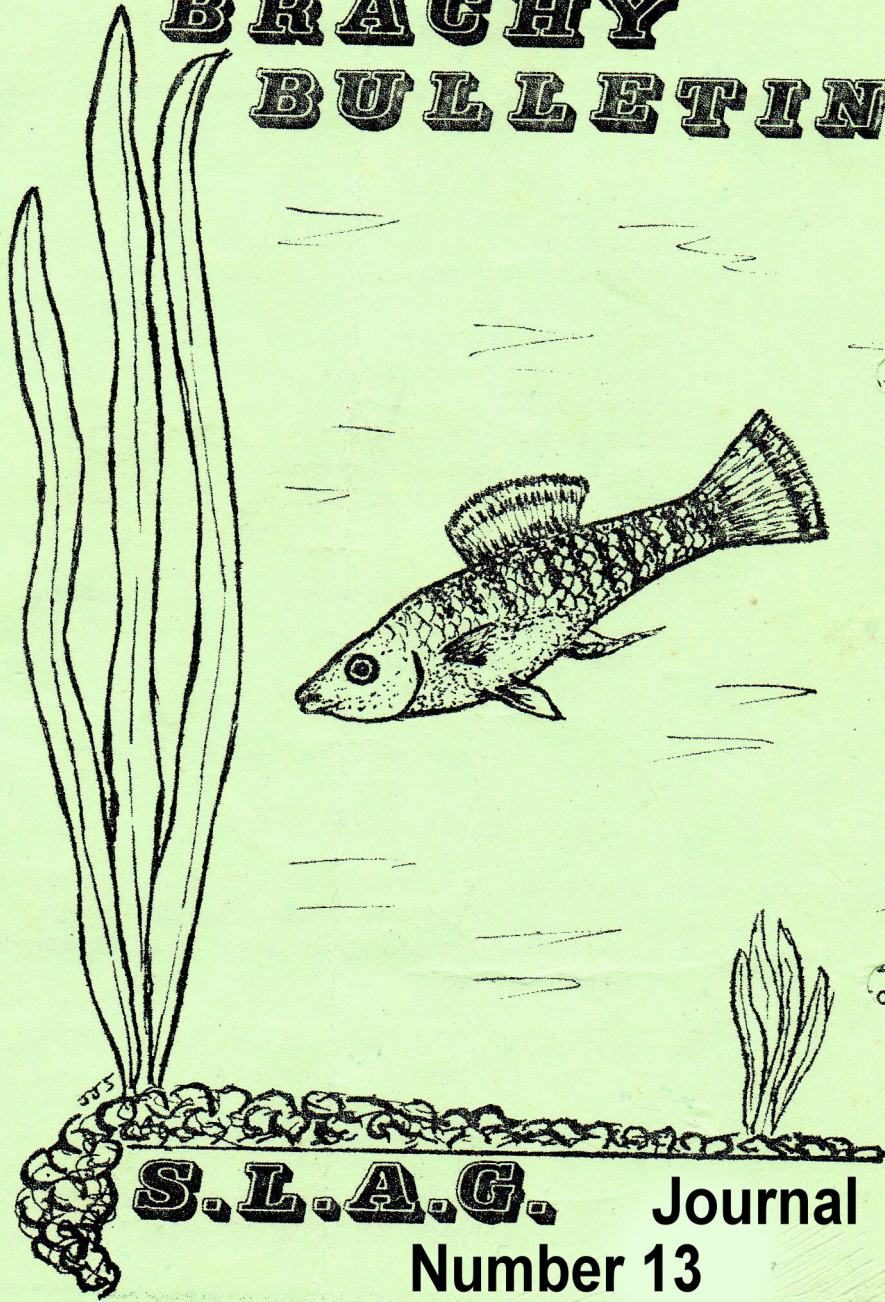


# BRACHY BULLETIN



**S.L.A.G.** Journal  
Number 13

**SOUTHERN LIVEBEARERS AQUATIC GROUP**

**JOURNAL**

**No 13**

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**Inside back Cover SUBSCRIPTION FORM please tear off and post**

ALL COPY TO BE SENT TO THE EDITOR :- **B.Meech (38). 338. Coggeshall Road,  
BRAINTREE, Essex,**

**.Printed by - D.M.Cheswright (2)**

DISTRIBUTED BY - **M. Strange (1)**

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**COMMITTEE 1981/82**

<b>President - John Dawes (53).</b>	<b>Hon. Vice-President - James Chambers</b>	<b>(159)</b>
<b>Chairman - Mervyn Strange (1).</b>	<b>Vice-Chairman - Barry Banks</b>	<b>(82)</b>
<b>Secretary - Naizby Noble (120)</b>	<b>Treasurer - Colin Howe</b>	<b>(5)</b>
<b>Species Control Mike Clarke (39)</b>	<b>P.R.O. (UK) - John Corbett</b>	<b>(118)</b>
<b>P.R.O. (O' SEAS) Ivan Dibble (4).</b>	<b>Editor Bernard Meech,</b>	<b>(38).</b>
<b>C o m m i t t e e m e m b e r s - Dr Kenwood (14.) &amp; Colin Taylor (95).</b>		

FROM THE EDITOR B. Meech (38)

Most members will know that all living things have a Scientific name. They may have a common name as well. In S.L.A.G. we depend on the knowledge of the scientific name as, often, this is the only way we can distinguish the fishes we have in our tanks.

From time to time scientists change their minds and change the names of the fishes, When this happens there can be some difficulties caused for aquarists. The Trade have been known to mis-take fishes (often through ignorance). We must aim to keep up with the changes as they happen and inform others as soon as possible so that no confusion is caused. One of the methods of informing people is, of course, through the columns of this publication.

