the male tending the eggs and fry. The pair are introduced together, having been well fed over a period to bring them into condition. The male will immediately take charge of the flower pot commencing to clean the inside surface. Within one to three days spawning will take place, some 2100 to 500 eggs being laid inside the pot. Usually the eggs are deposited on the lower surface of the pot but on occasions the upper inside surface will be chosen, the pair taking an upside-down position when spawning. After spawning it is best to remove the female as it is the.....

the male alone who tends the eggs. He remains in the pot and continuously fans the eggs until they hatch after about 48 hours, and then the fry until they leave the pot one or two days after hatching. On leaving the pot the fry hang onto the sides and bottom of the tank until free swimming, about 4 days after hatching. The male takes no further interest in the fry after they have left the pot and he then reverts to his normal colouring and is best removed from the tank.

When free swimming the fry must be fed on infusoria or green water for about a week when they should be big enough to take brine shrimp or micro worms. They will then as they grow require chopped tubifex the size of which should be increased as the fry grow. Daphnia will also be taken. They take about four months to reach a length of an inch and about 4 to 5 months before they are large enough to sex and for the males to display their colour changes described above.

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### THE FURNISHED AQUARIUM

The following article first appeared in February 1953 SLADAS Monthly Journal, and is an account of a talk given to the club by Peter Blomfield on Jan 20<sup>th</sup> of that year.

This last observation brought the speaker to the subject of "Furnished Aquarium" from a competitive point of view, and it was shown how a tank is judged, with the actual marks allotted to the various headings under which judgement is given:-

FISHES (25)	Size	8 points
	Quality	12 points
	Selection	5 points
PLANTS	Selection	10 points
	Quality	15 points
DESIGN	Permanency	5 points
	Originality	10 points
	Realism	5 points
	Harmony	5 points
TECHNIQUE	Planting	8 points
	Rockwork	7 points
	Clarity	5 points
	Compost	5 points

On the subject of fishes it was thought that these would be judged in accordance with show standards; they should therefore be adult, as large as possible, in perfect condition and well matched as to species and sizes. While some judges seem to favour the use of one species only in a tank, Mr Blomfield considered it better to use different types to give harmonious colour contrasts and to avoid having all the fishes swimming at one level in the tank. The use of.....

fishes which would obviously not live amicably together or the mixing of different species of livebearers (which could hybridize) was to be deplored and would lose marks on the score of selection.

Plants must obviously be in first class condition, free from algae and dead and deformed leaves, and 6 or 7 different types was considered ideal- more than this was apt to give a “bitty” look, while at least this number of different types was essential to add interest to the design as well as give variations in colour.

Permanency in design is taken to mean that the tank should convey the feeling that the arrangement will maintain its appearance for some considerable time and not quickly become overgrown and lose its original layout.

Originality must obviously warrant high marks, as there seems to be a limit to the number of ways in which a restricted space can be decorated, and it is most creditable when something really different is produced: in striving for originality, however, care should be taken to avoid anything striking or garish – the instance was quoted of a tank containing the rock work in the form of a brickwork wall (President's own comment “looked like a static water tank!”).

Harmony was naturally the blending of both the shapes and the colours in the aquarium – the shapes by reason of the clumps of plants with their varying greens, and the colours of both plants and fishes, which should produce an overall colour scheme and at the same time produce a contrast of tones which makes for interest and attractiveness.

In the matter of Technique the most points are awarded for the method of planting and rock work. Planting must be done to give the appearance that the plants are not only actually growing but have been in the same position for some time – this can hardly be achieved if roots are left showing waving about above the surface of the gravel; or if limbs of lead are in evidence, also plant must be positioned in the normal growing attitude taken up by that particular species e.g., Vallisneria with its crown just showing at the surface of the gravel; plants naturally grow in groves or clumps – so keep them that way to achieve a natural as well as artistic effect.

Rocks where they are used, must have a natural appearance- heavy penalties are incurred for sharp edges – and traces of algae here do add to the effect; of course one should avoid limestones, marbles, etc., of course any soft looking rock would be apt to make the judge suspicious and incur his or her displeasure; in arranging rock work care should be taken to choose pieces in size in keeping with the volume of the tank, and to arrange for any strata lines to run with the volume of the tank in the same direction. Complete absence of rocks would not be penalized provided that, in the judges opinion actual design of the tank was .....

effective with out them.

Compost should be of a type that will encourage plant growth, i.e. sufficiently coarse to enable mulm to work done to the roots, but not too coarse to allow particles of food to lodge among the pieces and lead to putrefaction and ultimate fouling of the water; some effort should be made to match the colour of the compost to rock work, but in the case of red sandstone the too closely matched colour of the rock and compost (red sand) would tend to give too overpowering an effect of red.

Of clarity, all one could say was that the gravel and the glass (inside and out) must be absolutely clean; gravel commonly being brought to this state by very patient and thorough washing in small quantities at a time.

A vote of thanks was passed to Mr Blomfield for his excellent lecture.

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## **THE DANGERS OF HARD WATER**

by A.J.Mason

This is another sorry tale about a batch of young Cherry barbs that I nearly raised.

I had successfully raised to 6 weeks a nice little shoal of some 30 to 40 Cherries, and I started to look around for tank space to grow them on. So I twisted my wife's arm a little and obtained permission to install another tank in the kitchenette. A 10" x 10" x 30" fitted nicely on a shelf I had my eye on for some time.

After completion, the tank was quickly installed in case the governor changed her mind.

I had some old gravel given to me by a friend, so this was used after thorough boiling and washing. The tank was set up with half old tank water and half fresh tap water, after a week I put some young simpson swordtails in. These, after another week seemed happy and quite at home. About this time I saw a nice little piece of rock at a local dealers shop, so into the tank it went.

Some three days later I noticed the sword begin to close their fins, so thinking that too newish water disagreed with them and returned them to their old quarters. I knew that young cherries did not mind newish water, so foolishly I put them all in the new tank. But I should have tried just a few at first, for next morning only one was alive, and that one was on his last legs!

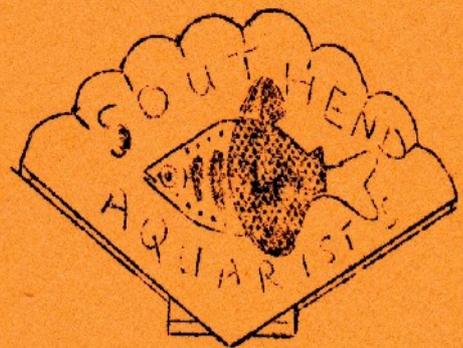
Too late I started to look for other faults in the tank. I took some water into work for testing. What a shock! The pH was O.K. (7.2) but the hardness was 290 ppm. The trouble was obvious, but what was the cause? I suspected the rock, but to make sure, I filled two buckets with fresh water, placing the rock in one and gravel in the other. A test ten days later revealed the cause: water with the rock, 120 ppm, water with the gravel 260 ppm.

My friend did not know if anything had been mixed into the gravel, but all I know is that I am 30 or 40 Barbs down the pan and a little wiser. In future I shall test water before, not after, the proverbial horse has bolted

Autumn 1963

SOUTHEND, LEIGH & DISTRICT

AQUARIST SOCIETY

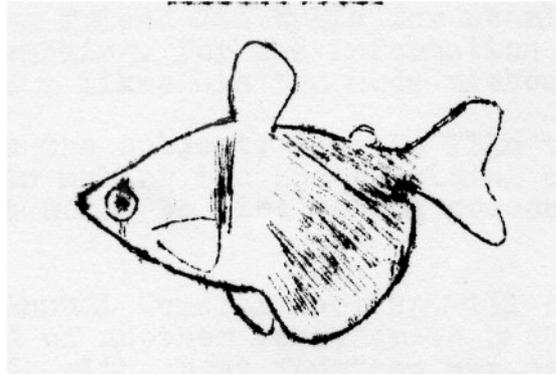


QUARTERLY MAGAZINE

THE SOUTHEND, LEIGH AND DISTRICT AQUARIST SOCIETY

QUARTERLY MAGAZINE

Autumn 1963



The Society meets at 8.00 pm on the  
first and third Tuesday in each month  
at  
THE LIBERAL HALL, Clarence Road,  
Southend-On-Sea.

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### PRESIDENT'S MESSAGE

It has been brought to my notice that as President, I am supposed to write a short letter in this Journal, so here we go.

In this my first little epitaph I must first apologise to our old (sorry Jim) young friend Jim Wylie for nearly poisoning him with my last effort in tea-making. For the information of those you make the tea at a later date, Jim likes his tea made without tea leaves.

Whilst tea is the subject, I would like to thank Mrs Iles for her steadfast effort in making tea and providing a service that is second to none. But it would be nice to see someone give her a break just once in a while.

The club's Annual General Meeting will soon be here once again bringing us to the end of another year, quite a successful one as far as this club is concerned, with about 14 new members.

Finally I should like to offer what amounts to a small prayer for myself:-

May all meetings go with the smoothness of silk,  
May all the entries of all our table shows be big ones,  
May all our members make an effort to attend all our meetings,  
And may there be plenty of volunteers to make the tea.+

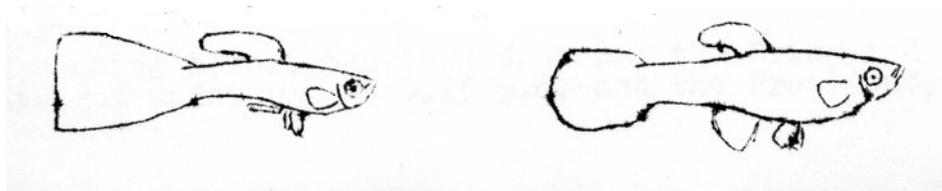
A.J.Mason (President)

.....

Tonight (15<sup>th</sup> October) we will hear extracts from a tape talk "Environment and Feeding" by Henry Roth, U.S.A. The following tapes can also be hired from the Federation of Guppy Breeders Societies:-

	<b>Time</b>	<b>Title</b>	<b>Author</b>
No 3	30 mins	Breeding Albino Guppies	W.Phillips, F.F.G.B.S.
No 4	30 mins	Visit to University College	
		Comments on fatherless guppies	W.Phillips, F.F.G.B.S
No 6	30 minutes	Feeding Colour to Guppies	A.J.Holloway F.F.G.B.S.
No 7	30 minutes	The Breeders Classes	R.A.Alley., Esq
No 8	65 minutes	The Guppy under the microscope	R.Forest-Jones Bsc
No 9	30 minutes	Vitamins and the Guppy diet	E.S.Roach F.F.G.B.S.
No 10	45 minutes	Hereditry without tears	Dr C.W.D.Cole

If any members are interested in hearing any of these tapes, will they please contact any member of the committee



**CLUB NEWS**

The meeting on July 16<sup>th</sup> attracted 16 members. The start was delayed by some 35 minutes by the late arrival of some members, and also by the need to confirm arrangement for the outing on the following Sunday.

Eventually proceedings did get under way, and Messrs Mason and Preston attempted to give a demonstration, complete with running commentary, on the art of setting up furnished aquaria, the emphasis being on tanks set up for short periods as at the Town Show. The v17” x 10” x 12” tank had already been provided with gravel of questionable cleanliness, and filled with water which was in consequence sadly cloudy. Rocks were selected from the stockpile on the table and placed in the tank. The Editor began planting, and Johnny Mason remarked that some people were very handy at using planting sticks. Howard immediately produced a pair as if nowhere and began scratching around in the gravel with them. He was soon in trouble, however, and claimed to have discovered a new type of vallisneria which is definitely a floating plant!

