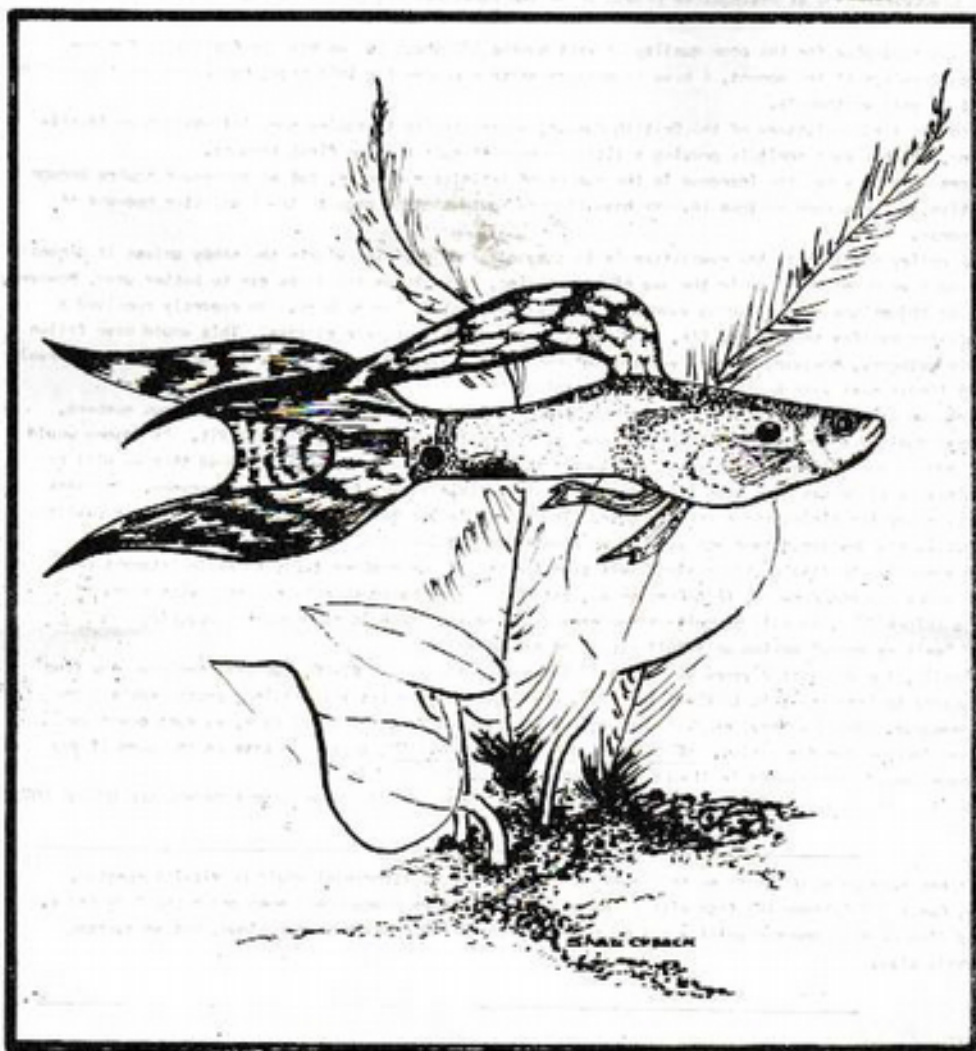


FEBRUARY 1978  
9/7/78

# N.G.L.S.



JOURNAL OF  
THE NEWCASTLE GUPPY  
AND LIVEBEARER SOCIETY

#### CHAIRMAN'S LETTER

Once again we come to the final edition of the year, and I'm pleased to report, a most successful one. Membership is increasing at a steady rate & seems to be well spread throughout the country. As it grows, our members are finding it easier to meet one another, also, both our own Open Show in Newcastle and the Livebearer Show at Basingstoke proved to be the ideal meeting places for our members from far and wide.

I must apologise for the poor quality of last month's I/D sheet but we have no facilities for re-producing drawings at the moment, & have to rely on another source for this page, but I hope that you will agree it is well worthwhile.

With the kind assistance of the British Museum, we are trying to acquire more information on identifications, which I must admit is proving a little more difficult than we first thought.

There is also a healthy increase in the number of articles coming in, but we can never acquire enough information, so keep sending them in. We have already added another page to the newsletter because of the response.

Our policy relating to the newsletter is to stay clear of politics within the hobby unless it directly affects us & we do not believe in the use of advertising, as we think the space can be better used, however, we have no objections to publishing events of special interest to our members. We recently received a so badge for Malifex show, (Nov. 6th, 1977) that included 16 livebearer classes. This would have fallen into this category, however, we received the information too late and were unable to publish, (sorry Dave) so don't forget next year & give us plenty of warning.

Since we started corresponding membership, I've received quite a few slides from various members, so we have decided to produce a slide/tape show, so the rest of our members can benefit. If anyone would like to add to our collection, we would be pleased to hear from them. It is also hoped that we will be able to make a slide exchange with the German Livebearer Association, for a future programme. The show should be ready for hiring after the New Year. (The charge is yet to be decided) Our relationship with the D.G.L.Z. has developed over the years & we seem to be getting along like a house on fire. This year we were able to take up their kind invitation for one of our members to go to their International Show in Hamburg & Don Kenwood, from Portlshad, acted as our Ambassador, & he returned with a lot of valuable information, as well as quite a few rare livebearers. (Don is at present developing a bed case of "writers cramp" making up a full report of his visit).

Finally, for the last 2 years we have held the membership fee at £1.00, but I'm afraid we now find it necessary to increase this to £1.25 for 1978. Unfortunately, costs keep rising, postal costs alone are tremendous. While we have no desire to make a vast profit from the newsletter, we must cover our costs and improve our facilities. MEMBERSHIPS ARE NOW DUE FOR 1978, so please pass on the word if you know anyone who is interested in livebearers and encourage them to join.