I have been keeping my ears open for information regarding the up dating of Jacobs "Livebearing Aquarium Fishes". It is now rumoured that a revision is definitely in the pipe-line. Information may still not complete if all the facts are not known by the author and his publishers. Please publish any information you have you may think it of little importance. How wrong you could be.

Whilst mentioning information I gather that Mike Clarke (39) is having a problem at present trying to keep the record straight. Please tell him what fishes you have please tell him from where they came. This will help in keeping blood lines identified.

Remember there are Area Groups around the Country. These may be able to help you meet your fellow Members. I find it difficult to attend my own local Area Group due to pressure of work but I do try to make contact as often as possible, or should I say, when I need to or the others need me (I flatter myself).

Please write to me soon AT :-  
Wickham House, '  
338, Coggeshall Road,  
Braintree  
Essex, CM7 6EH,

#### Corrections

- A. Page 13/2:- The first few lines should read:\_  
May I first of all welcome the many new members that have joined the Society this year. If those of you who have heard it all before will bear with me I will try to explain to the new member a little about what SLAG is all about. We formed just over 3½ years ago at an Open Show for Livebearing Fishes staged by Basingstoke A.S., (my local club). There was interest at the time in the Livebearing range of fish.  
Start of last para. ...We need all the...  
Second line size lists, needing information.....
- B. Species Record Sheets enclosed for mebers use only.  
Page 1 Alfaro cultratus, Ameca splendens, Anableps.....  
Page 2 Top three aree Ilyodon then Jensia lineata, Lermychthys, Micropoecilia  
Lower on list Thallocerus c....ret...auratus.

## CHAIRMAN'S PAGE

Mervyn Strange (1)

May I first of all welcome the many new members that have joined the Society this year. If those of you who have heard it all before will bear with me I will try to explain to the new members what S.L.A.G. Is all about. We formed just 3½ years ago at an Open Show for Livebearing Fishes staged by the Basingstoke A.S. (my local club). There was a growing interest at that time in the Livebearing range of fish, and at this time in addition to the more common livebearers of Guppies, Platies, Mollies Swordtails and a few Limias that had been well known and distributed for many years we had about 30 of the Any other Variety Livebearers. S.L.A.G. Was formed to encourage the keeping, breeding and distribution of these fish. At this time some of us were concerned about indiscriminate cross-breeding that was taking place at the time. At the first meeting 13 members joined.

Prior to the formation it had been difficult to acquire these fish. We in the South had been fortunate that Howard Preston from Essex had found a way to make several trips to Mexico and had collected specimens of several species of attractive and interesting livebearers. This with fish from other sources had stimulated a strong and growing interest. In the North East N.G.L.S was active and many of us were "correspondence" members, by the way this was why we decided to call ourselves Southern L.A.G. We did not aim to go nationwide.

Unfortunately although Howard and others distributed the fish they had willingly many of the people who acquired the fish were restrictive for showing and other selfish reasons. One of our major successes has been to disrupt these attitudes. There has been a massive distribution of fishes within S.L.A.G with many members being responsible for this by personal contact and through auctions at our meetings.

In this context we owe a great deal to Dave Cheswright, Ivan Dibble, and Colin Howe. The increase in the number of species available has increased beyond all expectations, and an important factor in this the interchange that has taken place with our German friends in D.G.L.Z. With many personal contacts by many members and the dedication of Ivan Dibble on our behalf. Several expeditions have been made by our German friends and we have benefited. Ivan has also built up other contacts and the relationship with the American A.L.A. Has been very fruitful.

The success of S.L.A.G. Is entirely dependant on the information that you the members are prepared to give to the Species Control about what fish you keep, breed, and distribute, it is no good complaining that we do not distribute information, S.L.A.G. Is what the members make it.

There is a surprising level of contact between our members from all over the country. As you may have realized we have spread countrywide. We started off being a South of England based organisation, spread from Essex through the South and West to South Wales, but this did not last for long. A strong Group formed in Yorkshire and has become a very important part of our development. They played an important role last year in the development of active Groups in the North West ( based on Liverpool) and in Scotland. An Essex Group was formed last year as well and now this year a South/South West Group has been formed. These Groups are an important means of regular meetings for members and must become more involved in distribution and involvement of members.

This Journal must become our basic contact with each other and I must appeal to all our members to build on this, to write to the editor even if only to complain, but better still share with us your experiences, ideas, successes, and even failures with fish, livebearers for preference.

We need all the information in order to produce specification sheets, size lists, breeding information so that we can distribute for the common good. There will be further distribution of slides for identification later in the year. Please have patience, plans are made, work is being done and your committee will give of it's best.

To the more established members who have not yet re-joined I trust you intend to do so, if so please make it soon, and send up to date information to Mike Clarke so that we can distribute it to all members.

### **MORE COMMENTS FROM THE CHAIRMAN**

The hobby as a whole is going through difficult times, as is our country and maybe we in S.L.A.G. Will experience difficulties as well. We have many characters, and many strong ones at that and we should survive the many storms. Last year was I believe a year when many more met each other and became friends. It seems that at any major event in the hobby means that S.L.A.G. Members meet up which have seen there is a lot of fun when these contacts are made. May that attitude develop even more this year. It would seem that we have a busy year. The first event will be the Scottish Festival at Motherwell the first weekend in April. Our members are involved in this Show, Bob MacIntosh will be doing his Chief Steward job. This is always an event worth the travelling, and no doubt many of our members will attend. I hope to meet some old friends and make some new ones.

In mid-June in the South West Nailsea A.S. Will be staging their Open Show with as usual numerous classes for Livebearers. There will be a SLAG meeting at this venue and this should be an important get-together for our members. Without doubt there will be some German friends of Ivan in attendance.