Before the tea interval, the tank had been beautifully (?) filled with vallis,( both types), Najas, Hair Grass Hygrophila (small and giant), Myriophyllum, Pygmy Sword and Ambulia.

During this time Messrs Cheswright, Perrott, and M.Willis had been judging the Characin show at the other end of the hall. The entry of 15 fish was quite good considering the attendance, and the standard was quite high. There was a complete absence of neons and cardinals, Gold tetras were well in evidence, though not among the first four.

**RESULTS:-**

1 No1	Mr Willis	Pulcher
2 No 3	Mr Willis	Heterohabdus
3 No 7	Mr Perrott	Penguin
4 No 10	Mr Mason	Silver hatchet

During tea, copies of the Summer Magazine were sold. One member noting, the number of different colours of covers available, suggested it might be renamed the “Rainbow Journal”. The demonstration furnished aquaria was the subject of much attention- it even had a number of small platies swimming around in it- but it was the plants that were the main attraction, for the Town Show was only four weeks distant.

Later in the evening, it was intended to further discuss the tank, but it did not last that long, for eager hands had stripped it of practically all it's plant. So the raffle was drawn, the winners being:-

Ticket No 283	Mr Bonner	Brilliant Danios
Ticket No 260	Mr Bennet	Midnight mollies

and the meeting dew to a close at about 10.15 pm.

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The last meeting before the Town Show was the Bring and Buy on August 6<sup>th</sup>. This got under way at 8.25 pm. And the President, assisted.....

by Brian Bonner, knocked down some 30 lots. The prices raised were in most cases ridiculously low; for example adult swordtails and platies at 3d each, and Vallisneria fetching a similar figure. But 58/9d was raised for club funds before the tea break at 9.30 pm.

After a twenty minute adjournment, the raffle was drawn. The prize of three young Tiger Barbs was won by Mr Machin with ticket number 309. The 21 members spent the rest of the evening discussing the Town Show, and helpers were asked to be at the show ground on the Wednesday and Thursday of the following week.

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The Southend Town Show is reported elsewhere in this issue.  
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So to August 20<sup>th</sup>, when the programme card read "Plant Table Show algae causes and cures". 24 members turned up; of this total 9 were new members enrolled at the Town Show. 2 of the newcomers, juniors Ian Lake and Keith Looett, live as far away as Springfield, Chelmsford. We hope the journey will not prevent us from seeing lots more of them in the future. For the Plant table show there were 25 entries. This permitted a division into 4 classes; the judges were Messrs Mason, Perrott, and L. Willis. Results were:-

Class 1           Grasses

- |   |      |                     |              |
|---|------|---------------------|--------------|
| 1 | No 4 | Twisted vallisneria | Mr Perrott   |
| 2 | No15 | Twisted vallisneria | Mr L. Willis |
| 3 | No10 | Giant Sagittaria    | Mr Perrott   |
| 4 | No18 | Twisted vallisneria | Mr Sellars   |

Class 2           Cryptocorynes & Aponogetons

- |   |      |                        |              |
|---|------|------------------------|--------------|
| 1 | No23 | Aponogeton undulatum   | Mr Perrott   |
| 2 | No8  | Crypt. Hartelliana (?) | Mr Perrott   |
| 3 | No25 | Aponogeton crispus     | Mr Booth     |
| 4 | No14 | Crypt. Hartelliana     | Mr L. Willis |

Class 3           Fine Leaved Plants

- |   |       |                       |               |
|---|-------|-----------------------|---------------|
| 1 | No 21 | Cabomba               | Mr Sellars    |
| 2 | No 6  | Myriophyllum          | Harvey Holmes |
| 3 | No16  | Ambulia               | Mr Plappert   |
| 4 | No7   | American myriophyllum | Mr Perrott    |

Class 4           Bog Plants

- |   |      |                       |            |
|---|------|-----------------------|------------|
| 1 | No19 | Ludwigia              | Mr Sellars |
| 2 | No 9 | Hygrophila polysperma | Mr Perrott |
| 3 | No 2 | Giant "Hygrophila"    | Mr Mason   |
| 4 | No24 | Dwarf Rush (Acorus)   | Mr Wylie   |

The meeting had been opened by Johnny Mason at 8.17 pm, who without delay handed over to Mr Willis for the talk on algae. The speaker began by describing some of the commoner types of algae encountered by aquarists, such as Blanket weed, brown and blue green varieties, green water, green growths on the tank glass, and short growth on plants such as twisted vallisneria. Excess light in combination with a lack of healthy plants provided the best environment for algae, and once it became established,.....

it was very hard to eradicate completely.

A method recommended by Mr Willis to combat green water was to provide or increase aeration to keep the water moving; while at the same time it was important to get the plants growing well. The filamentous algae known as Blanket weed was far more troublesome. This may be introduced to an aquarium as just a single spore, and it could only be kept in check by removing it by hand. Blue green algae should be scrapped off from the plants or tank and then siphoned off; several treatments may be necessary. Brown algae usually thrive where there was not enough light for the higher plants, and the remedy here was obvious.

All through his talk. Mr Willis emphasised the importance of trying to discourage algae s by having a vigorous growth of the higher plants. He did not recommend the use of chemicals in algae control because of the likely side effect on plants and fish. Acid water helped to keep algae down, but the majority of tanks soon became alkaline under normal conditions.

One very useful kind of algae was *Euglena*. This was an excellent fry food smaller than infusoria. It could be cultured by adding one teaspoon of “Bemax” to two pints of boiling or hot water, the resulting liquid was left to stand for a week and then the culture of *Euglena* added. (In appearance *Euglena* resembles green water).

Before the break for tea at 9.20 pm, Mr Willis answered a number of questions put to him by the audience.

A vacancy has appeared on the committee, and this was filled by Mr Brian Martin. Mr Barker won the raffle(4 red platies) with ticket Number 299.

Before the meeting closed at 10.25 pm, some of the plants from the table show were donated for auction; as result, club funds were swelled by 18/3d.

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On September 3<sup>rd</sup> we welcomed our old friend and supporter, past President and Secretary, and one of the founder members of the club, Horace Giles. It is pleasing to record that this coincided with the highest attendance so far this year, 27. The Vice President Mt L. Willis opened the meeting at 8.20 pm., and introduced Mr Giles, who was of course the judge at our section of the Town Show.

Mr Giles gave us a most interesting talk for 45 minutes. He praised the excellent display put on by the club, when with a far greater membership, there had been difficulty in raising even half the entries in the Annual Shows of those days.

Horace then went on to tell us of some of the faults he had found in the Town Show tanks. Many of the tanks, he said, were lacking in clarity; he suggested members wives should be made to do the gravel washing! Another common fault was the mixing of fish of different sizes; more than one tank was marred by the presence of large Swordtails in with the smaller types. One member had stuck a large lump of sandstone in the front of his tank, hiding too few plants. ....

Said Horace "It looked like a grave". Two exhibitors seemed have committed the sin of using invisible fish (this variety comes out of hiding only in the absence of judges). One tank had a sheet of glass right across it, and yours truly the Editor was under fire for having as many as 10 varieties of plants in his two tanks, instead of the recommended 7 or so. Other minor criticisms were brown tips and holes in plant leaves, two or more different types of rock in the same tank, a pale green background instead of the more popular black, and tropical plants in a coldwater tank.

Questioned about rocks, Mr Giles said that he thought most types except soft limestone were suitable, but he would regard marble, especially if white, as doubtful.

The results of the table show were as follows:-

**Cichlid Class:**

1	Ramirezi	Mr Mason	
2	kribensis	Mr Bennett	
3	festivum	Mr Perrott	Total entries: 10
4	Angel	Mr L. Willis	

**A.O.V Class:**

1	mystus catfish	Mr Brown	
2	unidentified shark	Mr Bennett	
3	leaf fish	Mr Bonner	Total entries: 7
4	Khulki loach	Mr & Mrs Dolby	

We were sorry to hear that our youngest member, Ian Stewart, lost all his fish the previous day after an accident with a thermostat.

The raffle (2 *A. ramirezi*) was won by Mr Forster, a new member, with ticket number 362

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"The raffle will be a culture of White Spot". Perhaps some members really believed this, for attendance of 21, though not too bad, was the lowest since the summer holiday period. The evening as September 17<sup>th</sup>; the subject Diseases, Causes, and Cures. This was most excellently covered by Len Willis, who described and illustrated most of the more usual fishy complaints, and some of the lesser known ones too.

Some colour slides of the Town Show and the London Zoo outing were shown for the first time.

Members were reminded that the return Inter-club Table Show with Grays Thurrock (at Grays) was to take place early the following month.

It was pointed out that club badges were now on sale, price 4/6d each.

Mr Norris won the raffle with lucky ticket 406. The prize a trio of Gold Tetras

The Treasurer should have presented membership cards at this meeting, but appeared to have absconded with the funds!

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On October 1<sup>st</sup>, rain fell steadily for three hours before the meeting, despite this when Len Willis opened the.....

proceedings at 8.20 pm, with table show entries still pouring in at the back of the hall, 23 members were present.

Part of the meeting as tape recorded by Len Willis.

The President said that the Table show at Grays was to take place the following Monday evening. He then started the Balanced Aquaria talk.

The location of the tank was discussed, as this had some bearing on the amount of light received from sources such as windows. Electric lighting was the next topic, and it was stressed how desirable it was to obtain plenty of plants for the tank when first setting it up. All these factors were important in the battle to combat algae. One point made was that the larger the tank the easier it was to keep the balance.

The number of fish kept in the tank seemed to have a bearing on algae growth, as several members said they had quite flourishing growths in under populated aquaria, which disappeared when more fish were added. Algae were said to do best in alkaline water, and it was interesting how the water supply varied in different parts of the Southend area.

At this point the Table Show judge interrupted to say that he had no pen or paper. His wants were attended to.

Many member commented on the poor quality of livebearers now available. Michael Willis point out that especially with Platies, males of today were often ridiculously small compared with females. Brian Dunn, and others blamed in-breeding. Len Willis said he thought frequent feeding were the answer to some extent; here was a matter for members wives if one was away from home all day!

Livebearer were said to be good mixers for community tanks, except perhaps some male swordtails. The less peaceful *Gambusia* and Dwarf Pikes are never seen in Southend.

Egglayers generally seem easier to keep in top condition. Barbs were recommended for beauty, though if tigers were kept there should be at least two in the collection, as a single specimen was likely to cause trouble. It was lamented that Cherry Barbs today were not in the class as those of Peter Blomfield's day (about 1952). Some of the best characins were Neons, cardinals, glowlights belgian Flag Tetras and young black widows. About twenty small fish were ample for a 2 foot tank.

Mr Mason said that egglaying tooth carps were perhaps the prettiest of the lot- if you could keep them! Most of them would live peaceably together, a notable exception being the "shovel-mouthed" lineatus panchax.

A break was made for tea etc., for twenty minutes from 9.20 pm.

Six cherry barbs were the raffle prize. Mr Machin won with ticket number 442. The 33/- raised for club funds on this occasion was said by Mr Mason to be the best ever.

Some time was spent making arrangements for the Grays trip on the following Monday. Transport was arranged FOR 15 MEMBERS AND THEIR ENTRIES.

Jim Wylie gave the results of the breeders table show, and the reasons for his placings( see next page). After this he gave a short but interesting and at times amusing talk on breeding fish. Finally.....

the meeting drew to a close rather later than usual at 10.45 pm.