HEY ! WISH YOU ALL A MERRY XMAS AND A HAPPY NEW YEAR & WE HOPE TO BE HEARING FROM YOU ALL DURING 1978.

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It has been pointed out to me that comment no. 4 (D.G.L.Z. standards) could be mis-interpreted. Tuxedo, Comet & Weisbaden ARE fish with a recognised colour form & would not come under the Code Index. I would like to make another point - all measurements are neither maximum or minimum, but an average acceptable size.

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PLANTING AND HEATING

by Mrs. H. Vinnell, F.G.S.

re-printed from the Journal of the Fancy Guppy Assoc.

Let me start with a generalisation; some people reckon that female guppies are rather like cows - they like to graze on vegetation all day long. So, if you wished, you could have all your females in planted tanks and all the males in un-planted tanks. It certainly seems to be a fact that female guppies appear more contented, less prone to listlessness and disease in planted tanks.

But you really need to have the set up for planted tanks. It is fine to have a fish house with 50 tanks - as I have - but not all the tanks that I have will grow plants at all well. And there is nothing worse than a tank full of decaying vegetation. So the tanks available for plants (and, if you like, female guppies) need to be in favoured positions in the fish house where plants will get sufficient natural light to flourish.

Assuming you have sufficient tanks of sufficient size and sufficient natural light spots to maintain plant growth, then you have no problem with the females. What then of the males? I still maintain after 10 years in the hobby that the males flourish better in tanks that contain no gravel. (I'm concentrating my remarks entirely on broadtails here, having had only a brief experience of 2 or 3 years with the short-tail varieties). But I do believe that male guppies are better with some shelter so I like to keep a piece of Hornwort, weighted with lead wire, in each tank - providing there is enough light to maintain the Hornwort in reasonable condition. Only about 3 of my 18x10x10 tanks do get enough light for Hornwort to flourish.

Again, I find that muck in these tanks tends to collect around the lead coil holding the Hornwort down, which makes siphoning out ession. So there is a plus factor. I also tend to keep Rieco in those male tanks with a lot of overhead light. This seems to keep the water sweet. I also use Rieco in my breeding tanks as an insurance in case I have rogue parents with a liking to baby guppies.

Now, it comes to show day, and you need to sort out your best females from your gravelled, planted tanks and you need to pull out your best males from tanks in which you have Hornwort and probably Rieco. There is a show rule which says 'no decoration'.....so you get some Rieco or a bit of Hornwort in the jar. The judge can quite properly disqualify your entry.

So, as you see, it is much more complex than a straight decision based on preference. I do not like completely bare tanks with just a filter in it, although that is the way most American breeders seem to favour. I'm an old softy with my fish really, I tend to escort them so they have a bit of Hornwort behind which to hide, I have all my tanks end on so they have some room in which to dart to the back in case they are frightened. But come showday and I can curse the planted tanks in which my females have decided to hide, or the bits of Rieco that inevitably find their way into my jars.

So far as growth and other factors are concerned, I think there is nothing in it. I have grown big males in unplanted tanks with no floating or other vegetation at all, and just as big males in planted tanks. Gravel can damage the lower part of the broadtail's caudal so I would not, but when my fish are past showing, getting a bit bent in their old age, I usually put them into one of my 4 ft. tanks to finish their days among planted surroundings.....unless my cat happens to be in the fish house looking for a bit of fish, in which case I might steal myself and give him a treat. In short, you pay your money and you take your choice.

The economies of heating a fish house is always being discussed. I still maintain that the cheapest (but not necessarily the easiest or most convenient way) is to use a blue-flame paraffin heater, such as the Blue Flame (Maddin Horticultural) Heater, which you can get in 1" & 2" wick sizes with the facility to interchange. I buy 5-gallons of paraffin approx. per week in the very coldest weather but a 5 gallon drum will last nearly 2 weeks in the milder weather.

If I ever get round to building my ideal fish house, I think for ease and cleanliness I would like to run a couple of radiators off my gas central heating. It would, I'm sure, be dearer but a lot more convenient. One of the problems here would be maintaining the temperature in the fish house in those periods when the time switch on the heating cuts out (overnight between about 11-30 pm to 7 am). Presumably I could fit an override system for the fish house.

There are problems with paraffin, but I think they are definitely outweighed by the cost factor.

Anal fin rays and supports - The first anal ray of Goodoids is typically rudimentary in males and often so in females. There is a one-to-one correspondence between the rays and the basal supports. The typical condition in teleosts, with the rudimentary anteriormost ray of the adult male unsegmented (but the ray is segmented, as well as bifurcated, though unbranched, in the juvenile) This element would ordinarily be missed in recording the anal rays because it can only be seen by careful dissection, clearing and staining or on radiographs. For this reason, anal ray counts in Goodoids, especially of males have probably been recorded a 1 fewer than the actual number of rays. We include this rudimentary ray in our counts of *A. splendens*.

The first 4 pterygiophores (in both sexes) lack medial radials. The next 10 (no. 5 - 14) have medial radials. The penultimate pterygiophore is a basal, and the last one (no. 16) is apparently a highly modified basal. Each pterygiophore has a distal radial which (except for the anteriormost ray) fits into the base between the 2 halves of the corresponding ray. All but the first 2 rays of the male anal fin are typically branched. However, branching varies from that in which all but the anteriormost ray are branched, to that in which rays 1-3 are unbranched. The branched condition may be primitive. With respect to bifurcation of anal fin rays and division of basal segments, this species may be regarded as rather generalized, for it typically has all but rays 2 & 3 branched (occasionally all but the rudimentary one, or all but rays 1-3) and there is little segment consolidation. In these characters, *Anca* rather closely resembles *Stenobius*, considered to be the most primitive genus.