The event of the year will be the International Livebearer Open Show staged by the Yorkshire Group on behalf of SLAG This will be near Hull in the later part of October. We should give our friends in the Yorkshire Group all the support we can as this will be our first Open Show, but without doubt it will not be the last, I am looking forward to this event.

As members will know last year we spent all our money, and used up any seed corn, a total of six slides was a start in the right direction but means a lot of work, if only we could afford to I think most members would like us to spend as much as possible on this. We now have a duplicator and intially this was expensive, but this year should not be as high. Postage etc. was the large expense that we may be able to reduce if we can get members to be more active in their groups and if we can get the Groups to service the members in their area. So it will be important for members to indicate whether this is the way we should proceed. In fact we would welcome any ideas from you.

The Committee has had one meeting, but aim to have other meetings when other event are likely to bring most of us together. We are reasonably representative of SLAG. Naisby Noble (Secretary) and Colin Taylor are involved in the Yorkshire Group. Me, Colin Howe (Treasurer) and Mike Clarke (He is the one who needs information from YOU) are South. Ivan Dibble and Don Kenwood are South West, Bernard Meech (He is the one who needs you to write something for the next Journal) is from Essex, and it seems that I am to act as a Honorary Scot and present their views.

This I did and one of the concerns of theirs was that we should proceed to make up a list of Livebearer fish sizes. We have agreed this is important to many of our members and are asking each Group to use the list of species and list aquarium sizes for as many as possible. We would welcome individual members giving their opinions as well. Send the lists to Mike Clarke or pass on to any Committee member.

Finally can I record a special thank you to the previous Chairman, Dave Cheswright. The build up of SLAG was no easy task, we seemed to be fated for a while to have Secretary problems. He has been involved in most of the things we have done and maybe as Species C.O. I was more aware of how much work he did for us. He did, and still does the bulk of our printing. Dave became very concerned as others about the activities of I.C.L.F. And committee members involvement. I give him and you all an assurance that if any conflict of interest did arise I and other committee members would support totally S.L.A.G. Interests and inform members of such situations. At present none exist.

We have now moved forward into a new year and the first Committee meeting was held at Newbury on Sunday 24th January, 1982. At this meeting many policy decisions were made and this is not known to the society it was decided that I should write a regular piece to members on Committee activity.

As from the A.G.M. Of November, 1981, Area Groups are entitled to elect Area Group Representatives. A representative to the National Committee. The Committee have decided that, they shall be treated as non-voting delegates and no expense grant will be paid from National funds. So as to avoid any duplicity in voting, and relieve national funds of undue expenditure

2. Association Affiliation. SLAG will affiliate to all major associations at the request of the appropriate area group. We are already affiliated to the F.B.A.S. and Yorkshire Ass `Aquarists. Action is currently being taken to affiliate to Fed. of

Scottish Aquarist Socs, and Fed. of Northern Aquatic Socs. Fees are paid by national funds. ;

3. Area Groups. At the request of an appropriate number of fully paid up members approval has been given for the formation of a new area Group for the South and West. If you are interested in this new Group Colin Howe is co-ordinating the formation, so drop him a line and he will give you details.

4. National meetings. To give more members the opportunity to attend a national meeting we shall be holding them in different parts of the country, hopefully in conjunction with major aquarist events. The first should be at Motherwell with the Scottish Aquarist Festival. Details will be published as soon as they are fixed. The Annual General Meeting will be at Newbury on the 20<sup>th</sup> of November 1982.

5) Slides Four slides will be produced during 1982, free to members. Hopefully more will be produced at cost, but this will depend on availability of finance. New members may purchase back copies for 4 for £1 from Colin Howe

Whilst it is slightly more difficult to produce, many members have suggested a return to this format. Which would you prefer? For members who have not seen, the old format, if you fold this Bulletin in half across the page that is how it would appear. Please write and let me know what you feel.

Finally the Bulletin in future will only be sent to paid up members in view of the cost involved. If you haven't renewed yet there is a form at the back of this bulletin.

Healthy tanks

Naisby Noble (120)

## AREA GROUP REPORTS.

13/5

'NORTH. WEST. -Secretary-J. Corbett (118)

The group held its first Meeting of 1982 Saturday 30<sup>th</sup> January. The members were told that Mr. J. Corbett would act as representative for the area group at the National Committee Meetings. - A brief report was then given as to the outcome of the A.G.M and that National Meetings would in future be held in various parts of the U.K.

It was put to members that as very few members of S.L.A.G. (in general) were returning Species Sheets, our area Committee would collate all the information from each member and send it to Species Control Officer in bulk.

The speaker for the afternoon was Dennis Barrett (81) who showed over .150 slides and was kept quite busy answering questions from all directions, well done and thanks again, Dennis.

The meeting closed with the usual Auction.

Dates for further Area Group meetings :- APRIL 24<sup>th</sup>,  
July 3<sup>rd</sup>.  
October 30<sup>th</sup>.

2) YORKSHIRE -Secretary-N. Noble (120).

The Annual General Meeting was held on 14<sup>th</sup> November 1981.

Elected were: - Chairman Trevor-Douglas (88), Secretary; Naizby Noble, Treasurer Colin Taylor, (95), YA.A.S. Delegate; Wilf Blundell (98), Committee members; Geoff Andrews (92) and Dave Thompson (97).

Meetings will be held at Thorne Town Hall, Nr. Doncaster- start 3p.m.

Saturday, 15<sup>th</sup> May 1982-Speaker, John Daves (53). President, S.L.A.G., Snr advisor to Aquarian foods  
Saturday, 11<sup>th</sup> September:- Speakers :- Colin Howe (5) & Mervyn Strange (1)  
Table Shows *Phallichthys*, *Carihubbsia*, *Priapella*, *Phallocerus* & *Alfaro*.