**BREEDERS TABLE SHOW RESULTS**

Livebearer Class (7 entries)

- |   |                        |            |
|---|------------------------|------------|
| 1 | No 3 Variatus platies  | Mr Preston |
| 2 | No 6 Red Platies       | Mr Perrott |
| 3 | No 5 Tuxedo swordtails | Mr Dunn    |

Egglayer Class (8 entries)

- |   |                       |            |
|---|-----------------------|------------|
| 1 | No 3 Glowlight tetras | Mr Perrott |
| 2 | No 3a Ramirezi        | Mr Mason   |
| 3 | No 1 Brilliant danios | Mr Perrott |

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**A TOWN SHOW EXHIBIT**

Our Journal now has a range that is extending beyond our club members and possibly it may add interest for our readers if I say something of the routine employed in setting up my own 24” x 12” x 12” exhibit in the Town Show.

Having a fish House, I am more fortunate than many in having sufficient Twisted Vallis, Cryptocorynes, etc, to call on to make “splash” in a Furnished Aquaria exhibit. Frankly for a show tank at home I would thin out some of the planting. In the Town Show effort I find I used 34 Twisted Vallis, strong thick leaved plants, 6 Ludwigia, in pairs of varied heights, 4 Cryptocoryne hartelliana (two largish two small), one Dwarf Rush (the only one I had) and a good 24 sprigs of Cabomba—say seven varieties in all.

The rock work was in small pieces and I think was Cotswold stone I brought back four years ago when on holiday. I remember I found all this Cotswold stone very uniform in size, not showing a great deal of character and difficult to obtain in large pieces suitable, say, for a 36” tank> The light colour of the stone is attractive.

I used two pieces, one rectangular 5” x 2½” and a small triangular piece, say, 3” x 3” on the edge of an imaginary line one third across the width of the tank from the left. A group of three, largest, say, 6” x 2½” placed on the right hand third. An attempt was made to funnel down the dividing gap between the two sets of rock by a small piece placed between the two groups. I know that I spent nearly an hour “fiddling” with the rocks to try to get them just right, avoiding too symmetrical a line and not too even a balance.

The twisted vallis was in the main planted up across the left side of the tank (back and half side) and the cabomba to the right side. Here and there a piece was planted in opposite “territory” to give a slight “echo”. Cryptocorynes (among the two pieces of rock), Ludwigia and dwarf rush were used to give life to the .....

water scene.

I hoped four good sized red-eyed red swordtails would give rich colour against the green vallis and cabomba. Being taken from a large tank in the fish house, they proved timid and tucked themselves away too much. I always like pulchers (there were 5); they are bold and keep position well. There were six *Nannostomus anomalus* which usually display attractively. These were perhaps a little disappointing and two more added to the group might have helped. The three Rosy barbs were in good colour but they were little more than half grown and must have lost marks on that count.

One never has all the time needed to set up a furnished display and this was no exception. I must say I admired Mr Howard Preston's 24" x 12" x 12" exhibit which had cleared and settled down nicely by Saturday. His guppies were most attractive but had he been in a position to use a dozen and a half bold colourful fish I think he would have had a most compelling and outstanding entry.

L.E. Willis

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### **MEET THE AQUARIST – CLIVE BENNETT**

One of our keenest younger members, Clive is now aged 15 and has been keeping tropicals for just over three years.

Clive's introduction to fish keeping goes back further than this however. For a long time his sister Pam had kept two small goldfish, named Hercules and Goliath, in a bowl. One day a larger goldfish joined them, and about the same time three White Cloud Mountain Minnows were obtained. (These white clouds came from a Mr Derek Punt, then of Royston Avenue, who at the time (about 1959) was no stranger to this club. He bred them in an unheated four foot tank maintained in his garden. The sudden increase in the Bennett fish population compelled a move to more spacious quarters, and the fish went into a galvanised metal tank in the garden. Clive began to take as more active interest in the fish, and books were obtained from the local library and studied. Two guppies were obtained, and lost no time reproducing themselves. A few minutes after the birth every adult fish in the tank was observed to have a young guppy in it's mouth. Clive recalled how he sold one young guppy to Harvey Holmes for 3d; it died within a few hours!

Soon after these events, Clive took up fishkeeping more seriously. Tanks were acquired, and his present day set up began to evolve. He now has four tanks, which are kept in a lean to, an arrangement which gives sufficient natural light to grow aquatic plants reasonably well.

Clive's favourite fish are Cichlids of all types, but in particular, Marbled Cichlids and Discus. The latest additions to his fish collection are Convict Cichlids. Breeding achievements so....

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far are: Guppies, Platies, Swordtails, Blue Gouramis and Blue Acara. This list would be longer but for the lack of tank space which has been an handicap.

When I visited Clive a few evenings ago he showed me one of his tanks, an 18" x 10" x 10", which was temporarily unheated and received very little light, sited on the floor of the lean-to. Despite these conditions, it contained Hair Grass, Myriophyllum and Water Wysteria of which all seemed to thrive. He expressed disappointment at having been able to grow *Cryptocorynes* to a large size, even in better lighted tanks. One plant in which he is particularly interested is the new *Blyxa*, which many of us encountered for the first time on the Kingfisheries outing earlier this year.

Clive is a great believer in tubifex, which he feeds to his fish often. He has had little success in culturing White Worm, and has never tried Grindal. When I mentioned Micro, he said that when he had no fry it swarmed all over the place. When the fish bred, it died off! He cultures Micro worm on Porage Oats (it gives them muscles). The oats are mixed (uncooked) to a very stiff paste with water to form the culture medium. I was shown a jar containing natural seawater four months old, in which a few Brine Shrimps had been maintained for all that time. They had received no food except for a few drops of liquid fry food added at sporadic intervals. No heating had been provided, and evaporation losses had been made good by the addition of tap water. A hard algae had grown on the side of the glass jar, and a growth resembling *Nitella* had also formed. The shrimps grow to a maximum of nearly half an inch, bred, and then the adults died, the cycle usually took three or four weeks. Each generation was a little smaller in size.

In the near future Clive hopes to be able to convert a garden shed into a fish house.

Interviewed by J.H.Preston.

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The following article is reprinted from the NEWS LETTER of the old Forest Hill & District Aquaria Society, which alas is no more.

#### HOW I JOINED THE CLUB

( with apologies to Damon Runyon)

I am standing in this fish emporium, wishing to know why some of the fish are scratching themselves on the plants and some doing likewise on other items. Now this is interesting to me because my fish are also scratching themselves on plants, as if, maybe, they are feeling an itch.

I am wishing to find out why this is so and I am asking the proprietor. This guy does not know why this is so, and is wishing that I would go away as other citizens are now observing this itch and saying that there are some lousy fish in this tank.

This is not doing the proprietor's trade any good and he is telling me this when he sees another guy outside his emporium who is, he tells me, what they call a Secretary. I am glad to know this, but.....

I am not, at this moment, wanting a Secretary, but someone who is knowing why my fishes are scratching themselves.

He is now telling me that this other guy is the secretary of a fish club, and maybe he will be knowing about this.

This Secretary guy is pushing his way through the citizens, who are, maybe, half the population of this town, and talking to the proprietor, who is telling him about this itch.

Now this secretary, who is called Jimmy-the-Vesper, tells me that his fishes do not have this itch and is not knowing why my fishes are itching.

He is telling me why I should join this club, the club which the proprietor is telling me he is the Secretary of.

He is telling me this for a considerable period, and I am thinking that maybe my dear old white haired mother is keeping my dinner warm, and that if I agree to join this club, maybe I will be in time for supper.

I am also thinking this guy Jimmy-the-Vesper, is wasting his time at this secretarying, and that he should be selling refrigerators to Eskimos.

All this is happening a long time ago and I am now a fully paid up member of this club..

I am collecting a considerable amount of information from other citizens, who are members of this club and collecting an even more considerable amount of items which they are telling me are necessary to keep my fish happy and contented.

I am a simple citizen who is thinking that before I am talking to Jimmy-the-Vesper, that fishes lived on pinches of stuff from little round boxes, and that one of these boxes was all that was required, besides a tank, fishes and plant.

Since I am a member, I am now discovering that this is not so.

Besides the tank, fishes and plants, which I am only looking at at odd moments when I am having time to spare from the boxes of worms, dishes of smaller worms, jars of shrimps, dried and brine, corn flakes, dog food, cat food, bread and milk, joints of meat, whale meat, buckets of dirty water which they are telling me is infusoria, but which my mother is telling me is not stopping in the dinning room much longer, and aerators, syphon s, rubber tubing, cables, sockets, adaptors, insulating tape, first aid kits, leaflets on reviving citizens who are getting themselves electrocuted, medicine chest full of bottles marked "poison", T.C.P., Dettol, etc, a bottle from a citizen in Birmingham who is telling me that it cures Gill Flukes, and who I am telling does not, Glass wool, Charcoal, sacks of peat, gravel, rocks, etc, and other items which are necessary for keeping fishes happy and contented.

I am thinking that maybe I am knowing more about this fish.....

keeping now, as when I am first starting, I am only getting an itch, whereas now I am getting White Spot, Dropsy, Wasting disease, Gill flukes, Pop eye, Fungus, and other items which are keeping the fishes from thinking about the itch.

W.G.R.

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#### WORLD OF THE AQUARIST

Mr Bill Freeth, Public Relations Officer of the Auckland Aquarist and Pond Society, has written to me about tape exchanges, talks and news.

I gather that at present there are at present 14 or 15 Aquarist Societies in New Zealand and Mr Freeth would like to hear a tape recording from part of one of our club meetings, some news on breeding say Neons, Chocolate Gouramies, etc, and a chat about one of our club outings. We are taking steps to meet his suggestions although we have no first hand knowledge on breeding Chocolate Gouramis or Harlequins – or has one of our members been hiding his light under a bush? The idea is that this tape should pass round to all Societies in New Zealand.

News also comes that there is flourishing Aquarist community in Mufulira, Northern Rhodesia (the copper belt) and we are hopeful of establishing exchange of news and maybe photographic slides etc.

The writer is a member of the American Killiefish Association (A.K.A.) and details have just come through of their second Annual 2-day Show (entirely of Egg-laying Toothcarps), the host club being the Cleveland Aquarium Society, Ohio. Many entries came through the mails from different parts of America. The fish were exhibited in flat side bowls, each with its individual concealed light. There were 6 classes, covering 104 entries and staging ran to almost 150 feet. Best Toothcarp in the show was a *Pterolebias longipinni*, the second an *Aphyosemion christyi*.

Fish and eggs were also contributed for Auction for A.K.A. Funds and fetched nearly £300. At an informal Mixer and Dinner on one of the tables a decoration placed before each dinner was a small white jar containing 3 toothcarp eggs, species not disclosed. Some of the eggs started hatching and many members hatched their eggs and will anxiously wait to see what their particular species turns out to be .

A “feeler” is put out in the Bulletin about a regional show in England next year. A years Associate membership cost the equivalent of 35/-, and gives a Monthly Bulletin, a first class Brochure of developments and notes and a complete directory of members with fish and eggs available for “swap” or purchase, (Air Mail used).

The subject of egg-laying toothcarps will no doubt be treated fully in our Club Programme next year.