Reproductive biology - Unlike their viviparous relatives, the Poeciliidae, male Goodoids lack spermatophores and the females do not store sperm for the fertilization of more than one brood. Thus each new complement of developing eggs must be fertilized separately. The eggs are extremely small and contain very little yolk, and the embryos are retained in the ovarian follicles until the yolk is virtually absorbed. They are then evacuated into the intra-ovarian cavity, where they remain for several weeks. The ovary functions as a nutritive organ, producing secretions that are discharged into the intra-ovarian cavity and absorbed by the embryo. Brood intervals average about 50% longer in Goodoids than in Poeciliids - approx. 45-55 versus 25-35 days. In *A. splendens*, under the less than optimal conditions of aquarium life, the average brood interval has been 54 days (range 44-76) and the average brood size 7 young (range 1-17), as based on 37 broods from 12 females. 59 young, representing 10 broods from 5 females, averaged 14 mm. in total length at birth. Attempts to hybridize *A. splendens* by forced reciprocal matings (18 pairs) with 3 species of Goodoids, (*Chirocentrus lateralis*, *Xenotoca variata*, *X. alacal*, *X. sp.*, *Xenoporphus capitatus*) have consistently failed, plausibly because of differences in chromosome number and morphology but possibly also because of behavioural blocks. Artificial insemination has not been attempted.

In the male, the swollen area between the anus and the genital opening is much wider than long, turgid basally and constricted distally, with the posterior margin concave; the structure is weakly to moderately spined laterally, the spines scarcely encroaching on the ventral surface anterolaterally.

It is not yet known just how the internal copulatory organ operates - It may eject a jet of semen or be everted and applied to the genital pore of the female. Dr. G. Mendoza is attempting to determine how this organ works. In view of our general lack of knowledge of the method of insemination in Goodoids, we feel that the term Gonopodium, as applied to Poeciliids and some other livebearers, may not be applicable to the male anal fin in this family.

Ovary - As in other Goodoids the single, median ovary is formed by the union of right and left organs, whose fused walls are represented by the prominent septum. The dual origin of the ovary is apparent since the two halves are not completely joined anteriorly. Eggs may be found throughout the length of the ovary in juvenile females or in females with embryos less than 2 mm. long. However, in adult females with embryos beyond the tail-bud stage, the ovigerous tissue occurs mainly in the anterior one-third of the ovarian septum and wall. The septum remains thickened posteriorly but contains a large number of longitudinal blood vessels rather than ova. Since the trophoblasts are attached to the posterior two-thirds of the septum, it is assumed that this section is the site of circulatory exchange that takes place between the female and the developing young. Because it is much thinner than the septum, it is possible to see the enclosed ova and embryos.

Trophoblasts - In *A. splendens* these consist of 2-5 (usually 4) flattened, ribbon-like structures extending posteriorly from a common base around the perianal lip. Tarelni number from 2-10 but counts between 4-7 are most frequent. The length of the trophoblasts varies - they may be fairly short in the tail-bud stage embryos, and short again in young nearing birth. A conspicuous sheath which separated the internal vascularized tissue from the external epithelium is present in the trophoblasts of young embryos, present or absent in half-grown ones, and usually absent in those near birth.

Feeding adaptations and habits - The intestine is long and greatly coiled. Within the front two-thirds of its length it is coiled anti-clockwise, followed by clockwise coiling. In a female, 73 mm SL, there were 4 complete anti-clockwise coils and 3 complete clockwise coils. In this specimen, and in a male 69 mm long, the intestine measured about 4.5 times the standard length of the fish.

A long, coiled gut and lack of a discrete stomach in the embryos, juveniles and adults suggest that *A. splendens* is herbivorous. Gut contents of field-preserved specimens revealed a predominance of pinnate diatoms and filamentous algae. The sparse animal material included such items as mosquito larvae, copepods and oligochaetes. Although these may have been adventitiously ingested along with the vegetation, laboratory stocks readily fed on live brine shrimp, daphnia, worms and small insects. These observations could indicate that *A. splendens* is an omnivore; however, the gut contents of fishes with similar gut morphology often merely reflect the relative abundance of available plant and animal food.

Habitat - The Rio Teuchitlan, the type locality of the new species, rises in large springs near Teuchitlan and, shortly below, forms a stream that averages 6 M. wide and up to 1.2 M. deep, flowing over a bottom that is mostly deep mud and silt but with some sand, gravel, volcanic rocks and boulders. It is heavily utilized for irrigation, drinking water and washing, with much pollution by man and livestock. Vegetation comprised of a broad-leaved Potamogeton, (locally abundant) water hyacinth and Ceratophyllum, with green algae on the rocks. In the main channel the current was moderate, and where ponds were formed, the water becomes more open and shallow, with little or no current at all. When collections were made, the water was almost consistently muddied by cattle, pigs and horses wading, or being washed in the stream. Specimens of *A. splendens* have been seen in only one other locality, the Rio Ameca. The water was muddy, the vegetation water hyacinth and rushes, the bottom sand and mud, and the current slow and the water depth approx. 1.2 M.

Etymology - The specific name, of Latin derivation, means bright (shining) or glowing, in reference to the striking life colours of the species.

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COLLECTING LIVERMORERS IN BAHAMAS

by Joseph Morano, A.L.S.  
re-printed from "Liveborders"

My next trip was to Codrington College, on a more distant and very beautiful part of the island. Codrington is, in fact, an academic college. It is situated in a very beautiful setting, and on the college grounds is a huge, man-made pool. It is at least 200-300 feet long. It is about 2 feet in depth, and is to a great extent covered with water lily pads. The water is crystal clear. The guppies here were so abundant that there was NO problem in collecting them. One could simply scoop them out by the dozen. Obviously some form of restraint on one's collecting desires was necessary. As there were literally millions of guppies, it was exceedingly interesting to scoop them out and look into the net for unusually marked specimens. The variety of markings was dazzling and remarkable. Also common in this pool were huge *Sphenopoma* type mollusks, at least 4-5", silver males, mottled with black, with magnificent orange bordered dorsals. It was rather appalling to watch the guppies so easily after all the difficulties at Graham Hole Swamp. I couldn't resist overcollecting, and I had about 20 males and 5 females.