Saturday 13<sup>th</sup> November-Annual General Meeting

Speakers-Dennis Barrett (81). Table Show Any other Species not listed above and Breeders,

Table Shows:- Classes, single & pairs. Breeders will be 2 matched sexed pairs, minimum age 2 months.

Auction at each meeting plus refreshments. All members very welcome. Yorkshire Area will be organising an International Livebearer Show on 31<sup>st</sup> October, 1982, at:- Shire Hall, Howden, Nr. Hull (Just off M62).

3) Essex. -Secretary-Dave Cheswright (2).

Meetings have<sup>1</sup> been held as follows.

a) . 22<sup>nd</sup> October, 1981 - at Karen Turner's (35) address. A general slide show, was put on and various species discussed.

b) . 17<sup>th</sup> December - at Barry Myer's (36) address. Members had received general letter and report of A.G.M. from National Secretary and decided on various comments and suggestions to be sent for National Committee consideration  
21<sup>st</sup> January, - at Dave Cheswright's address Use of stand at Open Shows discussed  
Look at Dave's fish house and general discussions,

15<sup>th</sup> February - at Stan Fursedonn's (33) address. Agreed to take the Stand to Croydon A.S. Show, 27<sup>th</sup> March, following their request and to Southend, 1<sup>st</sup> May, P. Burgess (139) had written saying that his *Gambusia affinis holbrooki* might be on T.V. In 'Horizon' on Malaria, 22<sup>nd</sup> February. Agreed to invite him to join Area. Agreed to discuss fish set-ups and methods of each

host at each meeting and Stan gave a resume this evening. Reports will be compiled later.

Next Meeting:- Wednesday, 10<sup>th</sup> March, at Howard Preston (21) address.  
HENDON CONVENTION

Our stand will at the Hendon & District A.S. 1982 Convention on 17<sup>th</sup> April, 1982.

At:- Aylward Lower School, Windmill Road, Edmonton, -London, N.18.

Speaker:- F.F.Schmidt. From Holland on "Habitat to Aquaria" (Good English).  
13,\ ; ; .N. Noble, Nat . Sec

HAVE YOU ANY GOOD PHOTOGRAPHS OF LIVEBEARERS. Fish, -of course, although

other types 'might be a ?

Editor.

Let Editor or Committee member know.

Contact Editor.

NATIONAL MEETING;- At Scottish Aquarists Festival 4<sup>th</sup> April 1982.  
N.Noble, Nat. Sec.

Member (4) Ivan Dibble, informs us that at 6<sup>th</sup> February 1982 he had the following fishes available to the membership if they would like to contact him.:-  
Limia nigrofasciata (GAS) "Humpbacks"  
Poecilia picta  
Xiphophorus montezumae cortezi. Dr. Radda's strain.  
Editor;

SUBSCRIPTIONS. - These are now due please contact Treasurer, Colin Howe (5) as soon as possible, if you have not yet paid.

#### S.L.A.G. BADGES

Colin.Howe has plenty of Badges for sale to Members

YOU ONLYHAVE TO BUY ONE ONCE

All you have to do to obtain yours is to send £1.30 with s.a.e.

20<sup>th</sup> November - At Newbury, Berks. - Annual General Meeting.



Poecilia Latipinna the green sailfin molly, is native to the Gulf estuaries and streams. It has been sorely neglected as an aquarium fish in the USA due to its status as a native, and therefore not an exotic fish. However, it.

In Texas (my home), P. Latipinna is found in brackish and salt water offers much to the aquarist who devotes some time and effort to its rearing coastal marshes as well as swamps and rivers of the coastal plains. The Texas Coastal Plains extend from the Balcones Escarpment, the boundary between the Edwards Plateau, and the Coastal Plains, to the estuaries and bays of the Texas Coast. The rivers and streams of the Texas Hill Country (remember Luchenbach, Texas) arise on the Edwards Plateau from clear, cool (68° - 70°F) springs. The source of water for these springs is the Edwards Plateau and the associated Hill Country. These formations are comprised of very deep layers of limestone laid down when Texas was at the bottom of an ocean. Rain water seeps and percolates through countless cracks and crevices and collects in underground lakes, and rivers, whose outlets are the many springs of the Hill Country. During its underground stay, the water becomes Very hard and somewhat alkaline as calcium carbonate dissolves into it. P. Latipinna is absent from the streams of the Edwards Plateau. Whether this is due to the cold winter water temperatures (at least as compared to the Coastal Plains water temperatures) or other environmental conditions (pH, hardness, etc) I do not know.

Once the rivers enter the Coastal Plains on their way to the Gulf of Mexico the water slows and picks up run off from the surrounding pastures and fields., The rivers tend to meander and have much reduced currents. The increased fertility due to the nutrients derived from fertile Coastal Plains run off water causes an algal bloom which stains the water green and reduces visibility drastically (less than 12"). P. Latipinna is common in these streams. They seem to congregate over gravel bars in shallow moving water and seem to avoid still and/or deep waters. They are most commonly found at depths of 18 to 36 inches.

The easiest way to collect P. Latipinnia is by seining shallow gravel shoals as those described above. Unfortunately, males seem very rare in the wild. Usually, only one male is caught for every thirty to forty females. It may be that the males are more elusive than larger and heavier females, however, I suspect that it is probably has more to do with greater predator pressure on the more colourful and conspicuous males. The boundaries of the shoals are usually patrolled by a number of voracious Spotted Bass, a small riverine relative of the more widely spread Largemouth Bass. As support for this theory, the males collected are invariably young adults and just beginning to display colour and expanded finnage.

I have never caught a fully developed male in the wild. It might be supposed that these wild populations have a skewed sex ratio. However, wild caught females released into ponds without predators produce equal numbers of males and females in their progeny. Pond reared males achieve sexual maturity within the same year they are born, but they do not reach full size, colour or finnage until their second season, other theories, to explain the rarity of mature males.....