L.E. Willis

## SOUTHBEND TOWN SHOW FURNISHED AQUARIA RESULTS.

		18" x 10" x 10"								24" x 12" x 12"				
Tank no.		1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	G/W.
<b>FISH (25)</b>	max.													
Selection	5	2	1	3	1	3	2	3	2	3	4	3	3	3
Size	8	5	3	6	3	4	4	5	5	7	6	4	3	5
Quality	12	8	5	8	5	7	4	7	6	8	8	6	4	7
<b>PLANTS (25)</b>														
Selection	10	6	5	6	4	7	4	5	4	7	8	7	5	4
Quality	15	9	7	12	6	12	6	8	6	13	10	11	9	10
<b>DESIGN (50)</b>														
Design	15	9	6	10	8	7	7	10	7	11	10	11	5	5
Originality	5	3	2	3	3	3	3	3	3	3	3	4	4	2
Permanency	5	2	2	3	2	2	2	3	2	3	2	3	2	2
Clarity	5	4	4	3	2	4	2	2	4	3	3	2	2	4
Backwork	10	5	3	6	4	4	5	7	5	6	5	6	4	3
Planting	10	7	4	8	5	5	4	6	5	8	7	7	4	5
<b>TOTALS</b>		60	42	68	43	58	43	59	49	72	66	64	45	50

16<sup>th</sup>, 17<sup>th</sup> & 18<sup>th</sup> August 1963

Competitors: Tank No 1 Mr Plappert (2<sup>nd</sup>)  
 Tank No 2 Mrs Iles  
 Tank No 3 Mr Preston (1<sup>st</sup>)  
 Tank No 4 Mr Holmes  
 Tank No 5 Mr Perrott (4<sup>th</sup>)  
 Tank No 6 Mr Bonner  
 Tank No 7 Mr Brown  
 Tank No 8 Mr Mason

Judge:  
 Mr H.A. Giles

Tank No 9 Mr Willis (1<sup>st</sup>)  
 Tank No 10 Mr Bennett (2<sup>nd</sup>)  
 Tank No 11 Mr Preston (3<sup>rd</sup>)  
 Tank No 12 Mr Cheswright

Coldwater Mr Perrott – Highly Commended

For some of us, the Town Show story began soon after 3 o'clock on the afternoon of Wednesday 14<sup>th</sup> August, Messrs Bennett, Holmes and .....

Preston, closely followed by Plappart and Martin, turned up at the Show Ground at the hour proposed by the Show Committee, but it was 2 or 3 hours later before members arrived insufficient numbers to enable much work to be done. Even worse was the fact that the 100 sand bags we had asked for were nowhere to be seen. A concealed a large number of sand bags in the Model tent. As usual, a misunderstanding had occurred and only half the required number had been delivered to the Show Ground. We washed and erected the stands, and there was the usual frantic search for beer crates. The tanks arrived, thanks mainly to the efforts of Brian Bonner. With no electricity and no sand bags, there was not much that could be done until next day.

**Thursday 15<sup>th</sup> August.** Our sand bags arrived by midday, and the pond was built by Messrs Booth, Bennett, Holmes and Mason. During the afternoon, the "Southend Pictorial" photographer came across some of our "shower" hard at work, and his picture appeared on the front page of that paper the next evening (Friday).

Johhny Mason and Dave Perrott were kept busy with electrical work. Towards evening, members arrived to set up their tanks, and this was the major event of the evening. Some of us renewed our acquaintance with our old Hon Sec. George Hedger, now a budgerigar enthusiast.

About 1 am, on end of Clive Bennett's tank started to burst having been weakened by a crack. Dave Booth did wonderful work on the leak with Brian Martin's tube of "Bostik", but unfortunately the tuber burst all over his hands. It is believed to this day our worthy Secretary is walking around with sticky black hands!

Worse was to follow. Someone discovered water pouring from Harvey Holmes' aquarium. A rapid investigation showed that the bottom had given way. (Surely 24 oz glass is not strong enough for 18" tanks in an exhibition such as this, when the use of fairly large quantities of rock and gravel may be essential to the exhibitor to put on an attractive display. Any way the amount of gravel and rock work used by Mr Holmes can scarcely be called excessive by an fair minded person). Harvey's tank was replaced by the spare one and some of the rock and sand transferred. Sometime later, perhaps about 4 am, everybody except myself went home.

I stayed until 6 am.,and I was rewarded by being one of the very few people who saw the sun on that Friday. Later that morning several exhibitor arrived with their fish, or busied themselves with last minute preparations; for instance, the water pump had to be started for the pond (it was not easy!), and goldfish had to be brought for the pond. Harvey Holmes was told by the Secretary of the disaster which had befallen his tank, and he arrived to set it up again..

Members of the public started to arrive at the Show at about Midday although it was early afternoon before the official opening took place,in pouring rain. Frequent bursts of rain and strong winds continued all that first afternoon,and it was under such conditions that judging took place. Towards evening the weather moderated, but the Show had got off to a bad start. The last of our members left at 11 pm,.

On the next morning, Saturday, there was brilliant sunshine – but of course this meant that massive cumulonimbus clouds soon built up to give heavy showers before noon. As a result there were far fewer.....

visitors than could have been hoped for.

We were very lucky at about 6.p.m. To miss the thunderstorm that flooded Eastwood on the other side of town. According to those who witnessed it, it would have just about washed out the Show completely. Not a drop of rain fell, which was doubly fortunate in view of the excellent fire work display later that evening.

The weather deteriorated again; continuous rain accompanied by a fresh northerly wind, set in before midnight, and was persistent on the Sunday morning. This may have been the cause of the electrical failure; which was first noticed by Clive Bennett and rectified by Brian Martin. Later the air pump blew up with a spectacular explosion, but it was got going again.

The Show ground was very muddy.

During the afternoon Horace Giles came along to have a second look at the tanks, which had mostly improved, as the water had cleared and the plants settled down. Dave Perrott's fighter almost spawned in their tank, and Clive Bennett's Blue Acara did.

The Show died away early in the evening, and under the leadership of Jim Wylie our section was taken down probably in record time.

Mention should be made of the attractive vivarium exhibit put on by Graham Halsey. This proved very popular with visitors.

Was the Show a success? From the point of view of the club, there can be little doubt it was. About ten new members joined during the Show. There seemed to be a lack of enthusiasm and spirit nearly everywhere compared with the previous year, which was not really surprising as everybody knew that a big financial loss was inevitable and the whole future of the show was in doubt. The weather also did it's worst.

The actual loss on the Show has been revealed as of the order of £9,000, and the Town Council has recently decided that there will be no Town Show as such next year.



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KINGFISHERIES OUTING JUNE 21<sup>st</sup>

The club's second outing of the year, to the Kingfisheries Aquarium, Beckenham, Kent, made a small financial loss as only 19 of the available 41 seats were occupied. Otherwise the day was a great success, and those who did not think it worthwhile to come are assured that they missed a very enjoyable and interesting day.

The weather was again near perfect for the trip; warm and dry with abundant sunshine. Interest was aroused on the journey when Michael Willis passed round a recent copy of the News Bulletin of the North Eastern .....

Indiana Aquarium Society. This publication is edited by J. George. Mannisto of Fort Wayne, Indiana, who is also the President of the Society. Mrs Heath of Romford Aquarist Society had sent a copy of our Spring number to the N.I.A.S., and we look forward now to a continuing exchange of bulletins between Southend and Indiana. (In a later N.I.A.S. Bulletin Michael Willis' article "A Few Comments on Plants", has been reprinted).

The coach proceeded at quite a leisurely pace towards London; unfortunately the pubs at Romford were closed! Reaching the city at noon, we crossed the Thames via London Bridge. The route then was through Southwark, down the Old Kent Road, through Camberwell and New Cross; then via Deptford, Lerwisham, Catford and Bellingham, and it was hereabouts, at about half past twelve, that we made a welcome stop for lunch.

Most of the party adjourned to the adjacent "Peter Pan's Playground", as park equipped with a café and various amusements including a boating lake. An hour was spent while Messrs Mason, Cheswright and Holmes devoured their chickens, and others less fortunate consumed sandwiches and sundry other delicacies.

The time came to board the coach again for the short run to Croydon Road, Beckenham, which took a little over ten minutes. The proprietor was ready for us and the party swarmed eagerly into the shop for a look around. There were a few more than thirty tanks on view, but no purchases were made at this stage. After a while we returned to the coach and followed the proprietor in his car to his home, where a much larger collection of tropical is housed in a cellar. An inspection of the garden was called for first, where there were several ponds containing large number of goldfish and also some golden orfe.

We then descended to the cellar, where there were a large number of tanks, each one individually heated and lighted. Most of us were quite impressed by the fish and plants, and many purchases were made. Finally we made a second visit to the shop before starting on the return journey.

A pair of Tuxedo Simpson Swordtails were raffled on the coach and won by Mr Preston.

A stop was made a Romford Market Place for refreshments, etc., and then we had an unexpected diversion to Wickford to lose our Treasurer, before returning to Southend.

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#### INTER-CLUB TABLE SHOW AT THURROCK, MONDAY 7<sup>th</sup> OCTOBER

The five cars carrying members to this event met beyond Victoria House Corner a little later than planned, raced down to Grays, and there became separated and lost. Eventually we all found the Hall by 8.45 pm., but it was at least 20 minutes more before all the Table Show entries were benched. Mr & Mrs Cheswright arrived just in time for tea and sandwiches, having come the great way round via Stanford-Le-Hope!

The raffle was drawn by Mrs Chesright; ticket No 33 was the winning one, but alas the prize "All About Tropical Fish" by D. McNery, went to a Thurrock member. But the home club did not have it all their own way in the Table Show as can be seen from the table of results.

Southend were also victorious in the Quiz which was held after tea, with 7 correct answers to Thurrocks 3. Did you know, by the way, .....

that the Latin “aquarium” means ` a watering place for cattle`, the ideal temperature for *Riccia* is said to be 68 degrees F, and that if all the fins of a fish were amputated it would float belly upwards? Just a few facts that we learnt during the quiz.

Before the meeting ended, there was a short discussion about White Spot Disease.

TABLE SHOW

Class 1	1	Mr Mason	Southend	Class 4	1	Mr Pearl	Thurrock
Fighters	2	Mr Cousins	Thurrock	A.O.V.		(American Flagfish	
	3	Mr Machin	Southend	Egglayer		Best fish in Show)	
Class 2	1	Mr Perrott	Southend		2	Mr Wylie	Southend
Labyrinths	2	Mr Rolfe	Thurrock	Class 5	3	Mr Martin	Southend
	3	Mr Cousins	Thurrock	Catfish	1	Mr Pearl	Thurrock
					2	Mr Williams	Thurrock

Class 3

Danios,	1	Mr Mason	Southend
Rasboras &	2	Mr Pearsall	Southend
Minnows	3	Mr Cheswright	Southend

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STOP PRESS

Clive Bennett reports a successful spawning of *Cichlasoma nigrofasciatum* although his female was a mere three quarters of an inch long. (this species grows to a maximum size near six inches.

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FORTHCOMING ATTRACTIONS

- OCTOBER 15<sup>th</sup> Guppy slide show and talk
- NOVEMBER 5<sup>th</sup> Auction sale also general discussion
- NOVEMBER 19<sup>th</sup> Best fish of the year table show with talk on Members Breeding Achievements
- DECEMBER 3<sup>rd</sup> ANNUAL GENERAL MEETING

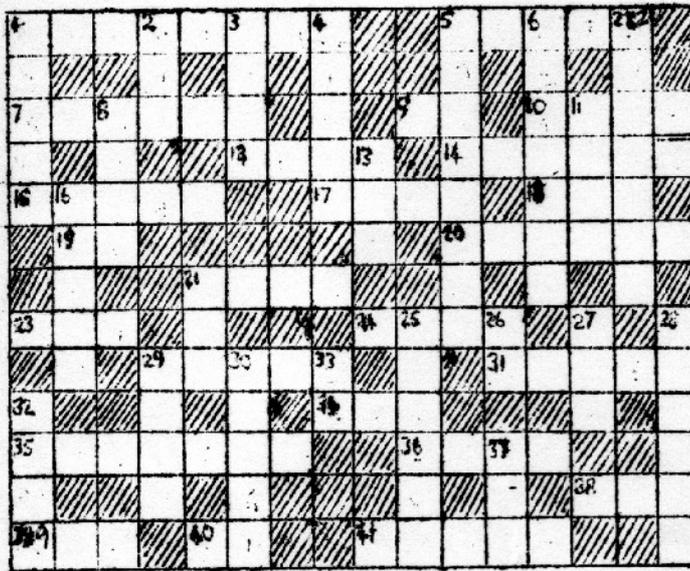
DECEMBER 3<sup>rd</sup>

.....  
SEX! By James Hedley Chase Mash (from October 1953 SLADAS JOURNAL)

An aquarist whether he or she  
 Gives thought to the sex of his (her) fishes;  
 To know all the answers of sex, you'll agree  
 Is the first of a breeder's “three wishes”.