All the fish survived several days of waiting in overcrowded plastic bags, plus the plane trip to New York, with almost no losses. Unfortunately, I did lose one interesting male molly I had collected at Graham Hole Swamp. The male was largely black, with white markings and a white eye ring. He was different from all the other mollies at the Graham Hole Swamp, which were all typical *Poecilia latipinna*. I did not have adequate aquarist facilities to transfer the fish into when I arrived home, and had to put the approx. 25 guppies and a pair of *Poecilia latipinna* into a 10 gallon tank. The water was aged and green. Whether it was strictly from over-crowding, or due to the chemical changes in the water conditions, the guppies started dying off one by one. Even when they had lessened to the point where over-crowding could no longer be a factor, they continued to die off. However, something stabilized when they got down to about 8 males and (luckily) 1 female. From that point on, they began to thrive beautifully and are still doing well, having even survived an arduous re-location move to New Mexico. They lived in a plastic bag for over a week without added oxygen, and their young were transferred and survived this crude transportation as well. The Codrington males are exquisitely marked and coloured. It is difficult to describe them. While they all have relatively short tails, they are brilliantly and intensely coloured. They all have black circular spots and each male is unique and has its own special markings. One male, (born in New York) has a yellow dorsal, and

yellow 'snake-skin' type markings and is quite beautiful. I have kept the two strains separate so that I can see what differences will eventually appear in the young.

It is a moot question as to whether the Codrington guppies were strictly speaking 'wild fish' since they were living in a man-made environment, however, they were totally free living, and the descendants of fish taken from the natural environment. I noticed some larger fish in the middle of the pool, (Tilapia?) that had perhaps been introduced as predators, to keep the mollies and guppies from breeding to the point of over-population.

The great variations in the markings of just these two strains of guppies makes it appear to me what a fascinating study it would be to compare the colouration and markings of wild guppy populations throughout the areas of their natural habitat.

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Note added by the Editor of 'Livewheelers'

The guppies in the Codrington College pool probably were stocked by man. Fancy guppy enthusiasts might like to speculate that some of this stocking may have been with domesticated guppies (from the pet shop, for example). This would result in a great diversity of pattern and colours, and may have contributed greatly to the beauty of the guppies in the campus pool

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XIPHOPODUS SPECIES.

by Mr. M. Mansbridge. N.G.L.S.

General description - Mr. Mansbridge's female is approx. 3" long. Fins yellowish with black edging and some red also in the fins. There is a touch of red under the lower jaw. The eyes are black with golden yellow surrounding them. The ventral fins are very near to the anal fin. This female has produced 8 fry on 17th August and a further 7 on 9th September. The fry were quite large -  $\frac{3}{4}$ " to 1" in length.

Description - The young are almost transparent, fins seem to be clear, no red under the lower jaw until they are a few weeks old, and then the edging of the fins becomes blackish also. The jaws of the young soon to curve upwards.

Feeding - Very easy to please, takes live and dried food.

Temp. - Kept at 60-62 F. Water depth 2" for the first few weeks with floating plants for cover.

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XIPHOPODUS MILLERI\*

by Mr. T. Mayle. N.G.L.S.

We keep Xiph. milleri and they breed very well in a small tank. A little salt should be added to the water. The tank is kept at ordinary room temperature so heaters can be dispensed with. They breed at 60-65 F.

Description of older fish.

Male. The males have similar colours to the Variatus platy, i.e. blue to mauve. There are 2 semi-circles on the root of the tail, one yellow and one red. They have a yellow dorsal with black edging only when mature. They have 3 bars on the middle of the body. Size - 2"

Female. Brown and black checkered pattern. 2 semi-circles on the tail. Other fins clear. Size - 2 $\frac{1}{2}$ ".

Special remarks.

DO NOT KEEP THIS SPECIES IN WARM WATER AS IT WILL DIE. They are avid consumers of algae, but will eat anything offered. They are easy to breed and the females do not appear to eat their fry. The young are brown with 2 semi-circles on the root of the tail.

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\* I would like to query the identification of this species, as I have had some of these fish for quite a while (these were given to me as Xiph. milleri, but I have had my doubts for quite some time) so I took the opportunity of enlisting the help of the British Museum, and I have just heard from Mr. Chambers and he is 99.9% certain that this species is Xiph. variatus variatus (wild form). I must admit that mine have never shown as much colouration as Mr. Mayle described, but this could be due to them being kept in a lot higher temp. than Mr. Mayle or Jacobs suggests, so I will slowly reduce the temp. and see what happens.

#### LETTERS.

Reading the article on the Poec. vittata with the shrimles I also have experienced this with my own stock of vittata. I have no trouble in curing this sorry looking trouble. I find putting the fish in a tank with a great deal of salt added, or better still, 2/3 full of sea water will cure them. I have found that this cure worked with almost any livebearer with the shrimles. I put 2 gravid platives with the shrimles into pure sea water. They dropped fry in the tank and the fry have come on really well.

I picked up the newsletter of August '77 and was reading the article on *Apoec splendens* again, and I note that the author stated that only a few fry were born at one time. Well, both myself and Bill Innes have had very different results. My female had 21,  $\frac{1}{2}$ " fry for her first brood. Bill had 2 females, the first female dropped 19 fry and the second one, believe it or not, dropped 36. In my opinion these fish are capable of producing even more than this. The females were all conditioned on live food prior to mating. This is only a short observation but I am building up an over all picture of this species, and if you want this information for the newsletter, I would be glad to supply it.