Such as the males residing elsewhere in the stream. This question begs further investigation.

When the fish are collected they, adapt rapidly to aquarium conditions any good commercial flake supplemented with algae or duckweed makes an adequate aquarium diet. They are not destructive towards regular aquarium plants. Their space requirements are minimal for adults, two to three gallons per fish, but in contradiction of published reports, they absolutely require frequent large water changes. The fry, on the other hand, require up to ten gallons each to reach anything approximating wild size. Once they reach adult size, space is not critical. However the only way to achieve spectacular size is to rear them in large outside ponds.  
 outdoor

The females achieve standard body lengths in excess of 4 inches and males 3 inches. Females are green/green to sometimes grey/lavender with parallel rows of grey to grey/black dashes from head to caudal peduncle. The mature males sport a very large dorsal with two horizontal rows of black spots. Most males over a year old develop range patches just posterior to the gill plates. Additionally the lower half of the caudal fin is usually pale blue or turquoise. The blue colour sometimes extends into the ventral caudal peduncle. The mature male normally keeps his dorsal in a fled position against his back. The dorsal is spread and erected during courtship and threats.

Courtship consists of the male chasing a female and upon "catching" a receptive or tired female, nudging her cloaca with his mouth. If the female is receptive and not just exhausted, she leans her dorsal surface away from away from her ventral surface towards the male. The male then moves his mouth diagonal up from the cloaca to alongside her gill plate and tilts his body so that his gonopodium can contact the cloaca. The rest of the copulation takes place so rapidly that is hard to see how the transfer of spermatophores takes place.

If the female is not receptive but has stopped simply to rest (the males are very hard drivers), then she refuses to lean and the male incessantly nudges her. If the female flees, the male pursues her, races ahead of her and spreads his dorsal and caudal to their fullest extent while curving his body so that it is concave in relation to the females. He then moves rapidly back and forth in front of the female, apparently attempting to prevent her escape.

The threat posture is used only against other males, differs from the courtship fin spreading in that the body is not curved, but remains in a single plane. Additionally, the male does not dart back and forth, but instead moves slowly and deliberately whilst quivering his fins. Usually this display is used simultaneously by both males until one flees and is pursued by the victor. Only rarely does the display fail to resolve the conflict and then the males may nip and hit each other while nose to tail. Again the loser flees and is perused for a short time by the victor.

Sailfin molly males show a wide individual variation in the placement of colour and are, therefore, I suspect, candidates for selection for colour enhancement. I think this fish deserves more American attention. If it were to come from South America, Africa or.....

Australia, everyone would want them. Let's not discriminate against locals. Our thanks Charles Clappsaddle of American Livebearer Association Inc. from whose Journal "Livebearers" - this item of **interest** on Poecilia Latipinna has been reprinted.

### "Wild" Xiphophorus maculatus notes

Howard Preston (21)

For nearly 10 Years I have kept small numbers of various strains of this specie they are no harder to keep than "domesticated" aquarium strains of Platies, yet due I suppose to lack of care and lack of widespread interest, they usually seem to die out after a few years. Of course, one point against them, is that their colouration is seldom as bright as in cultivated strains.

I have had fish from the Rio Grijalva, Rio Tonalá, Rio Coatzacoalcos and Rio Papaloapan (or at least from tributaries or irrigation ditches, etc., connected to these Rivers. Also Ivan Nibble (4) once passed me some ex-German stock which at that time we believed to be from the Rio Jamapas after some 3 years I was fighting a losing battle to save them but Ivan said not to worry as they may not after all have been all they seemed.

At the time of writing I have small numbers of Rio Grijalva, Rio Tonalá and Rio Papalapan fish. Dave Cheswright (2) (of the aquarists in my area) also has the last 2 strains so between us we so between us we ought to be able to maintain them. Mervyn Strange (1) had, a year or 2

back Rio Papaloapan specimens, but he told me recently (Jan 1982) that there seemed to be none left around his area. Is there still a Kidderminster population, I wonder? - they were being kept by more than one SLAG member in, I think, 1980- comet marked.

The fish originating from all these rivers are, to outward, appearances, identical therefore, to keep the strains pure. they **must** be **kept separate**. As most of you will know, X. maculatus, wild type, has (nearly always) a basic greyish body colour. In addition, there **are** **dozens** of distinct black markings (such as moon, crescent, one-spot, comet, spotted dorsal, stripe-sided) and several red markings e.g. red dorsal, red anal, "bleeding heart") some of which may or may not be present, not to mention the occasional occurrence of a tendency to red, yellow or metallic blue body colour. Some of these patterns of course also occur in other species of Xiphophorus, Most of these traits are inherited in; accordance with Mendelian principles, and most are represented in most wild populations but I think there are exceptions, thus, I believe maculatus from the Rio Hondo or Belize River may exhibit black and/or, red patterns which are never found in populations further west in Mexico. I cannot speak from definite personal experience of this however - I have never ventured further east than the City of Villahermosa in the state of Tabasco. Ivan has, I believe, via Germany a red-eyed strain from the Honduras area (no doubt he will correct me if I am wrong, please!) What is very noticeable in captivity is that, after a few generations all maculatus offspring turn out increasingly identical in colour and markings. This might be an advantage when breeding cultivated strains (unless you get, say, a red dorsal in your yellow wags); conversely, with **wild** stock, unless particular care.....

is taken to maintain certain desired features in a strain, they are likely to disappear! Now when, a couple for example, amongst the fish I brought back from the Rio Tonalá in April, 1979, were one or two showing large areas of black on the body (similar to the Tuxedo pattern) together with metallic blue reflective scales: most attractive fish and not unlike some cultivated strains months ago, I came to have a thorough appraisal of what stock remained after 2½ years of "flock breeding", there remained just one small female showing this black pattern. I intended to breed from her, naturally, but she very soon died. So this pattern has now been lost from the strain and I would not expect it to reappear. My latest brood, growing up, from the Rio Allegri, has the one spot (dot) caudal pattern and no other markings (but possibly some individuals may show the "red dorsal" also when they are old enough to develop it). These represent my future breeding stock so probably in future Rio Allegri fish I may have will all look the same. Dave Cheswright has been keeping the Rio Papaloan population since 1979 and it is noticeable here too how his broods of young fish are as alike as "peas in a pod". The latter is particularly annoying since I took care when selecting 14 or so young Rio Papaloan adults to bring back from Mexico in April 1979 that as many different markings and colour patterns as possible were represented.