A man that I know who kept a few fish,  
 Through volumes had pondered and battled.  
 Resulting in putting a type in a dish  
 Then judged it a male if it rattled!

Now this is the wrong way of proving the sex  
 Of fishes both cold and exotic;  
 And experts – in this way – you're likely to vex;  
 They'll think you are drunk , or neurotic  
 (continued near foot of next page)

Down.

1. You can fix these on stands.
2. Pea container.
3. Hits your pocket. .
4. Hen or Mollies?
5. Heavenly Fish.
6. Brings oxygen†
8. Tetra.
11. Fish can't do this.
13. Wipe your feet on it.
16. In the tank.
21. Propeller.
22. Home of a Molly.
25. Colour of several popular fish.
26. Saint.
27. Maturity.
28. Take care of fish when you do this.

Across.

1. Not coldwater.
5. Livebearer.
7. Native of India, Burma.
9. Introduces alternatives.
10. Ornament.
12. Not us!
15. Weapon on fish.
18. Shortened name.
19. Will find itself.
21. What every tank needs.
24. Fish have two.
31. Barb.
34. Snake-like fish
38. Perceive.
40. No, reverse.

29. Found washed up on beach sometimes.
30. To set, maybe with T-square.
32. For catching fish.
33. The (French).
37. Name of boy.

14. Climber, tortoiselike.
17. Sometimes used on tank bottom.
20. Comes from Borneo; if mixed with other breeds will kill.
23. A colour for brightness.
29. Small cleaner.
35. Native of East U.S.A. & Canada.
36. Delayed, perhaps.
39. The sun does every day.
41. Home of many tropical fish.

SEX (continued)

So gather round comrades – a secret I'll tell –  
 If sex is the cause of your flurry.  
 In spawning – the one that lays the eggs is the “gal” –  
 The other's a male – so why worry?

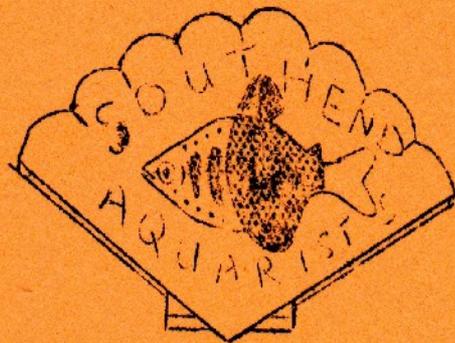
But then you will say with a face that unbends,  
 “How about all the livebearing fishes?”  
 So say I, “Elementary, my dearest of friends.  
 The gravid ones **must** be the witches!”

JAN 1964

SOUTHEND, LEIGH & DISTRICT

④

AQUARIST SOCIETY

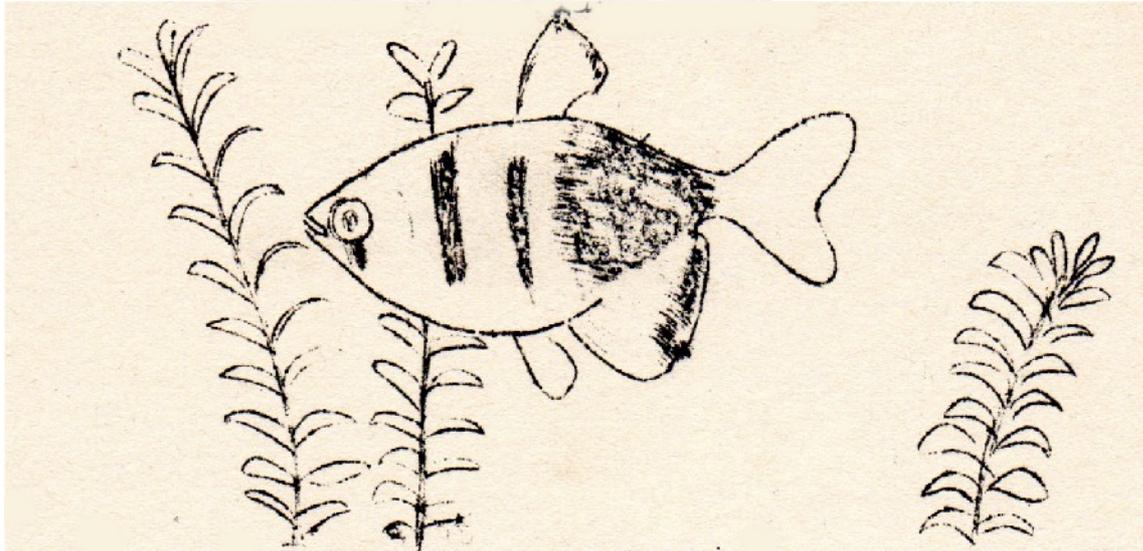


QUARTERLY MAGAZINE

**THE SOUTHEND, LEIGH AND DISTRICT AQUARIST SOCIETY**

**QUARTERLY MAGAZINE**

**No 4 – January 1964**



The Society meets at 8.00 pm/ on the  
first and third Tuesday in each month

at

**THE LIBERAL HALL**  
Clarence Road,  
Southend-On-Sea,  
Essex

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committee members: B.Bonner, B.Martin, and L.E. Willis.

## PRESIDENT'S MESSAGE

Dear Readers,

In this our first issue of the Journal in 1964 I would like to take the opportunity to wish you all a belated Merry Christmas and a prosperous New Year.

The past year has in my estimation been a most successful one; I hope this one will be even better. I was very pleased to see such a goodly gathering at our A.G.M. , and feel that was an excellent omen for the coming year.

We have hopes this year of starting a junior section within the club, so any member who has a young, budding Aquarist in their family please bring him or her along.

Let us all hope that our efforts in breeding all the new fish that come our way will be successful. I think our friend Dave Cheswright has had at least a dozen spawnings of neons without any success – better luck in this new year Dave.

Finally let us not forget our old friend Len Willis. I know we all wish him the best of health and a speedy recovery – I think Michael is lost without him on the other end of the epidiascope!

PS. Thank you Jim for judging our table shows. Carry on the good work.

A.J.Mason (President)

.....  
FROM THE EDITOR:-

From me also, belated New Year greetings to all our readers.

As many of you will know, Len Willis was forced to spend several weeks in hospital, until immediately before Christmas. He is now back at home and making good progress; we hope to see him back at our meetings later in the year. Len's "World of the Aquarist" feature will we hope reappear in future issues of this Journal.

At the suggestion of the committee, the club rules have been reproduced in this issue, for the benefit of those members who have joined the club since the supply of green cards was exhausted. It was also decided to publish names and addresses of members; lack of space has restricted us to 5 members this time, but more will appear in April. We would like to welcome the 3 members who have joined us in the last few weeks, Mr S. Smith of Hockley, Mr B. Andrews of Thundersley, and Mr J.G.T. Hearne of Wickford.

Finally I would like to express my thanks to all those who have contributed to this number or otherwise helped in it's production

J.H.Preston (Editor)

TEN YEARS AGO

(reprinted from the January 1953 S.L.A.D.S. Monthly Journal)

“Some thirty of the stalwarts braved, the elements having forsaken, on a raw winter's night, the home comfort of an armchair by the fire, carpet slippers and feet up (pat him on the boko) to attend the first meeting of 1953. The atmosphere in the hall was as chilly within as without but when we had been relieved of some of our filthy lucre by cur Hon. Treasurer (yes, annual subs. are now due!) things warmed up, particularly when the tea. and cakes were promoted from their customary midway to almost the opening ceremony. Mesdames Gibbs and Cooke must have heard cur knees knocking and cur teeth chattering!

The meeting then get under way by our President welcoming a new member, Mr. Knight, who, he explained was in the rather unusual position of being a member before he was a fully fledged aquarist, in fact before he was a fishkeeper. The paraphernalia of the aquarist, was in his case still a credit in the bank.! The meeting then decided by discussing algal growth and introducing into later points various fish diseases, that the life of an aquarist is no sinecure and from the advice showered upon him, Mr. Knight must have reflected whether to proceed. further in the matte, while discussion of the minimum needs must have assured him that the first requirement to being an aquarist was unlimited funds. Let me however assure him that such is not the case, we're only or'nary folk if you ignore our "fishysyncracies"

The first item discussed was, rather naturally, the wherewithal in which to place the fishes. As it was hoped that all new fishkeepers (and I might add some of the not so new) will in time graduate to aquarist s (there is a subtle difference ) it was generally agreed that three tanks were the minimum; two not less than 24" x 12" x 12", one as a community tank and the other for "dabbling", the third, and most important, though of smaller size. (15" x 9" x 6" was ample) for use as an isolation tank in which any additions could be quarantined, thereby ensuring a clean bill of health in the community tank. These would suffice, finances being the limiting factor, as working basis on which to expand, until the. ultimate fate of living rough, his home having been given over to the fishes, obtained! .

Standardisation of all equipment was considered a good thing, one thermostat could then cope with all the tanks, all heaters being of the same wattage, instead of an heterogeneous assembly of tanks, with different wattage heaters necessitating a large stock of spares to be carried against emergencies.

Thermostats next came under review and it was agreed that; the external fitting had many advantages over the submersible or partly ditto with external adjustment types. It was ,however noted that the variation of plus or minus one degree Fahrenheit of which some makers seemed very proud tended, rather, to coddle our fishes, a range of 8 to 10 degrees being considered, more realistic.

Heaters next came under discussion - there were few comments - a heater being a heater after all is said. It was however agreed that they should be so arranged that they don't come into contact with the glass of the aquarium, as some of us have found to our cost!

Condensation was regarded as an enemy by all, but despite its proximity to live wires -- and we have some !- was not considered dangerous. Then that so controversial question of lighting was raised. Suggestions ranged from all over covers to narrow reflectors from natural daylight to artificial light, with the corollary of ultra violet rays. It was argued loud and strong; that thin glass covers ( 24 oz. ) with a long reflector raised sufficiently to allow air to circulate between the bulbs and the glass was one of the best ways of providing illumination and defeating condensation, also it was less likely to provide additional sharp edged compost in the tank below! Our President was not convinced, advocating the use of wire reinforced glass for the cover. ( I rather suspect that he uses it because, it stands up to rougher treatment, accidental or deliberate!).

Mr. Knight and the rest of us departed at approximately 10 pm. to cogitate on matters fishy for another fortnight”

#### CLUB NEWS

The October 15<sup>th</sup> meeting opened at 8.25 pm, with the Vice-President, Len Willis, introducing to the 24 members present the tape talk on Guppies which he had recorded with the Journal Editor, Howard Preston/ Colour transparencies and other illustrations accompanied the talk, with Michael Willis operating the epidiascope. Some of the Guppy Breeders` Societies Show Standards for Guppies were also presented on the screen. Some facts about guppies which emerged were that they do best in clean, well oxygenated water of moderate hardness, the optimum pH being from 6.8 to 7.2. Indian fern was mentioned as being “the” plant (very many of the specialist breeders use it), and Giant Hygrophila, Water Wisteria, *Cryptocoryne hartelliana*, and four leaf clover were said to be of doubtful value to the guppy breeder, possibly having a harmful effect on the fishes.