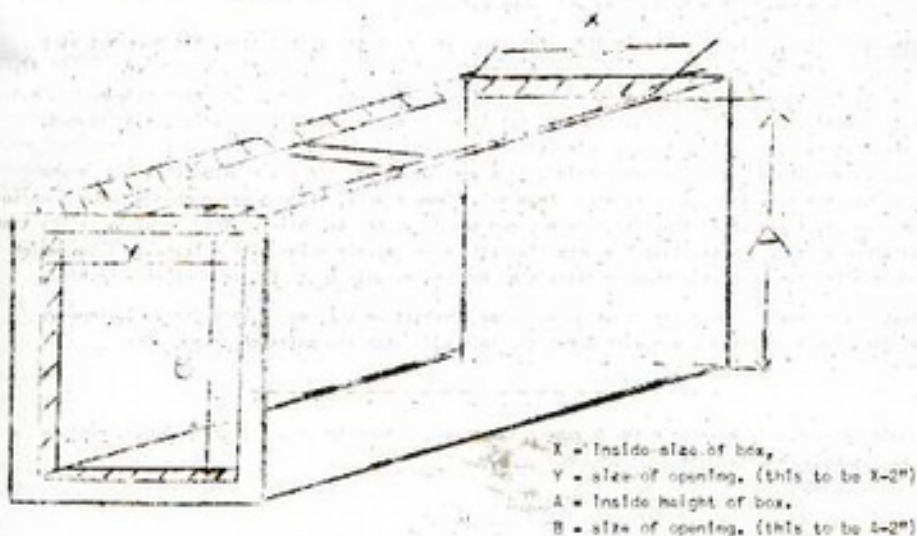
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Both these letters were sent in to Mr. George Kane of Kirkcaldy. I'm sure that everyone would be interested in learning more about *Apoec splendens*, as someone's personal experiences can be much more help than any other type of information. One question I would like to ask Mr. Kane is "What size were the females when they produced those large numbers of fry?", as we have found that if a small female (say 2") produces a large number of fry, the fry do not survive - it could be that there is a limit to the number of fry the female can nourish completely before they are born.

I would also like to thank Mr. Mayle and Mr. Menzies for sending in the information about two species that little is known about.

#### MAKING A TANK FROM A POLYSTYRENE BOX

by Mr. R. Gedhill, N.G.L.S.



X = inside size of box,  
Y = size of opening. (this to be X-2")  
A = inside height of box.  
B = size of opening. (this to be A-2")

The above polystyrene box can be made into a fish tank at very little expense. Paint the outside with a flat paint, NO GLOSS, after removing any paper which may be stuck to it. I have used Matt emulsion covered with a gloss paint, but give 2 or 3 coats of matt first, as gloss paint is death to polystyrene.

The glass should be cut to the inside size of the box, e.g. X" x A". The opening should be 1" less all round on the inside side, e.g. (X - 2") x (A - 2"). Seal the glass in with allison waster inside and out. It is better to fit a strip across the top as the sides bulge when the tank is filled. This strip can be made from the top of the box.

I find these tanks loose very little heat and of course are very light. The disadvantages are that the heater clips have to be stuck on, (use ones that have lost their rubber suckers and allow for the height of the gravel). If you use space heating, they do not heat up quickly as they are well insulated from the outside air.

This month I was going to get on my high horse and have a go at the various non-standard SUPPLIES I've seen in the North-East this year; the local members know that this is my pet grouse. This was going to be my subject, but I've actually had a few requests from members to explain how I use the three items which I mentioned in the last newsletter (the 3 my wife tried to get for me). Now this really surprised me because I never realised that anyone read my articles, in fact I always thought that June made up a special newsletter for me and included my articles in it just to humiliate me. The members in the North-East know that I need humouring just after I've been beaten by a non-standard fish. Enough of this for this month.

Now for the three items I mentioned last newsletter. 1. DRIED YEAST, 2. SOLUBLE VITAMIN B12, and 3. YELLOW CORN MEAL. Now there's no secret about these three items, I use them, but other fish keepers use different products for the same purpose and I suppose their results are just as good as mine, but I use them because I've tested them for a good many years with good results. For a start, I use items 1 & 3 when I'm treating macro worms and white worms, this is what I do.

MICRO WORMS First of all the container, I use a square plastic container approx. 7" x 7" and 4" deep. Into this I put yellow cornmeal to a depth of approx. 1", then I mix dry yeast in water until the water turns milky. I then mix this with the cornmeal until a sloppy mixture is obtained, a macro worm culture is then added, a piece of smooth wood, approx. 4" x 2" x 1" is placed in the centre of the culture. The top of the wood is level with the top of the culture mix, and after a day or so this wood is covered with macro worms. I remove them with a small paint brush which is washed about in the tanks. I can get 2 or 3 feeds a day from each culture, and I keep 6 cultures going at once. A lot of people who use 'Ready Brek' etc have to renew their cultures every 4 or 5 days by using cornmeal and dried yeast I'm able to keep mine going at least 2 months before renewal, in fact I've had 1 culture going for 6 months. When the cultures start drying up I mix more yeast water with the culture until I again get a sloppy mixture, you must do this every time the top starts drying out. If you have no yeast, a drop of beer will do the job quite well. I've found that by using yeast the smell from the culture is more acceptable than any other method. I keep mine at 65 F.

I also use yellow cornmeal for feeding my whiteworm cultures.

Now for the last item, Soluble vitamin B12, (for those who read the last letter, "It does not stop their heads dropping off" but what it appears to do for my fish is to stop their fins splitting, especially the broadfins. My friend Alf, sent someone to get some after reading my article, unfortunately he did not ask me first, so I'm afraid he got the soluble type but it was contained in a phial which, once opened, must be used straight away, I believe he was going to use a syringe to measure it out.

I use capsules made by Healthlife and obtained from various shops, (if you have difficulties maybe you can write to the makers). (address obtainable from me). Once a week, after a water change I cut a capsule in half and drop in any tanks where fin damage is noticed and leave the two halves of the capsule in the tank until the next water change. In the last 6 months I've also been experimenting with Vetzme tablets, which are sold as dog conditioning tablets, these contain some B12 and results up to the present show promise.

In the last newsletter I gave a tip about using black Contact on bottoms of show jars. To improve on this, paint jars first and then cover with Contact, this will stop the paint chipping, etc

The following nonsense is meant for the North-east members, I hope the rest of the N.G.L.S. members will forgive me for this private joke.