Dr Myron Gordon wrote many years ago how he found many (males) with bright copper coloured throats in a roadside ditch at Plaza de Agua, just a few miles from the city of Veracruz. This was the "bleeding Heart" marking - used to develop a cultivated strain of that name - though it is not often seen. Only male fish show the "red throat" though females do carry the genes for it also. It may be that it is one of the rarer markings, since I have only encountered it once in wild stock (from Rio Papaloan near to junction with the Rio Toto near the town of Tuxtepec). It sounds as though Gordon's were from the Rio Systematise: this river meets the Rio Cottontail where they flow into the Gulf of Mexico at Boca del Rio immediately south of Veracruz city and I believe this is about the northernmost limit of the specie. I have never found them in or near the Rio Jamapa - I could not even find Plaza de Agua (although I suspect the copper throats are still there forty or so years on) - perhaps I should learn more Spanish to get better directions - but in the next river system (omitting the Rio Blanco a swordtail stream) only an hour or two to the South by road, the great Rio Papaloan (river of butterflies) they are abundant. Here, practically every road side ditch, every water hyacinth covered sugar cane irrigation canal has its plat population. The predatory Belonesox is common too in these waters, along with other livebearers such as Mollies and Gambusias, also Cichlasoma and Astynax and Rivulus species. It can be hard work getting them out, what with the mud, mosquitoes, barbed wire and thorny vegetation.!

I am writing these notes at the end of January 1982, and it seems at this moment - nothing definite - that there is just a chance this year of another brief visit to the fascinating area either in late August (rainy season) or late December. There is no guarantee that I would get any fish back alive, though I have been lucky in the past.....

Anyone else in SLAG fancy a night in El Hule ("village of Rubber") - or a couple of days in sun-stupored Cosamalopan? There is a lot to be said for the Papaloapan swamp.

LIGHTS AND LIMNURGUS (*Girardinichthys viviparous*).  
 the "Amarillo" - Ivan Dibble (4).

Some of you may remember my last article on light and heat playing a big part in the healthy Maintenance of this specie. Since that article I have continued my experiments and observations with light and heat. I have now taken them a stage further by trying out my findings with other specie first let me deal with the "Amarillo".

My Conclusions were that this specie seemed to deteriorate and eventually die if subjected to any artificial light of greater intensity than a 15 watt tungsten bulb but fared much better with little or no direct artificial light. The only exception to this was a small group kept in a very densely planted tank covered in duckweed with a 35watt, Warm White fluorescent tube over it, but, although these fish remained apparently healthy, they neither grew nor produced any fry.

On the question of heat, however, I have now kept quite successfully for many months groups of "Amarillos" in a number of unlit tanks with temperatures varying from 68° to 82°F (20 to 28°C) although I think I should add that the temperature variation in any one tank was never more than 5 or 6°F (1°C). The only observable difference with these groups was the number of fry produced and the length of the gestation period. Those in the higher temperatures produced, more frequently, i.e. 5 to 6 weeks and from 12 to 43 fry, which were only about half the size of those produced by a similar sized female kept at lower temperatures, i.e. 68° to 74°F (20° to 23°C). which usually produced between 6 and 15 Fry.

All the fry grow without any problems in unlit tanks at the temperatures stated above, although I do not claim that this is their range limit of temperature but are just the temperatures I work with.

I have also found that moving either fry or adults from one tank to another was quite often followed by fatalities, either in those moved or those left behind, so, when working on or removing fish from the tank, great care must be exercised to cause the minimum of disturbance and, if possible, the fish should be moved without taking them out of the water by using a bent spoon, for fry after catching them in a net, and a jar or scoop for adults. I have also tried keeping these fish in water ranging from 5 to 8.4pH and hardness from 3° to 30°DH and from my experience there has been no problems in keeping these fish in water above 7pH and 7° hardness but below this they do not fare too well.

As with the "Amarillo", but to a lesser degree, a number of other fishes I have found to be light sensitive. I know many people will probably say when I mention them "Oh, but I have kept these fishes in brightly-lit tanks for years", and they probably; have but chances are that they have one or more of the following conditions:-

1). Generally densely planted tank, 2). a large amount of floating plant, or, (3). the light is more than 9" (225mm) from the surface of the water.

How often have I heard of mystery diseases which hit Platies or other fishes and as often as not the water supply is blamed because of a water change just done and also at the same time getting rid of all that "unsightly duckweed" on the surface. Yet a friend down the road who also did a water change had no problems. Then there is the theory that when you remove some of the plant from a long established tank, some fish lost their cover and were picked on by the more dominant ones. To a certain extent this is true but I feel sure it is only half the reason; the other being that some of the fishes are forced away from the shaded positions by the dominant ones and have to spend time in the more brightly-lit areas. My theory is that it was more of a case that these fishes were being directly affected by the bright light than any other factors.