Various technical and other difficulties meant that members were only able to hear a very little of the Henry Roth tape. I might add that considerable amusement was caused by some of the background noises on Len's tape, notably a very squeaky door, and Michael mowing the lawn.

A twenty minute break for tea, etc., commenced at 9.25 pm.,and then the raffle was drawn, this being a rather lengthy procedure on this occasion. The winners were:-

1	No 76	Mr Bonner	<i>Aphyosemion arnoldi</i>
2	No 84	Mr Ollett	Pair young Red Veiltail Guppies
3	No 37	Mr Norris	Trio golden veiltail guppies
4	No 23	Mr Pickett	young pair of red veiltail guppies
5	No 456	Mr Barker	Male coloured veiltail guppy

Before the close of the meeting, Mr Mason started a general discussion by telling us of his recent failures at breeding Cardinal Tetras.

22 members escaped the Guy Fawkes celebrations on November 5<sup>th</sup> to attend the Auction, which started at 8.30 pm.,. Mr Mason, assisted by Messrs Bonner, and Perrott, knocked down 29 lots for a total of £6-1s – 3d. Tea was served at 9.25 pm., and during the interval Vic Pickett won the raffle prize of three Tiger Barbs. The meeting was resumed at 9.50 pm, the first item for discussion being which fishes were eligible for the Best Fish of the Year Table show. It was argued successfully, that better fish might have well been raised during the last few months than had been exhibit in the Club early in the year. Various fishkeeping topics then came up for light hearted discussion before the meeting finished at about 12.25 pm.

The November 19<sup>th</sup> meeting got away to a rather late start and it was after 8.35 pm, when our President made the first of several preliminary announcements. An hours discussion on “Members Breeding Achievement” followed, though from the deathly hush that descended at times one might have thought that most of the 28 members present had kept only sterile fish. Vic Pickett had brought some of his young Berlin Swords which seemed to have queer shaped tails – it was decided that this was inherent in this variety, and I will have more to say in our next issue – and the breeding of fighters and ramirezi was discussed at some length. Other egglayers were dealt with more briefly, and when the topic of conversation switched for awhile to heating, Mr Peartsall, suddenly inspired, suggested pumping hot air or steam to the tank via the air pump!

A half hour break was held for tea, etc., and Vic Pickett made it a partial hat trick of raffle successes by winning the prize of a Bronze catfish. After the interval, the table show judges, Jim Wylie and Dave Booth announced the following results:-

#### BEST FISH OF THE YEAR SHOW

1	No 481	Speckled Molly	Mr D.Plappert	(88 points)
2	No 466	Mystus catfish	Mr B. Martin	(84 points)
3	No 473	Bleeding heart tetra	Mr J. Pearsall	(83 points)
4	No 474	Kissing Gourami	Mr D. Perrott	(82 points)

There were 23 entries, The winning Sphenops – a male - was a well marked fish of good size.

ANNUAL GENERAL MEETING December 3<sup>rd</sup>. 23 attended, and the start was again late, at 8.45 pm. Mr Mason optimistically announced that a “right carve up” would now commence(!) and then 50 minutes were than spent discussing the past year and the accounts. Jim Wylie indulged in much good natured heckling, until it was suggested he make the tea. Mrs Iles was thanked for her making the tea so often. An interval was then held until 10 pm.,when the following trophies were presented:-

Duboisson Cup (best characin of 1963) to L.E. Willis  
Barnes-Oak Cup (winner of breeders egglayer Class) to D.G. Perrott  
Coronation Cup (winner of breeders livebearer class) to J.H.Preston  
Jones Cup (for best tropical fish of the year) to D.B. Plappert  
Brookes Shield (best furnished aquarium) to L.E. F. Willis  
Brookes Shield II (2<sup>nd</sup> best Furnished aquarium) to J.H. Preston  
Southchurch Cup (highest points table shows in 1963) to D.G. Perrott

The executive committee for 1964 was then elected -see page 1- and Mr R. Machin and Mr J. Wylie were appointed as Honary .....

Auditors. Mr Mason elected as President for the second successive year , was called upon to make his second speech of the evening. He asked the members for ideas for the coming year, and although few were forthcoming, Dennis Plappert suggested the Home Furnished Aquaria Competition could be reinstated. (The committee have since decided that this will take place during the Summer). Jim Wylie said that the committee should look into the possibility of holding a show during the year.

The meeting closed at 10.35 pm.

On December 17<sup>th</sup>, two dozen members turned up for the "Aquarist on Holiday Slide Show" Once again a start was not made before 8.40 pm. The first half of the evening's consisted of slides taken by Michael Willis and his brother; Cyril Barker and Dave Cheswright. The places "visited" ranged from the Costa Brava, St Malo, Greece, Cyprus and Israel to a great variety of locations in England. The usual breaks was held for refreshments, and the raffle prize of two weather loaches went (again!) to Vic Pickett.

After the break, members were entertained to films taken by your editor on the Norfolk Broads and in Southend, including some shots of the 1963 Illuminations. Contrary to some rumours, the film of the bonfire and fire works was NOT taken in the Editor's "fish room"! The Norfolk Broads films seemed to show mainly disused railway swing bridges and ducks swimming at great speed away from the pursuing motor cruiser. There was a great deal of cloud and rain, but the audience had an hilarious time making up their own commentary. Despite the lack of "fishy" interest the evening went off very well, the meeting drawing to a close just after 10.45 pm.

The first meeting of the New Year, on January 7<sup>th</sup>, drew 23 members. Michael Willis began the evening by starting at 8.15 pm., a general informal discussion. The Auction commenced at 8.30 pm., And 44 lots came under the hammer, with Johnny Mason in charge, assisted by Michael Willis and Harvey Holmes. A total of just over £10 was raised – the best for a long time. Disaster struck the meeting at 9.15., when it was announced that someone had forgotten to bring any tea! It is not expected that this will happen again! A 25 minutes break was held, without refreshment but with apologies. Programme cards for 1964 were distributed, and a reminder was given – again – that Annual Subs were due. The talk on setting up Furnished Aquaria for beginners was given by the President; much of the ground has ready been covered in this Magazine, but one or two other points emerged. Fewer than 10% of the members present had troubled to earth their tanks, although, Mr Hearne a new member, told us how it was quite easily done. Mr Mason did not recommend the practise of using one thermostat to control several tanks, because failure of the heating in the controlling tank means that the other tanks will also "boil" or "freeze". Losses could then be considerable.

The meeting then finished soon after 10.30 pm.

.....

**Mr J. McNaughton**

We deeply regret to announce that Mr J. McNaughton passed away during December. "Mr Mac" as he was known to members, belonged to the club for many years took a keen interest in coldwater varieties. We extend our sympathies to Mrs McNauton.

## HEMICHROMIS BIMACULATUS – THE JEWEL CICHLID

by C.Bennett

*Hemichromis bimaculatus* or the Jewel fish is an African Cichlid, and is one of the most colourful members of it's family. It grows to about 4 inches long and is the typical Cichlid shape. Favourite foods of the Jewel Fish are small fish, garden worms, tubifex and as a delicacy Daphnia.

The normal colour of Jewel Cichlids is a brownish-grey with a large dot in the centre of the body. Fins and body are both covered in brilliant iridescent scales - the "jewels" - and there is a larger "jewel" on the gill plate, although this marking fades almost completely from time to time. Indeed the whole colour of the fish is very variable- not infrequently, especially at breeding time, the fish assumes quite a reddish appearance. The tail fin has a red line around its edge.

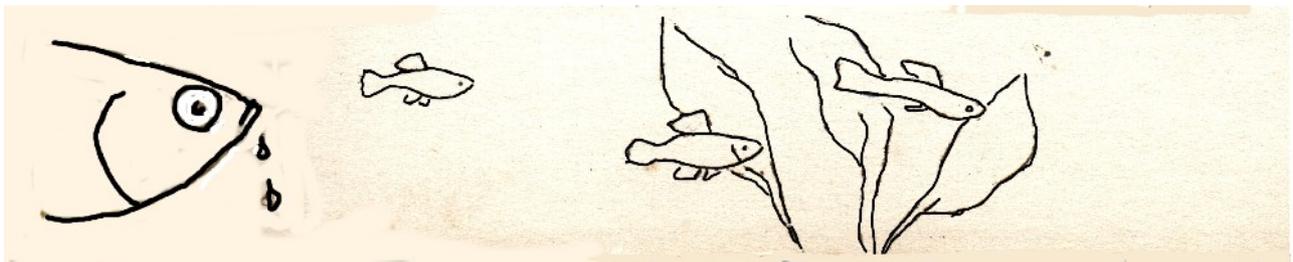
These fish are very difficult to sex; the finnage has been the same all the ones I have seen. According to Thos. B. Marshall in his book "Breeding the Cichlids", in the male the jewels run all round the outer edge of the caudal fin; but in all the fish I have observed the jewels only extend half-way round the fin's – and I refuse to believe that I've only been looking at fish of one sex.

I have two Jewel Fish in a 21" x 12" x 12" tank which is maintained at 78 degrees F. They eat ravenously, and although they are still timid they are slowly becoming more tame and will rush to take food from my fingers.

The only real fault one could find with Jewel Cichlids is their habit of eating other fishes. Other fishes are in fact their favourite food and the best one to bring them into condition. They do prefer adult small fishes rather than fry ( my Jewels have eaten fish up to one inch long? the main source of supply being Howard Preston`s culled Guppies and Swordtails ). This live food immediately brings them into better colour.

I have so far had no success in breeding Jewels. I conditioned what I had been informed was a pair in a 2-foot tank and fed them heavily on tubifex, garden worms and fish. They courted, spreading fins, chasing each other- and locking jaws, but nothing came of it, and after several of these experiences I am forced to the conclusion that my two fish are both of the same sex.  
has a spare tank and a surplus of such fish as

So if any one has a spare tank and a surplus of such fish as Guppies or Platies, then the Jewel Fish is the one for them.



NEONS WITHOUT FRY

. . . .by D.M.Cheswright .

I have been attempting to breed the Neon Tetra for some time, having obtained fry on one occasion only to lose them ten days after hatching.

According to information gleaned from books and fellow aquarists the essentials for breeding are;-

- A) Healthy young fish - 6 to 9 months old.
- B) Soft acid water- around 6.4 pH and 2 degrees German hardness.
- C) Cleanliness - necessitating sterilising tanks and equipment.
- D) Darkness - very little light is apparently needed to destroy the eggs or young fry.
- E) Temperature - 70 to 72 degrees F.
- F) Patience.

No to deal with the above as applied by myself.

A) Having obtained 6 ½ inch Neons in July, 1963 by October it was apparent that there were 4 males and 2 females and their age was guessed at about 6 months. Females are quite easy to spot because of their fuller and rounder shape at most times; males are more difficult to decide on as they tend to be quite fat after feeding and it is best to inspect the fishes in the morning, before feeding, when the males will be flatter underneath and slim when viewed from above or face on.

The Neons were kept, in a 24" x 12" x 12" tank, together Harlequins and young Leeri Gouramis, a total of 18 fishes. This had a peat bottom, covered with gravel and a Peat Filter has been running at all times. This has kept the water at a pH of 7.0 ( neutral) but so far has not made the water at all acid.

Feeding has been on a variety of dried foods, small amounts of finely chopped Tubifex ( once every 2 days ), and even less Daphnia when available.