#### RON'S NO FOOL.

IT WAS ON A SUMMERS DAY,  
THAT THE JUDGE HAD THE FINE SAY,  
RON HAD FOUR JARS UPON THE STAND,  
FOUR OF THE BEST FISH IN THE LAND,  
PERFECT BUT FOR THE MATTER OF SIZE,  
THE COLOURS WERE BRILLIANT TO THE EYE,  
BODY COLOURS WERE A BEAUTIFUL GREEN,  
THE MOST COLOURFUL FISH EVER SEEN,  
THE JUDGE WENT UP AND DOWN THE CLASS,  
IT'S JUST A MATTER OF TIME, RON TOLD HIS LASS,  
AT LAST THE SHEET WERE FILLED RIGHT UP,  
RON'S EYES NOW WERE ON THE CUP,  
WHEN OUT OF THE CORNER OF HIS EYE,

THE NAMES OF THE WINNERS HE DID SPY,  
RON'S NAME WAS NOT IN THE FIRST THREE PLACES,  
SO HE STARTED PULLING LOTS OF FACES,  
ON CHECKING THE LIST OF POINTS HE DID SEE,  
THAT FOR COLOUR, HIS FISH HAD ONLY GOT THREE,  
RON'S ATTITUDE TO JUDGES IS ALWAYS KIND,  
MAYBE THE JUDGE WAS JUST COLOUR BLIND,  
THE ONLY THING THAT RON WILL NOW SAY,  
DON'T MENTION JUDGES WHOSE NAME STARTS WITH K,  
I MUST ADD TO THIS THAT RON IS NO FOOL,  
AND HE'S HOPING MR K WILL KEEP HIS COOL,  
MOST OF THIS IS WROTE IN JEST,  
AND HE REALLY IS ONE OF THE BEST.



The black lyretail swordtail is without a doubt one of the most beautiful tropical fish. A brief description here is in order as many who have not seen it might well picture it as being similar to a black mollie in colouration. Actually it is quite different. Indeed, its greenish or bluish-gold iridescent 'spangled' studded body gives it a most stunning appearance. Yet, here in the New York City area this fish is scarce in the stores and there are several reasons why.

1. **STERILITY.** This fish is a hybrid, the result of a cross between a black platy and a swordtail. Experience has taught me that the rate of sterility among families is not as high as I once thought. Rather, many are of low fertility. Instead of a brood of 100, a good size female might only bear 25 - 30 young. Therefore, the fullness of body associated with advanced pregnancy is not present. Furthermore, the dark colouration of the fish makes the 'gravid spot' not visible. Careful observation is necessary to determine when a fish is due. There is usually some squaring off of the body as is found in other livebearing families shortly before giving birth, but often it is just a matter of luck in watching a female in this condition. Of course, once you know for sure that a female has given birth it is then possible to anticipate the arrival of the next brood, although I have found that black lyretails to be more inconsistent than other livebearers in this respect. Intervals between broods range anywhere from 28 - 40 days. Also, most females cannot be expected to have 6 broods from a single mating, 2 or 3 being more likely.

Black males are just as likely to be sterile or of low fertility as females. Of course, the lyretail males are virtually useless as breeders, as is true of all lyretail males regardless of colour. (I seriously question the credibility of those who claim to have success with male lyretails as breeders). Black hi-fin males can be used; however they tend to reach sexual maturity late, attain a large size and tend to be impotent. Those of normal size that are opposite of brooding seldom are as effective as hi-fin males of other colours. On several occasions I have mated black hi-fin males with highly fertile red lyretail females. The broods of young were rather small and only 2 or 3 consecutive broods were produced. After the females had given birth, it was apparent that many eggs had not been fertilized.

2. **HYBRIDIZATION.** Since black males are not very suitable, this means a male of another colour must be used. Red or red wing hi-fins are most commonly used. From this mating, a black female having a relatively small brood of 50 young (this is about average) would produce approx. 25 black babies. Of these, about 7 or 8 would be low fins, leaving only 17 or 18 hi-fins and lyretails. The remaining 25 fish would be red. By this time the reader should be getting the picture as to why black lyretail hi-fin swords are scarce. But that is not all.....

3. **MELANOSIS.** The excessive production of black pigment can result in melanosis, leading to cancer. This is manifested as black lumps at the base of the tail. Based on my experience, this afflicts between 25-32% of these fish. However, their percentage of afflicted fish is decreasing as the number of fish I raise increases. That is, I can be more selective in choosing females for breeding; the more iridescent colouring and less black colouring at the base of the tail, the less the likelihood of a female producing young that will get cancer.

It should be obvious by now why black lyretails and hi-fins are hard to come by. These just are not profitable fish for commercial breeders. ~~More~~ fish that are available are raised by hobbyists operating on a limited basis.

Before concluding, 3 additional observations should be made:

1. Genes for red and black are both dominant. Therefore, mating a red hi-fin male with a black lyretail female often results in beautiful colour combinations. Black fish often have red fins and in some cases the iridescence has a red suffusion. This can result in a basically red fish with some black colouring (Tuxedo). However, this fish turned out to be an underbred, and apparently sterile female.
2. Seldom do females give premature birth, which I have often found to be a problem with newer strains of swordtails. Also the dorsal fins of the hi-fins are exceptional.
3. I have heard from several sources that the black colouring is a sex-linked trait resulting in 90% of these fish being females. This has not been my experience; indeed some broods of young have turned out to be predominantly male. Perhaps the assumption is due to the late sexual maturity of the males. They often appear to be females until 8 or 9 months of age.

EXCHANGE COLUMN

Although the weather has now turned quite cold, we are still getting a lot of exchanges for publication, so please remember to take a little extra care when packing the fish to give them a bit more insulation from the cold, and also try to avoid the Christmas period, for although the Post Office is very efficient in dealing with our 'Live Biological Samples' there is always the chance of them being delayed at this very busy time.