13/12

At this stage, I think should say that in the main the fishes I am writing about now are most, members of the Xiphophorus genus, excluding, the "swordtails" as, due to lack of space, I did not include them in my experiments, but I have proved, to my own satisfaction that, X, maculatus, X. variatus, X. xiphidxum, X, nigroerisis, X. pygmaeus, X. milleri, X. alverezi, X.couchianus, X.gordoni and, X. andersi all do much better in tanks which have very subdued lights. In fact, over the past year I have been monitoring the effects of this very carefully. At least a dozen times I have removed almost all floating plant from tanks where the above fishes were housed, thereby exposing them more to the glare of the 30 watt fluorescent tube which was 6" on average above the water level and each time, after a few weeks, there was an obvious deterioration in the fishes with the dominant ones picking on the weaker ones. After 4 Or 5 weeks a few deaths started to occur. At this point I have removed the remaining plant, replacing it with a similar sized clump of chopped up scouring pad; also I removed the light and within a week they were, in most cases,, even better specimens than they were before.

I have repeated this at least a dozen times with many different Xiphophorus species, each time with the same results. For those who do not know, my fish room is indoors with very little penetrating daylight and the only light these tanks receive is the general room light. As I have a very good air circulation and filtration in my tanks, I am not particularly worried about plants, in most of them as I substitute their green food diet with garden peas.

So, to conclude, I would be interested to hear from anyone with similar experiences and if you are not fussy about having plants in your tanks, why not give it a try this Winter. At the very least you will save on fuel bills.

Ed Re "Amarillo"

Please note the possible change of name! If anybody has the written confirmation of this please let me know:-

1).- **Who changed-the name.**

2). When?

3).Why (if known)

4), This specie is on our SPECIES RECORD SHEET  
Girardinichthys innominatus.

SUBSCRIPTION AND BADGE FORM INSIDE BACK COVER

NOTES RE Species Record Sheets enclosed with J13. M. Clarke (39).

This record is as you can see incomplete. This is because members have not furnished the information needed. We know that fishes have been distributed in large numbers to all areas but it can be only you, the members who can confirm that they survive and hopefully multiply. By this record one would conclude that most species held Only a handful of members give complete details of transfers and holdings. record of auctions, transfers, are exchanges, etc. and sending this information to me regularly. Most of the species on there are errors or omissions of your number or species in the enclosed sheets please let me or your area Species Control know so that I can rectify in time for the next Journal. Only a handful of members give complete details of transferor holdings by this recordone could conclude that most species are held by the "few".s record have been widely distributed. Only an estimated 1/5th of transfers are reported to species control, part of this is reported by the distributor. The receiving member is the one who should supply the details for such a record as this. The area groups could help by keeping a local records of auctions, transfers, exchanges, etc., and sending this information to me regularly. If there are errors or omissions of your number or species in the enclosed sheets please let me or your area Species Control know so that I can rectify in time for the next Journal.

FISH PHOTOGRAPHY. Colin Howe (5).

Several members have written to me asking my advice on fish photography. May I say straight away that I am no expert in fact. I know very little indeed and have only owned a camera during the last couple of years. I purchased a camera with fish in mind, after after a lot of wasted time and film I have managed to produce slides Which satisfy me – well almost.

What equipment do I use.

My basic set-up is Camera bodies- Pentax K1000 + a Parragor Macro Converter and a set of Automatic extension Tubes, and, the basic 50mm lens.

What Film do I use.

My favourite film is Ektachrome 400.

"Fuji" film gives me "orange" water; "Agfa" is too "stark".

What is the most important thing? thing?.

Patience This is needed in great amounts. It can take 15/20 minutes to take 1 shot.

My Method is as follows:- All my photography is done in natural lighting, preferably on a clear day when the light is constant. It is a problem-trying to do it when any clouds are about:- the settings go haywire. An ordinary "show tank" is used with a partition which I can move freely - this I hold in the right place with suckers. I tend to use bright green plant; in particular, I like Elodea and Indian Fern, They seem to have the crisp look which I like. In the early days I used Willow Moss: but the light readings were poor and gave poor quality slides.

Things to be fussy about.

Make sure *that the* area of glass, through which you are going to photograph is scrupulously clean and unscratched, This may soundsilly but I have wasted many slides by not paying attention to this detail. One thinks the glass is clean, gives it a good wipe with a handkerchief and "click"- what do you get? - a great smear you did not notice. How many times have you taken, a Shot only to find a snail crawling up the glass?

The partition should also be 100% clean and glass, not Perspex or similar or similar materials, Perspek tends to reflect and you will get a shadow of the fish on the partition;

So I am now seated in front of my immaculate tank with clean Water, fish in position, in front of the partition and nice green plant behind; out in the beautiful sunlight on a picnic table, the fish in its tank at one end and my camera and I at the other,

Next the Camera:- I like to use a camera that allows me to control what is happening. I also like a clear focusing screen!. It is extremely difficult at close range to focus a "split prism" type screen, when your eyes are like mine, that is. So, my basic set-up is a 50mm lens with a Macro Converter behind it and 400 Ektachrome film. This allows a speed of 1/250 @ F2 in good weather. The Macro Converter gives great flexibility when focusing and can be focused very accurately and quickly.

I usually try for three shots of the same fish and hope for one reasonable shot in the end to be usable.

It works for me and hope it will for you. At least it may save you wasting That I am afraid is the limit of my knowledge.rolls of film on simple mistakes- as I did. There is no doubt that the biggest asset you can have is PATIENCE.