B) The water used was tap water passed through the "Permutit" Ion exchange Resins "Zeo-Karb 225" and "De-Acidite FF" . This process is rather complicated and could form the subject of a separate article , but the result is to produce water which is extremely soft ( 2 degrees German Hardness maximum ) and acid to varying degrees. Having tested this water over a period I have found that, although it remains soft for a considerable period, the acidity will change from pH 6.3 ( acid) to alkaline ( pH over 7.0 ) within 10 days if fishes are present and within 21 days if kept without fishes in an open container. This could obviously have a bearing on the success or otherwise of breeding . I have used water at pH's from 6.2 to 6.6 in my attempts.

C) The set-up used for each attempt consisted of a 10" x 8" x 8" all glass tank, 4 inches of treated water, 1 nylon mop, cover glass, and a black cloth to completely cover the tank. The tank mop and cover glass must be sterilised before use and I used a solution of "Diseasesolve", soaking the articles for 1 hour, then rinsing under a running tap and finally rinsing out with a quantity of the prepared water. The tank was then filled to a depth of 4 inches with the prepared water and the mop placed in and the tank, with the cover glass on, placed on the cloth in a position in the fish house where it was hoped the temperature would stay- at 70 to 72 degrees F. The net meanwhile was kept in a jar of the sterilising solution. The tank was completely covered with the cloth and was now ready for the pair.

D). Darkness appears essential until the fry are free-swimming and the only light allowed to enter the tank is when inspecting for eggs, removing the parent fishes or seeing if fry are present. The introduction of light encourages the growth of bacteria which will destroy eggs or young fry. Inspection of the tank for eggs or fry involves lifting a small corner of the cover for a few seconds; removal of the parents must be quick, using a sterilised net, and the cloth replaced immediately. The fry hatch in about 24 hours and are free swimming 3 to 4 days later. Feeding should commence on the 5<sup>th</sup> day after seeing the fry and a side of the tank away from direct light can be uncovered. The rest of the tank can be uncovered in stages over 2 to 3 weeks.

E). Low temperatures are considered essential from the information I can obtain although it will be seen below that the fluctuations in my only hatching to date varied from 70 to 76 degrees F. It would, therefore, seem that temperature is not quite as important as the other factors. All temperatures noted were taken on top of the covered tank.

The parent fish were separated into large jars one day before placing them in the tank after dark, using the sterilised net. Between spawnings they were kept in separate 6" x 6" x 6" tanks filled with treated water. The breeding tank was inspected morning and evening until eggs were seen, when the parent fishes were removed regardless of whether or not spawning was still in progress. All eggs appeared to scattered over the tank bottom and not on the mop. A time-table of spawnings follows: -

	pH	German Hardness	Parents in in	Eggs seen	Eggs fungussed	Fry seen	Temp. variance
1)	6.4	2 DEG	28 Oct	8.30 am, 1.Nov	4 <sup>th</sup> Nov		72-76
2)	6.4	2 deg	10 Nov	8.30am, 13 Nov	15 <sup>th</sup> Nov		68-74
3)	6.6	2 deg	19 Nov	8.00 am, 21 Nov		25 Nov	70-76
4)	6.3	2 deg	26 Nov	10.00 am, 1 Dec	5 <sup>th</sup> Dec		70-78
5)	6.2	2 deg	5 Dec	10.00 am, 8 Dec	8 <sup>th</sup> Dec		68-74

Inspection for fry was made in 1 and 2 before the 4th day as it apparent when the eggs were seen that all was not well and in 5 eggs were fungused when found.

-

The fry in 3 were about 50 in number jerking through the water and the tank was covered for a further day. Then the front of the tank was uncovered and the fry were mostly swimming properly; those which were still jerky did not take Brine Shrimp and were dead within a further 3 days. I commenced to feed Brine Shrimp in very small quantities on 26th November and it was taken by all fry which were swimming properly. Feeding with shrimp was carried out morning and evening and any dead shrimp was removed with a piece of sterilised aerator tubing. Very slight aeration commenced on 28th November using a sterilised air stone and tubing. On 3rd December one dead fry was found on the surface and was removed but all others appeared in good condition. At 9 a.m. On 4<sup>th</sup> December the fry were not active but were still eating and had definitely grown since hatching. By the evening only a dozen fry could be seen and the casualties were removed. At 8 a.m. on 5th December there was no trace at all of the remaining fry, the bodies presumably having dissolved, The pH was then 7.0 ( neutral ) and there were 6 degrees German Hardness.

Because of the healthy condition of the fry for 8 days it seems that the light and temperature conditions were satisfactory. The had fluctuated between 72 and 73 degrees F. I am at present assuming that the loss was due to pollution and change in pH and hardness caused by the dead shrimp and the fry in the tank and hope that, if further hatchings occur, smaller quantities of shrimp can be fed, perhaps at more frequent intervals, in order to try to avoid sudden death. It also seems that the smaller fry, which were those swimming jerkily, were unable to take shrimp, and I wonder if in the natural state there is some type of microscopic food for the fry during their first day or two. An article in a recent "Aquarist" by a gentleman who apparently supplied Neons on the Continent at the rate of 30000 per month recommends Infusoria in small quantities for the first 3 days but fails to state what type of Infusorial!!

At the time of writing I have 2 spawnings from 2 pairs both obtained on the 3rd morning after they were placed in the breeding tanks but I must wait a farther 2 days before the truth will out.

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## THE "WILHELMA" STUTTGART

by N. Sellers.

### Part 1.

As many of you will be aware, I have in the past had the good fortune to be able to travel the high roads ( excellent ) and byroads ( often better not mentioned ) of the European continent by virtue ( convenience ) largely of accumulating friends and relations in various regions.

Having, over the years, improved my knowledge of the German language by frequent thumbing through a now rather grubby dictionary, I ventured a not particularly insignificant sum in procuring, with the kind assistance of the local bank, the monthly delivery of D.A.T.Z. - West Germany's journal for Aquarists.

It was in this knowledgeable and well illustrated periodical that I first became acquainted with the Wilhelma Zoo in Stuttgart, as an article on new fish arrivals there appears every month in the latter pages of each issue. As the subjects mentioned were confined to marine species, I of course presumed that this was one of the Zoo's specialities.

Having seen numerous coloured and black and white pictures of marine fishes with their infinite variations of colour and shape I was naturally curious, as I had not seen living specimens apart from a few sea-horses from time to time, to see them 'in the flesh', particularly as I have a rather doubting mind and could not conceive many of the pictures I saw as being other than a 'fake-up' of brilliantly painted plastic models suspended in water. How very wrong I was, I was to learn later, for the unbelievable beauty of colour shade and pattern, of bizarre shapes and behaviour are in fact a reality.

During the early days of July last year, as I was nearing Stuttgart on the Autobahn leading from Karlsruhe to Munich, the puzzle of queer fishy shapes again came to my mind and I was mentally goaded into physically breaking my journey at the next turning. After some detours, one via a tram depot, I managed to find the not very externally imposing, and non-signposted, walled enclosure called the 'Wilhelma'. On paying my 2/6 I passed through the turnstiles and found myself in the Tropical House. This is an enormous greenhouse housing the largest collection of cacti, orchids, tropical trees and plants I have ever seen, with bananas and pineapples for the 'picking', and one could even sit beside an indoor pool in a tropical forest setting.

The end of the Tropical House aptly merged into the entrance hall of the newly erected 'Interim-Aquarium' which was opened to the general public last Easter, enabling the viewing of fish hidden from the public eye during rebuilding work, until the eventual permanent Aquarium is completed. The present building is constructed of natural finish grey concrete and asbestos, being rectangular in shape 180 feet long and 27 feet wide with a low minimal illuminated ceiling. Almost the sole lighting is within the tanks which are built into the walls on either side. One passes via three vivariums containing half grown crocodiles into the rather 'eerie' darkness of the Aquarium - a sinister 'welcome'.

On the left of the 'hall' are the Mediterranean 'marines' and the tropical freshwater fishes, and on the- right the tropical seawater fishes. There are 55 tanks each containing from 40 to 300 gallons. At the end of the 'hall' are two vivarium containing tortoises, one variety of which lures its prey by means of the emanation of a cheeselike smell from below a soft shell projection above the head; the victim, thinking he has a delicate morsel before him takes a bite, and as quick as lightning a mouth protrudes and he or she is gobbled up.

The most fascinating creatures on view, might be considered to be the five foot long electric eel which arrived at the zoo eight years ago as a two foot specimen and is able to stun a man with its electric discharge, .an electric catfish, an albino African lungfish, giant Gouramis, and a shoal of Piranhas. The latter certainly did not look as fearsome as portrayed, being a dull silvery fish about four inches .....

in length, but as they occur in huge shoals in nature and have razor sharp teeth, there is no doubt some truth in the legends surrounding them.

There was little new in the way of freshwater tropicals apart from a number of Black Neons (*Hyphessobrycon herbertaxelrodi*).

As regards the marine exhibits the most striking for length of life in captivity are a shoal of WimpelFish imported in 1957- There are over 200 examples of 90 species of marine tropicals on view. Many of the marine tanks contain hermit Crabs, and numerous species of sea anemones whose bright colourings, diversity in form and delicate appearance are barely exceeded by the fish creating a flower like landscape. Additional ornamentation of the tanks consists of natural rock work, numerous specimens of coral and here and there clumps of Caulerpa - an advanced form of algae. The nearest relatives of the sea-anemones are the corals, these being nothing more or less than sea-anemones which have united together in colonies creating skeletal structures from chalk, silica and tissue breakdown, the commonest form of which is sponge coral. Many of the mountain ranges of today consist of the chalk deposits from coral formed many millions of years ago. Some corals are brightly coloured in orange, lemon or red, this colouration being due to deposited remains of hermit crabs who have talc on shelter there in. In deeper ocean regions - over 250 feet, branched coral is found. Care has to be taken in the collection of sponge coral as it is liable to breakage on impact and also if exposed to rapid changes in water pressure.

Interesting occupants from the bed of the Mediterranean are the tube worms which build chalk 'flight holes' in the sand to which they quickly resort when frightened.

Highly developed plant life cannot exist in sea water and the only vegetation suitable for marine aquaria is the advanced form of algae already referred to - Caulerpa. This multiplies rapidly under favourable light conditions and helps to remove nitrogenous waste products from the water.

Octopus and several types of crab are on show, as well as Seahorses with which the Zoo has had considerable success, the decisive factor being the rapid transport of perfect specimens from sea to tank.

The Wilhelma houses the largest collection of tropical marine fish in Europe, Its central positioning enables the greatest number of people on the continent to visit it without undue travelling difficulties but its being some 300 miles from the nearest source of natural seawater has had its problems in the past, as also has the long journey by train from the ports of arrival for the fish.

The fish are now imported by air taking two days to travel from India. They are packed in plastic bags half-filled with seawater and half with pure oxygen. The Latter gives the fish 'oxygen-shock' leading to slower breathing, enabling the 'air' supply to last the whole journey.

This is as much a gamble of time, for a few hours' delay means the loss of the whole consignment, as of temperature, for this can result in freezing of the fish in winter or boiling or asphyxiation in summer.

TO BE CONCLUDED IN NEXT ISSUE.

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### GENETICS

by G. Hedger.

(This is the first of a series of three articles by our former Hon. Secretary. Later articles will include the topics of sex-linkage and line breeding - Ed.)

Genetics is a subject that most Aquarists think is beyond them, but a basic knowledge of the laws of inheritance is essential to all who are interested in breeding livebearers. I have the report on your recent Table Show and on the poor quality of many livebearers and Platies in particular, also the erroneous ideas that most Aquarists have in blaming "inbreeding" for the poor size of their stock. Indiscriminate inbreeding can only produce poor stock; controlled inbreeding ( line breeding ) is the only way to make improvements. I will now try to confuse the issue still further by trying to simplify the subject of Genetics.