Another of our new members is appealing for help in obtaining varieties of fish, so if you can help him, please drop him a line, or if you live near by, drop in and see him. His address is:-

Mr. S. T. Norton "Gwyndy", 120, Garter Street, Lincoln, LNS 7JS.

Mr. T. Mayle,  
61, Kingfisher Drive,  
Cholesleywood,  
Arus II,  
Birmingham, 36.

offers - Phall. amies, Gir. metallicus, Pove. melanogaster,  
Xiph. milleri & Hal. formosa.  
wants - Poec. variegatus acudifasciata & ornata, Hal. bimaculata,  
Brach. rhodiphora or any other species of Brachyrhaphis. X

Mr. J.C. Mann,  
50, Rayners Lane,  
Harrow,  
Middlesex. HA2 0UQ

offers - Poec. vittata, Gir. metallicus, Xen. cisoni, Acan  
splendens.  
wants - Poec. nigrofasciata & ornata.

Mr. V. Innes,  
25, Ferns Court,  
Kirkcaldy,  
Fife, KY2 6EH

offers - Limited amounts of A. splendens & Xen. cisoni  
wants - Goober atripinnis, Brach. rhodiphora, Hal. bulbigenus.

Mr. R. Townsend,  
18, Garfield Rd.,  
Thatcham,  
Berks.

offers - Hal. bimaculata, Poec. nigrofasciata, A. splendens,  
Xiph. montezuma.  
wants - Nemurhaphis calchensis, Gir. metallicus, Gan. affinis  
affinis, Poec. roticulatus (double sword or pintail)

Mr. R. Wilson,  
11, Chorwell Walk,  
Corby,  
Northants.

offers - Hal. forkneri, Gir. metallicus, Xen. cisoni, Xiph. varietus.  
wants - Poec. vittata, melanogaster & nigrofasciata, Hal.  
bimaculata, Xiph. montezuma Gan. affinis holbrooki. X

Mr. D. Matthews,  
5, Sylvan Grove,  
Bamber Bridge,  
Preston,  
Lancs. PR5 6YU

offers - 3 tier, 1"x1" angle iron stand. 5'6" high, 3'0" wide  
and 14" deep.  
wants - 6 ft. fluorescent tube, or will consider exchanging  
for fish, particularly needs a male Hal. bimaculata.  
Can provide transport within a reasonable distance  
of Preston.

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NEWCASTLE UPON TYNE, NE6 5BW.

The standard and assessment guidelines fall into 2 parts:-

- 1) The standard and guidelines for the outer shape of the fish and the fins are pin-pointed.
- 2) Colour descriptions. Here the colours of the body and fins are described.

The assessment guidelines give information about the qualities. They are guides for breeders and judges. It is open, however, to aquarists and breeders alike, to breed new colour strains and forms, to establish them and show them. Everything that has not been established within the standard types is known as experimental breeding. When experimental fish are shown, the breeding aim must be made known and will be judged outside the rules. An experimental type only becomes standard if it has been shown at least 3 times by the D.G.L.Z. It must differ in colour and shape from known standards.

Appreciated are breeds from :- *Xiph. helleri*, *Xiph. maculatus* and *Xiph. variatus*.

It must be evident from the body shape that the fish belong to these species, and they must be easily identified as such.

### COLOUR

#### Primary colours.

- Wild colour : Wild coloured fish are only judged in combination with reflected (mirror) colouring or with a design pattern.
- Red : A fish without any design pattern only is classed as 'NEW RED'  
\* without grey factor with proper regard to standard.  
In 'NEW RED', a white chest is a fault which loses points.  
As the primary colour for design patterned fish, (eg. Spotted) is valued less than 'NEW RED', a white chest in such cases is not regarded as a fault.
- White : Only fish with red eyes are permitted with regard to the standard.
- Yellow : Colourless fish with pigmented eyes.
- Yellow : Yellow fish with pigmented eyes.
- Reflected Colour : Reflected or lustrous colour (Mirror)
- Design Colour : All design patterns should strive for intensive colour and a clear demarcation of pattern. (reflected colours are not encouraged as these are not sharply defined)
- Spotted : A loose, sprinkled spotting without concentration in the caudal base is desired.
- Waltzodon : Fish with a half-black body mark (stripe) and CLEAR FINS.
- Tuxedo : Fish with a half-black body mark and BLACK FINS.
- Cross Section : The front half of the body is a primary colour without any pattern. The rear half of the body is strikingly marked in another colour.
- Black : Head and fin colours must correspond with the primary colour.  
BREEDING FIRMS WITH BLACK FINS DO NOT CORRESPOND WITH THE STANDARD.
- Comet : Limited pattern is only allowed on the upper and lower edge of the caudal. Wagtall and weft or partly coloured fin rays in other fins are faults.
- Wagtall : The black colouration of the fin rays on all fins must not spread into the body. Black markings around the mouth are typical on this colour variety. Insufficient or irregular fin colouration causes loss of points under 'colour distribution'
- Moon : The moon marking in the caudal peduncle must be complete. (full moon) Faint markings must be classed as a fault and lose points will be given.  
One spot, twin spots and halfmoons are equally judged depending on value. Two, but never more, of these designs can occur together in the caudal base. Eg. Moon/halfmoon, Moon/twinspace and Mickey Mouse design. All markings must be clear and pure black. Faint and irregular markings are faults and must expect loss of points.
- Red Dorsal : The red should be limited to the dorsal only and should be clearly marked off from the body colour.
- Red caudal : The red should be limited to the caudal fin. In *Xiph. variatus* Marigold, the caudal red SHOULD run into the body colour. Likewise with the Blue variety.
- Yellow caudal : The yellow should be limited to the caudal fin. Caudal yellow occurs in *Xiph. variatus*.
- Region Red : Red marking, known as the 'Bleeding Heart' in so-marked *Xiph. maculatus*.



#### Size.

The size is measured from the tip of the nose to the caudal peduncle.