**Belonesox belizanus** - Kner 1860.

Dave Cheswright (2)

This specie was first "found in Belize, British Honduras but is well spread, through Mexico, etc. Originally it was caught from cloudy and polluted waters, back waters, marshes lakes, it is one of the larger livebearers reaching lengths of approx. 100mm, males, and 200mm. In Aquaria the tendency is for these sizes to be somewhat smaller. The common name of Pike Top Minnow aptly describes this specie which is typical in habits of any "Pike" type fish. It remains still for very long periods, hidden among plant, etc, and is only active when hungry, when a lightning dash enables it to catch a live fish which it swallows tail-first in most cases. The specie has a long "pike-like" body with a beak-like mouth. Colour is almost black on the upper body fading to a light-grey underneath; there is a black mark on the caudal peduncle; in the right light greenish/bluish highlights can be seen on the opercula.

. This Specie is a predator - they are interested in eating only fishes Of a suitable size - they will normally ignore live fishes which are "too small" they will starve rather than attempt to eat other than live fishes of the right size. They have been known to catch a fish that is too big and choke to death. They appear to prefer fish of a "livebearer shape" , i.e. long and relatively slim-bodied. They will not even attempt to eat such round bodied fishes as, the various Cichlids which tend to have hard fin rays. They do kill for the sake of it but only when hungry. The jaws appear to dislocate, somewhat in the manner of snakes, in order to accommodate what seems to be prey which is far too big to swallow. This dislocation is particularly noticeable in the fry, if kept in small aquaria, where they can be closely observed, I have tried feeding the fry, on Daphnia, which they appear to eat, and Tubifex, which I have never seen them eat. They do not grow unless they are fed with ever increasing sizes of other fry. They will eat each other but only if there is no other food about and then only if their brothers and sisters are small enough to swallow. Adults will go without food until they are hungry and one can have many fishes in the aquarium in order to feed them long term. Food consumption of an adult can be as little as 1 - 2" fish every 3/4 weeks. last for much longer than this without any food at all. Fry and young specimens however, waste away quite quickly unless fed regularly. The essential is to feed the fry well over the first, say, month, after which they will grow reasonably well- provided they are fed 2 or 3 fishes every few days. I have also tried feeding adults with tadpoles and baby frogs, ' - one large female consumed several of the latter but, within 2 hours the frogs were still swimming about having been disgorged. I have been told that strips of meat can be fed if moved through the water. I have found this completely unsuccessful - if they do take this food it is, in my experience, disgorged later. If any members have definite evidence of them eating foods other than live fishes I for one would like to have details. Anyone taking on this specie, particularly as, fry, must be prepared to be able to provide sufficient fry to feed them.

Conditions: One would: bare in mind always the wild conditions of any specie. Belonesox is suitable for a pair in a 24" x 12" x 12" aquarium, nothing larger is needed as they do not need swimming spac. In a smaller container there is a danger that the female may eat the male, this happened to me with my first - luckily the female was fertilised!! The male trends to stay to the rear of the female, which is quite sensible a similar positioning occurs in Heterandria bimaculata, where wild females have been known to eat their mates. No aeration or filtration is needed for this specie - indeed, they are not all that happy in moving water - again, think of the wild conditions and the fish's habits- other fishes can move.....



around - "Pikes" pick them up as they came past.

My first experience with this specie was in the early '70 s when Howard Preston (21) around brought back wild specimens. 80 fry were born and all but 6 given away. I have a note of only 1 other aquarist who raised these to maturity and then bred them. Of the 6 I kept I still had one which lived to just over 4 years of age. I did not bother to breed the originals or next generation again and as far as I know, that strain was lost. Even with large fish-house and other aquarists giving fry it is extremely difficult to obtain enough fry to feed even 6 over the first few weeks.

I obtained them again from a then Member in March, 1980: -12 from the same brood, all different sizes from 25/50mm. They had to be kept separated because of the size differences - therefore, 2 were eaten, 2 died 4 were farmed out and 4 retained. By June, 1981 (1½ years old) I had two females and one very thin-looking male. My friend had 2 left, females, 1 was about 125mm long and the other smaller, I obtained these from him but 1 died on the way home, (presumably from shock) The male was placed with the best female, The other 2 females both died by August, 1981 (1½ years old). By early September the last female was pregnant and the male was removed. The aquarium was filled With Elodea to provide hiding places for the fry. The female ate nothing for 4 weeks although there were prey in the tank - 62 fry were born over the night of 26/27<sup>th</sup> September. I do not know if there were more fry born and the rest eaten by the mother- however the female showed *no interest* at ail in her fry they are probably "too small" for a large female to bother with. The fry were scattered all over the aquarium. Size of fry- approx 16mm long. The only difference between this brood and the earlier one was that in the earlier case there was a bright red spot on the anal fin where it connects to the body. This did not show at all on the 1981 brood, in the earlier case it faded slowly as the fry grew.

I disposed of all, but 8 of the try to other SLAG members. By the end of Jan,, 1982, 5 were left of my 8; 1 choked to death, 2 died from under-feeding as far as I can see. The 5 were then 50 mm long. They had in 4 months consumed about 550 other fishes, starting with guppy fry size. Most of these fry were provided from my own breeding plus a few at the start from a nearby Southend aquarist. This large number was obviously not enough to keep all 8 happy, You have been warned I hope to obtain a Pair from the remainder to keep the strain going, interest was created by the September brood and I have a waiting list of members, a further 40 plus were born in December but the diabolical weather prevented more than 6 of these being given away to 2 Essex members. The rest became food for the first brood!! The male died earlier in December and the female is off her food and looking very thin, being about 2 years old.

This specie is easy to keep and to breed PROVIDED the food problem is realised. They require no special conditions just the odd water change and the removal of any prey which they have killed, this happens if they cannot tum a prey round to swallow it and the usual result is two bits of a fish or a fish which dies. This they will ignore. Temperature is no problem provided it is 21°C (70°F) or a bit over.

I am sure that members would like to hear from others who have or are keeping this specie. I am particularly interested to see that, between us we end up with at least 1 pair to carry on the strain.

---

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