Genetics is the study of inheritance, and was first started by an Austrian abbot, Gregor Mendel, about 100 years ago.

Mendel's experiments were carried out on the various characteristics of plants. For all his experiments he used culinary peas; he used plants varying as much as possible in various characteristics, i.e. sex, colour, etc. He found various constant ratios of the difference in the same characteristic in the number of offspring when two plants were bred together, and on these ratios he founded his laws. Each of the two parents contribute equally to the hereditary constitution of the offspring.

He found that if he crossed a tall plant with a short plant all the offspring from the first cross were tall. If he then selfed these, i.e. bred brother to sister, he got a different ratio of tall plants to short plants.

Tall	x	Short	P
I			
Tall			F.1
Tall	x	Tall	F.1
I			
I		I	
3 Tall		1 Short	F.2

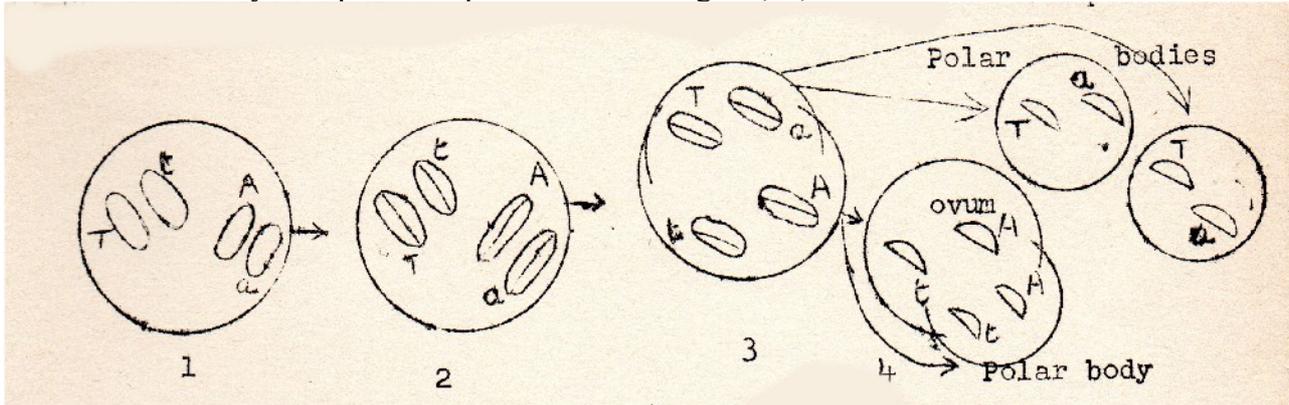
On investigating the F.2 generation he found that they did not behave the same way on selfing. All the short ones bred true to shortness; but of the tall ones, only one in three bred true to tallness, the others acted as did the F.I generation, that is breeding three tall to one short.



chromosomes are always present in pairs, except in the gametes ( sex cells ) which only contain one of each pair.

Though the chromosomes cannot be the genes, there is every reason to believe that they are carriers of the genes, or that the genes are a small portion of the chromosomes.

The process by which the sex cells receive only one of each pair of chromosomes is known as meiosis. I will try to explain this process with a diagram, --,



The cell in the ovary, showing two pairs of chromosomes.

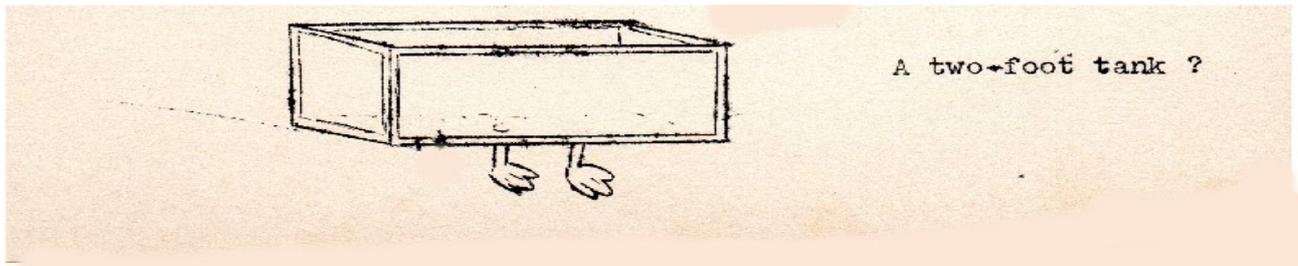
2. The chromosomes divide but halves do not separate
3. The reduction division, one chromosome of each pair ( either one ) goes to the end of the cell, the other goes to the opposite end, and the cell divides.
4. The half chromosomes ( chromatids ) separate and the daughter cells divide. One of the four final cells becomes the ovum ( eggshell)s and the other three ( the polar bodies ) degenerate.

The ovum may contain any of the four following combinations-

Ta. TA. ta. tA.

In the male the same process,of meiosis ensures that each sperm contains only one of each pair of chromosomes. The only difference is that in the case of sperms, all four final nuclei in each meiosis enter gametes; there are no polar bodies.

TO BE CONTINUED



-16-

Names and addresses of Club Members (see page 2)

Mr. and Mrs, A. W. Maynard, 34- Deerhurst, Thundersley, Essex,

Mr. S. Smith, 12 Woodlands Close, Hockley, Essex.

Mr K. J. Ollett, 14, Weymouth Road, Chelmsford, Essex.

Telephone Chelmsford 58335-

Mr. I. P. Lake, 7 Dartmouth Road, Chelmsford, Essex.

Mr. M. Wilson, 57 Western Road, Leigh-on-Sea, Essex.

Telephone Southend-on-Sea 72183

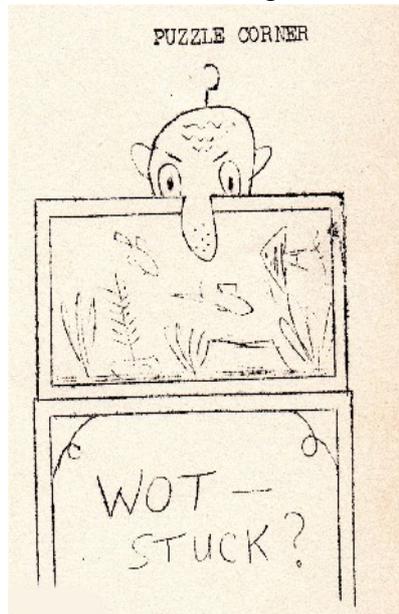
### What a mix-up !

Here are a few anagrams to keep you busy. Each one represents the Generic and Specific name of an aquarium fish, and in this case they are all tropicals.

- 1) As Roy has dustcart 0 (9,8).
- 2) Robe leans as rag (7,7).
- 3) If main bus is a fag (8,7).
- 4) At, or in, a mail (5,6).
- 5) Chirpy as pie plate (9,7).
- 6) Bust cues rise a little (8,11)

To help you, the figures in brackets indicate the number of letters in each part of the scientific name. Also, 1, 2 and 5 are egglayers and 3, 4 and 6 are livebearers.

Happy solving. The un-jumbled names will be published in our next issue.



**Here are the remainder of the crossword clues** (see next page).

Down; 24. Help (3).

25. This fish has been described as a loach (5).

27. Order of the British Empire (1,1,1).

28. One is built by most Anabantids (4).

30 Sound made by animals such as Lions (4).

32. You may do this with a planting stick (3).

33. It may affect the fins of fishes (3)

THE SOUTHEND, LEIGH AND DISTRICT AQUARIST SOCIETY.  
REVISED RULES.

- 1.- That the Society shall be known as the "Southends Leigh and District Aquarist Society" incorporating Pondkeepers, Aquarists and Herpetologists.
2. That the aims of the Society shall be for the promotion and furtherance of all aspects of Pondkeeping, Aquaria and Vivaria and to give mutual help to members.
- 3.- That the Annual Subscription for Senior Members shall be 7s. 6d.  
All Subscriptions fall due at the Annual General Meeting.
4. That in cases of husband and wife joining the Society a joint Annual Subscription of 10s. 6d» will apply.
5. That new members shall pay an Entrance Fee of 1s. upon applying for membership.
- 6.- That all applicants for membership shall be over fifteen years of age.
- 7.- That all persons desiring membership of the Society shall submit the prescribed application form duly completed and bearing the Proposer's signature to the Honorary Secretary through the member proposing the applicant, for consideration by the Executive Committee. The Entrance Fees of unsuccessful applicants will be returned. Successful applicants will be notified and must remit the proportion of the Annual Subscription due.
- 8.- That all Annual Subscriptions shall be paid within one month of the Annual General Meeting. All members not having paid by then will be deemed to have lapsed their membership.
9. That Members lapsing their subscriptions will be deemed to have resigned membership. Lapsed members upon rejoining will be required to fulfil the same conditions as a new member.
- 10.- That each member shall be considered a subscriber for the ensuing year unless he sends notice, in writing of his intention to resign to the Hon. Secretary not later than one month after the date of the Annual General Meeting.

At the Annual General Meeting held on December 8th, 1953 Rules 11 and 12 were amended to read as follows;-

"That the Executive Committee shall consist of the President, Vice-President, Honorary Secretary, Honorary Treasurer, and four other members. Five members shall form a Quorum. The Executive Committee shall have power to Co-opt".

13. That all Officers of the Society shall retire annually, and be elected at the Annual General Meeting. Two Honorary Auditors shall also be appointed at each Annual General Meeting.

14. That should the conduct of any member be , in the opinion of the Executive Committee, injurious to the character or the interests of the Society, or opposed to the principles on which the Society is established,, the Committee shall be empowered to recommend such member to resign or failing this to remove the members name from the official records of the Society.
- 15.- That notices of meetings and other matters requiring to be brought to the notice of other members shall be forwarded by post, giving at least seven days' notice of such meetings where possible.
- 16.- That on receipt of a requisition signed by at least one-third of the total number of members, the Hon. Secretary shall call a Special Meeting, giving fourteen days' notice of such meeting and stating the object thereof.
- 17.- That the Hon., Secretary has the power to convene any Special Meeting in an emergency or to give any direction or decision he may think fit ..in the interests of the Society either with or without the authority of the Executive Committee, subject to his placing the matter before the Executive Committee for confirmation at .a later date.
- 18.- That the Honorary Show and Entertainments Secretary is responsible for all matters arising from his office and any relative directions given by him to members should be accepted as official and acted upon. The Honorary Secretary is responsible for all other Contingencies and his directions should be accepted in a similar manner. In the absence of either, the other acts in both capacities.
- 19,- That the Annual General Meeting be held in December each year for the Election of Officers and the presentation of accounts.
- 20,- That in the event of any member resigning or being resigned by the Society he shall forfeit any monies paid.
- 21.- That these Rules shall be altered only at the -Annual General Meeting or a Special Meeting convened for the purpose.
- 22,- That members pay their own expenses on outings, etc., and the Society will not be responsible for any expenses incurred by members or for any injuries sustained at any of it's functions.
- 23 That the Society shall have a banking account. Withdrawals to bear the Signatures of two of the following: President, Hon. Secretary, Hon Treasurer.
- 24.- That any expenses debitable to the Society shall be approved by the Executive Committee.
- 25 - That the Executive Committee is empowered to enlarge upon any of the foregoing Rules without the consent of the Annual General Meeting provided no such enlargement or modification of terms affects the principle of the Rule governing the subject.
- 26 That the ruling of the Executive Committee on the interpretation of the Rules shall be final.

Jan. 1953-