Males - 2 1/2"

Females - 4"

The size of the fish cannot be measured exactly, one has to guess. With the help of several assessment judges, the failure to judge correctly is minimized.

#### Fins.

After the fins are fully grown, 3 groups are established:

1) Normal fin : In this class, high fins are not permitted. The rays of the fins must be fully formed. The edge of the fin must be complete, not damaged, split, frayed or malformed through disease. In the male, the height of the front of the dorsal should be under 1 cm. In the males, the end of the dorsal comes to a point, in the female it is rounded.

2) HI-fin : Only indisputable HI-fins, without lyratal tendencies are acceptable.

Flag Dorsal - All fin rays should, if possible, be the same length. Also the width of the dorsal top edge should be of similar length to the dorsal base. The broader the dorsal base, the greater the points awarded.

Veil Dorsal - All fin rays should be of the same length if possible, but the width of the dorsal top edge should be broader than the dorsal base.

NEITHER SHIPED DORSAL SHOULD EXTEND BEYOND THE END OF THE CAUDAL WHEN IN THE REST POSITION.

3) Lyratal - This variety must not show any HI-fin tendencies. The first 2 or 3 rays should be extended with the remaining rays graduating in size evenly to the normal fin height. The upper and lower rays of the caudal are extended. In the Lyratal helleri, we have to differentiate between 2 tall ships.

a) Lyratal with sword - In this variety, the sword extension from the lower caudal is the same as in the normal Xiph. helleri, and the caudal extension on the upper edge should be as long as the sword.

b) Lyratal without sword - This variety can be recognized by the same colouring of the upper and lower caudal extensions. In this variety, the sex is differentiated from the female by the slimmer appearance and by the Gonopodium, which must be straight, unfrayed and end at the caudal root. The upper and lower caudal extensions must be equal, symmetrical and of the same colour. Both varieties are judged equally. FURTHER CAUDAL EXTENSIONS ARE NOT PERMITTED.

#### Judging of the Sword in Xiph. helleri.

The absolute length of the sword has to be measured from the deepest indentation of the caudal to the end of the sword. As an aesthetic ideal, one would take the slightly downward position of the sword as an angle of 15 - 20 degrees, and the edge of the sword must be straight. The ratio for body length to sword length is 2 to 1.

Point deductions are made for:

a) irregular edges.

b) curved sword.

c) blunt point on sword.

Xiph. maculatus - This species has a thickset and high-backed body. The high back appears very strongly in older fish. The males appear to look slimmer and more elongated than the females.

Point deductions - see comments under Xiph. helleri. Points are also deducted from fish showing the influx of a foreign species, (cross bred). eg: Xiph. maculatus showing a sword shape.

#### Size.

Males - 1 1/2"

Females - 2"

#### Fins.

After the fins are fully grown, 3 types are established.

1) Normal fins.

In this class, HI-fins are not accepted. The fin should be fully formed and not damaged, split, frayed or deformed.

2) HI-fins For fin shape, the veil fin should be steved for. All fin rays should be of the same length if possible, but the width of the dorsal top edge should be broader than the dorsal base.

In the female, the first few dorsal rays should be slightly longer and drawn to a point. The fin should be carried erect as much as possible. When the fish is motionless, the dorsal should not extend beyond the outer edge of the caudal.

3) Brush or Pint-tail.

In these varieties, only the caudal differs its shape - all other fins are normally set.

- a) Brush-tail - In this variety, the caudal has the normal shape. The middle rays are drawn out longer and forked. This produces a "brush-tail" effect in the center of the caudal.
- b) Pint-tail - The shape of the caudal resembles a spear point. An even, clean edge to the fin is important.

Xiph. variatus.

Xiph. variatus has a slightly more slender body than Xiph. maculatus. Their caudal is also not so wide. Point deductions - see comments under Xiph. halifortii.

Size.

- Males - 1 1/2"
- Females - 2 1/2"

Fins.

After the fins are fully developed, 2 types are established.

1) Normal fins.

In this class hi-fins are not accepted. The dorsal should be fully formed, not damaged, split, frayed or deformed.

2) Hi-fins.

In Xiph. variatus, the well set dorsal should be higher than in the Xiph. maculatus, but be the same general shape. The fin should be carried erect as much as possible, but should not extend beyond the caudal edge when at rest.

The above standards were sent to us by the German Livebearer Association for our comments and views. They are accepted in Europe, and it has been suggested that we accept them, after discussion regarding our own suggestions and reservations, for any future International show held by us and they are not meant to take the place of normal judging methods used by the various Federations and organisations our members may belong to. May I ask all our members to study the previous paragraphs and send in your comments and suggestions.

I will take this opportunity to go over some of the points that have already arisen. (Bearing in mind that some meaning may have been lost in translation)

- 1) The term, 'Other than New Red' means any red-bodied fish that is overlaid with a pattern. In these varieties a white chest is not disallowed, however it must be pointed out that in this country a white chest is regarded as a fault.
- 2) Although there are 2 varieties of Lyretail Swords illustrated, there doesn't seem to be any provision made for the accepted Double Sword, that appears in this country. (There is an example of Lyretail Sword on Plate 16 in Jacobs "Livebearing Aquarium Fishes")
- 3) The drawings of the Pasty markings, (Figs. 1-7) are the natural markings for the wild Xiph. maculatus and in this country, only the Full Moon marking is usually accepted in cultivated colour varieties.
- 4) The method for judging colour varieties which do not have a recognised form, i.e. Tuxedo, Comet & Weisbaden, is the code index, and seems a logical and straight forward method.
- 5) The standards for Black Swords seem to be what this society has been advocating for some time. We have always tried to discourage the black finnage in this variety, as it has been proved that it can encourage cancerous growths.
- 6) We are already querying the method of accepting new varieties, as on the face of it, it appears very easy.

We ask that you read the standards with an open mind and leave room for compromise, bearing in mind that there is more than one country involved.

D G L Z  
 Standard Guidelines for Xiphophorus drawings

